## **Barnes Products P/L**

 Chemwatch: 5247-09
 Issue Date: 10/12/2021

 Version No: 6.1
 Print Date: 22/03/2022

 Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements
 S.GHS.AUS.EN.E

## SECTION 1 Identification of the substance / mixture and of the company / undertaking

### **Product Identifier**

Product name	Stoner E302 Rocket Release
Chemical Name	Not Applicable
Synonyms	Stoner E302 Rocket Release.
Proper shipping name	AEROSOLS
Chemical formula	Not Applicable
Other means of identification	Not Available

### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Mold Release.

## Details of the supplier of the safety data sheet

Registered company name	Barnes Products P/L	
Address	5 Greenhills Avenue Moorebank NSW 2170 Australia	
Telephone	+61 2 9793 7555	
Fax	+61 2 9793 7091	
Website	http://www.barnes.com.au/	
Email	sales@barnes.com.au	

## Emergency telephone number

Association / Organisation	Barnes Products Pty Ltd	
Emergency telephone numbers	+61 2 9793 7555 Business Hours	
Other emergency telephone numbers	Poisons Information Centre 13 1126 after hours	

## **SECTION 2 Hazards identification**

### Classification of the substance or mixture

## HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

ChemWatch Hazard Ratings

	Min	Max	
Flammability	4		
Toxicity	0		0 = Minimum
Body Contact	2	1	1 = Low
Reactivity	1		2 = Moderate
Chronic	0	1	3 = High 4 = Extreme

Poisons Schedule	Not Applicable
Classification <sup>[1]</sup>	Aerosols Category 1, Aspiration Hazard Category 1, Skin Corrosion/Irritation Category 2, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Hazardous to the Aquatic Environment Long-Term Hazard Category 2
Legend:	1. Classified by Chernwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI

Label elements		
Hazard pictogram(s)		
Signal word	Danger	

AUH044	Risk of explosion if heated under confinement.	
H222+H229	Extremely flammable aerosol. Pressurized container: may burst if heated.	
H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H336	May cause drowsiness or dizziness.	
H411	Toxic to aquatic life with long lasting effects.	

## Precautionary statement(s) Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
P211	Do not spray on an open flame or other ignition source.	
P251	Do not pierce or burn, even after use.	
P271	Use only outdoors or in a well-ventilated area.	
P261	Avoid breathing mist/vapours/spray.	
P273	Avoid release to the environment.	
P280	Wear protective gloves and protective clothing.	

#### Precautionary statement(s) Response

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider.	
P331	Do NOT induce vomiting.	
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.	
P391	Collect spillage.	
P302+P352	IF ON SKIN: Wash with plenty of water.	
P304+P340	P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
P332+P313	If skin irritation occurs: Get medical advice/attention.	

#### Precautionary statement(s) Storage

P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

## Precautionary statement(s) Disposal

P501 Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.

## **SECTION 3 Composition / information on ingredients**

#### Substances

See section below for composition of Mixtures

### Mixtures

CAS No	%[weight]	Name
142-82-5	1-20	heptane
64741-66-8	1-20	naphtha petroleum, light alkylate
Not Available	80-100	halogenated hydrocarbon/ether blend
Not Available		which contains,
115-10-6	NotSpec	dimethyl ether
Legend:	<ol> <li>Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&amp;L * EU IOELVs available</li> </ol>	

## **SECTION 4 First aid measures**

Description of first aid measures		
Eye Contact	<ul> <li>If aerosols come in contact with the eyes:</li> <li>Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.</li> <li>Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>Transport to hospital or doctor without delay.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>	
Skin Contact	<ul> <li>If solids or aerosol mists are deposited upon the skin:</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Remove any adhering solids with industrial skin cleansing cream.</li> <li>DO NOT use solvents.</li> <li>Seek medical attention in the event of irritation.</li> </ul>	
Inhalation	<ul> <li>If aerosols, fumes or combustion products are inhaled:</li> <li>Remove to fresh air.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> </ul>	

Continued...

## Stoner E302 Rocket Release

	<ul> <li>If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>Transport to hospital, or doctor.</li> </ul>
Ingestion	<ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>Seek medical advice.</li> </ul>

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically

for lower alkyl ethers:

BASIC TREATMENT

- ٠ Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min. ۲
- A low-stimulus environment must be maintained.
- Monitor and treat, where necessary, for shock.
- Anticipate and treat, where necessary, for seizures
- DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.

#### ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- ۶ Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias. ٠
- ۲ Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- ٠ Drug therapy should be considered for pulmonary oedema.
- Hypotension without signs of hypovolaemia may require vasopressors.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

#### EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- ▶ Ethers may produce anion gap acidosis. Hyperventilation and bicarbonate therapy might be indicated.
- Haemodialysis might be considered in patients with impaired renal function. .
- Consult a toxicologist as necessary
- BRONSTEIN, A.C. and CURRANCE, P.L.

EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

- For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:
- Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- ۲ Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases (pO2 50 mm Hg) should be intubated.
- ۲ Arrhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Epinephrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

## **SECTION 5 Firefighting measures**

#### Extinguishing media

SMALL FIRE:

Water spray, dry chemical or CO2

LARGE FIRE: Water spray or fog.

#### .

Special nazards arising from tr	le substrate or mixture
Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result
Advice for firefighters	
Fire Fighting	<ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water course.</li> <li>If safe, switch off electrical equipment until vapour fire hazard removed.</li> <li>Use water delivered as a fine spray to control fire and cool adjacent area.</li> <li>DO NOT approach containers suspected to be hot.</li> </ul>
Fire/Explosion Hazard	<ul> <li>Liquid and vapour are highly flammable.</li> <li>Severe fire hazard when exposed to heat or flame.</li> <li>Vapour forms an explosive mixture with air.</li> <li>Severe explosion hazard in the form of vapour, when exposed to flame or spark.</li> </ul>

Vapour may travel a considerable distance to source of ignition.

Heating may cause expansion or decomposition with violent container rupture.

## **SECTION 6 Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

See section 8

## **Environmental precautions**

See section 12

#### Methods and material for containment and cleaning up

Minor Spills	<ul> <li>Clean up all spills immediately.</li> <li>Avoid breathing vapours and contact with skin and eyes.</li> <li>Wear protective clothing, impervious gloves and safety glasses.</li> <li>Shut off all possible sources of ignition and increase ventilation.</li> <li>Wipe up.</li> <li>If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated.</li> <li>Undamaged cans should be gathered and stowed safely.</li> </ul>
Major Spills	<ul> <li>Clear area of personnel and move upwind.</li> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>May be violently or explosively reactive.</li> <li>Wear breathing apparatus plus protective gloves.</li> <li>Prevent, by any means available, spillage from entering drains or water courses</li> <li>No smoking, naked lights or ignition sources.</li> <li>Increase ventilation.</li> <li>Stop leak if safe to do so.</li> </ul>

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## **SECTION 7 Handling and storage**

## Precautions for safe handling

Safe handling	<ul> <li>Avoid all personal contact, including inhalation.</li> <li>Wear protective clothing when risk of exposure occurs.</li> <li>Use in a well-ventilated area.</li> <li>Prevent concentration in hollows and sumps.</li> <li>DO NOT enter confined spaces until atmosphere has been checked.</li> <li>Avoid smoking, naked lights or ignition sources.</li> <li>Avoid contact with incompatible materials.</li> </ul>
Other information	<ul> <li>Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can</li> <li>Store in original containers in approved flammable liquid storage area.</li> <li>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</li> <li>No smoking, naked lights, heat or ignition sources.</li> <li>Keep containers securely sealed. Contents under pressure.</li> <li>Store away from incompatible materials.</li> <li>Store in a cool, dry, well ventilated area.</li> </ul>

## Conditions for safe storage, including any incompatibilities

Suitable container	<ul> <li>DO NOT repack. Use only containers as originally supplied by manufacturer</li> <li>Aerosol dispenser.</li> <li>Check that containers are clearly labelled.</li> </ul>
Storage incompatibility	<ul> <li>Avoid reaction with oxidising agents</li> <li>Avoid strong acids, bases.</li> </ul>

## **SECTION 8 Exposure controls / personal protection**

## **Control parameters**

### Occupational Exposure Limits (OEL)

## INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Australia Exposure Standards	heptane	Heptane (n-Heptane)	400 ppm / 1640 mg/m3	2050 mg/m3 / 500 ppm	Not Available	Not Available
Australia Exposure Standards	dimethyl ether	Dimethyl ether	400 ppm / 760 mg/m3	950 mg/m3 / 500 ppm	Not Available	Not Available

Emergency Limits					
Ingredient	TEEL-1	TEEL-2	TEEL-3		
heptane	500 ppm	830 ppm	5000* ppm		
dimethyl ether	3,000 ppm	3800* ppm	7200* ppm		

Ingredient	Original IDLH	Revised IDLH		
heptane	750 ppm	Not Available		
naphtha petroleum, light alkylate	Not Available	Not Available		
dimethyl ether	Not Available	Not Available		
Occupational Exposure Banding				
Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit		
naphtha petroleum, light alkylate	E	≤ 0.1 ppm		
Notes:	Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a			

range of exposure concentrations that are expected to protect worker health.

Exposure controls

•	
Appropriate engineering controls	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.
Personal protection	
Eye and face protection	No special equipment for minor exposure i.e. when handling small quantities. <b>OTHERWISE</b> : For potentially moderate or heavy exposures: Safety glasses with side shields. <b>NOTE:</b> Contact lenses pose a special hazard; soft lenses may absorb irritants and <b>ALL</b> lenses concentrate them.
Skin protection	See Hand protection below
Hands/feet protection	<ul> <li>No special equipment needed when handling small quantities.</li> <li>OTHERWISE:</li> <li>For potentially moderate exposures:</li> <li>Wear general protective gloves, eg. light weight rubber gloves.</li> <li>For potentially heavy exposures:</li> <li>Wear chemical protective gloves, eg. PVC. and safety footwear.</li> </ul>
Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities. OTHERWISE: • Overalls. • Skin cleansing cream. • Eyewash unit. • Do not spray on hot surfaces. • The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials including cotton. • Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost. BRETHERICK: Handbook of Reactive Chemical Hazards.

Recommended material(s)

GLOVE SELECTION INDEX

#### **Respiratory protection**

Type AX Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	Air-line*	AX-2	AX-PAPR-2 ^
up to 20 x ES	-	AX-3	-
20+ x ES	-	Air-line**	-

\* - Continuous-flow; \*\* - Continuous-flow or positive pressure demand

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the *computer-generated* selection:

Stoner E302 Rocket Release

Material	CPI	
BUTYL	С	
HYPALON	С	
NATURAL RUBBER	С	
NEOPRENE	С	
NITRILE	С	
NITRILE+PVC	С	
PVC	С	

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

 $\ensuremath{\text{NOTE}}$  As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

#### **SECTION 9** Physical and chemical properties

#### Information on basic physical and chemical properties

Appearance Colourless to pale yellow flammable liquid (aerosol) with a mild slight ethereal odour.

Physical state	Liquid	Relative density (Water = 1)	0.74
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	622
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	-13	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	-41 (dimethyl ether)	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	60-80
Vapour pressure (kPa)	71 @ 21.7 C	Gas group	Not Available
Solubility in water	Not Available	pH as a solution (Not Available%)	Not Applicable
Vapour density (Air = 1)	2.12	VOC g/L	Not Available

### **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	<ul> <li>Elevated temperatures.</li> <li>Presence of open flame.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

### **SECTION 11 Toxicological information**

Inh

#### Information on toxicological effects

	Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of
aled	co-ordination, and vertigo.
	The vapour is discomforting

	WARNING:Intentional misuse by concentrating/inhaling contents may be lethal. Inhalation hazard is increased at higher temperatures. Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.			
	Material is highly volatile and may quickly form a concentrated atmosphere in contined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure. Symptoms of asphyxia (suffocation) may include headache, dizziness, shortness of breath, muscular weakness, drowsiness and ringing in the ears. If the asphyxia is allowed to progress, there may be nausea and vomiting, further physical weakness and unconsciousness and, finally, convulsions, coma and death. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.			
Ingestion	Overexposure is unlikely in this form. Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industri vomiting	al environments Ingestion may result in nausea, abdominal irritation, pain and		
Skin Contact	This material can cause inflammation of the skin on contact The material may accentuate any pre-existing dermatitis co Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed Material on the skin evaporates rapidly and may cause ting Entry into the blood-stream, through, for example, cuts, abr prior to the use of the material and ensure that any external	The material may accentuate any pre-existing dermatitis condition Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Material on the skin evaporates rapidly and may cause tingling, chilling and even temporary numbness Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.		
Eye	The material may be irritating to the eye, with prolonged con conjunctivitis.	ntact causing inflammation. Repeated or prolonged exposure to irritants may produce		
Chronic	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course. Main route of exposure to the gas in the workplace is by inhalation. Chronic exposure to alkyl ethers may result in loss of appetite, excessive thirst, fatigue, and weight loss. WARNING: Aerosol containers may present pressure related hazards.			
	τοχιριτή	IRRITATION		
Stoner E302 Rocket Release	Not Available	Not Available		
	τοχιςιτγ	IRRITATION		
	Dermal (rabbit) LD50: >2000 mg/kg <sup>[1]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>		
heptane	Inhalation(Rat) LC50; >29.29 mg/l4h <sup>[1]</sup>	Skin: no adverse effect observed (not irritating) <sup>[1]</sup>		
	Oral (Rat) LD50; >5000 mg/kg <sup>[1]</sup>			
	ΤΟΧΙΟΙΤΥ	IRRITATION		
naphtha petroleum, light	Dermal (rabbit) LD50: >1900 mg/kg <sup>[1]</sup>	Eye: no adverse effect observed (not irritating) <sup>[1]</sup>		
alkylate	Inhalation(Rat) LC50; >4.42 mg/L4h <sup>[1]</sup>	Skin: adverse effect observed (irritating) <sup>[1]</sup>		
	Oral (Rat) LD50; >4500 mg/kg <sup>[1]</sup>			
	ΤΟΧΙΟΙΤΥ	IRRITATION		
dimethyl ether	Inhalation(Rat) LC50; >20000 ppm4h <sup>[1]</sup>	Not Available		

napritna petroleum, light		
alkylate	Inhalation(Rat) LC50; >4.42 mg/L4h <sup>[1]</sup>	Skin: adverse effect observed (irritating) <sup>[1]</sup>
	Oral (Rat) LD50; >4500 mg/kg <sup>[1]</sup>	
dimethyl ether	ΤΟΧΙΟΙΤΥ	IRRITATION
	Inhalation(Rat) LC50; >20000 ppm4h <sup>[1]</sup>	Not Available
Legend:	1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise	

1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.\* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

enzyme not produced in substantial amounts in female rats, mice and other species, including humans. The resulting nephrotoxicity and subsequent carcinogenesis in male rats were therefore not considered in deriving LOAEC/LOAEL values. Only a limited number of studies of short-term and subchronic duration were identified for site-restricted LBPNs. The lowest LOAEC identified in	NAPHTHA PETROLEUM, LIGHT ALKYLATE	and dermal (LD50 in rabbits > 2000 mg/kg-bw) routes of exposure Most LBPNs are mild to moderate eye and skin irritatis in rabbits, with the exception of heavy catalytic cracked and heavy catalytic reformed naphthas, which have higher primary skin irritation indices. Sensitisation: LBPNs do not appear to be skin sensitizers, but a poor response in the positive control was also noted in these studies <b>Repeat dose toxicity:</b> The lowest-observed-adverse-effect concentration (LOAEC) and lowest-observed-adverse-effect level (LOAEL) values identified following short-term (2-89 days) and subchronic (greater than 90 days) exposure to the LBPN substances. These values were determined for a variety of endpoints after considering the toxicity data for all LBPNs in the group. Most of the studies were carried out by the inhalation route of exposure. Renal effects, including increased kidney weight, renal lesions (renal tubule dilation, necrosis) and hyaline droplet formation, observed in male rats exposed orally or by inhalation to most LBPNs, were considered species- and sex-specific These effects were determined to be due to a mechanism of action not relevant to humans -specifically, the interaction between hydrocarbon metabolites and alpha-2-microglobulin, an enzyme not produced in substantial amounts in female rats, mice and other species, including humans. The resulting nephrotoxicity and subsequent carcinogenesis in male rats were therefore not considered in deriving LOAEC/LOAEL values. Only a limited number of studies of short-term and subchronic duration were identified for site-restricted LBPNs. The lowest LOAEC identified in these studies, via the inhalation route, is 5475 mg/m3, based on a concentration-related increase in liver weight in both male and female rats following a 13-week exposure to light catalytic cracked naphtha. Shorter exposures of rats to this test substance resulted in nasal irritation at 9041 mg/m3 No systemic toxicity was reported following dermal exposure to light catalytic
		these studies, via the inhalation route, is 5475 mg/m3, based on a concentration-related increase in liver weight in both male and female rats following a 13-week exposure to light catalytic cracked naphtha. Shorter exposures of rats to this test substance resulted in nasal irritation at 9041 mg/m3.
these studies, via the inhalation route, is 5475 mg/m3, based on a concentration-related increase in liver weight in both male and female rats following a 13-week exposure to light catalytic cracked naphtha. Shorter exposures of rats to this test substance resulted in nasal irritation at 0.014 mc resources.		No systemic toxicity was reported following dermal exposure to light catalytic cracked naphtha, but skin irritation and accompanying histopathological changes were increased, in a dose-dependent manner, at doses as low as 30 mg/kg-bw per day when applied 5 days per week
these studies, via the inhalation route, is 5475 mg/m3, based on a concentration-related increase in liver weight in both male and female rats following a 13-week exposure to light catalytic cracked naphtha. Shorter exposures of rats to this test substance resulted in nasal irritation at 9041 mg/m3 No systemic toxicity was reported following dermal exposure to light catalytic cracked naphtha, but skin irritation and accompanying histopathological changes were increased, in a dose-dependent manner, at doses as low as 30 mg/kg-bw per day when applied 5 days per week		for 90 days in rats No non-cancer chronic toxicity studies (= 1 year) were identified for site-restricted LBPNs and very few non-cancer chronic toxicity studies were
these studies, via the inhalation route, is 5475 mg/m3, based on a concentration-related increase in liver weight in both male and female rats following a 13-week exposure to light catalytic cracked naphtha. Shorter exposures of rats to this test substance resulted in nasal irritation at 9041 mg/m3 No systemic toxicity was reported following dermal exposure to light catalytic cracked naphtha, but skin irritation and accompanying histopathological changes were increased, in a dose-dependent manner, at doses as low as 30 mg/kg-bw per day when applied 5 days per week for 90 days in rats No non-cancer chronic toxicity studies (= 1 year) were identified for site-restricted LBPNs and yerv few non-cancer chronic toxicity studies were		identified for other LBPNs. No significant acute toxicological data identified in literature search. Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of

n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to

The major classes of hydrocathons are well absorbed into the gastionitestinal funct in vortices greeks, in many cases, the hydrocathons provides in the hydrocathon provides in thydrocathon prevides in the hydrocathon provides	be present in mineral oil, n-parattins may be absorbed to a greater extent than iso- or cyclo-parattins.	
hydrocathona are ingested in association with faits in the dief. Some hydrocathona may paper unchanged as in the logotherin particles in the digy hytho. but most hydrocathona that becames available to be deposited unchanged and instances audits may be deposited unchanged and instances. Audit and the matching and instances which can be metabolized to compounds which are toxic to the nervous system. This product contains tolkness factors in the dief. The dief of	The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic	
put lymph, but most hydrocatorea partly separate from faits and undergo matabolism in the gut. The gut cell may play a major tole in determining the proprioring of hydrocatorea that becomes autoat any placed buckaemia, and n-harane, which can be matabolized to composite which are brack to the nervous system. This product contains bukene, and animal tasking suggest high concentrations of toluors the benerging loss. The product contains and y placeare and nary placed buckaemia, and n-harane, which can be matabolized to composite any place to any set of the nervous system. This product contains have near the site and kidney; these are however not considered to be relevant in humans. Matation-causing potential: Annual tasking above inhaling petroleum causes turnours of the fiver and kidney; these are however not considered to be relevant in humans. Matation-causing potential: Notice studies site involving gasoline have returned negative result regulting the potential to cause mutations, including all recent studies in high human subject (such as in partice twoics station affordamis). Respondunce to tacking with a discussion of the totax. Discussion and the totax. Discussion and the place on the totax. Internation and permitation by other materials. Internations of holuene (cd. 1%) can cause Matatona, including all recent studies in the site and based to the totax. Discussion and the totax college and base information and permitation by other materials. Animal testing divocations, CF-r04, isolations and an information and studies and the site of matabilis for 4 hours used as site and to applications, CF-r04, isolations was determined according to CED 404. The test substance was an infraing to the site, we permitation potential of the hydrocations, CF-r04, isolations was determined and stored 1, 28, 48, 72 hours the application. At the 1 hour evaluation, to opinich and a discussion of the test substance was determined a society to be application of 1 multicating the town to substance. A substance was an anotabiline t	hydrocarbons are ingested in association with fats in the diet. Some hydrocarbons may appear unchanged as in the lipoprotein particles in the	
determining the proportion of hydrocarbon that becomes available to be deposited unchanged in peripheral tissues such as in the body fat stores or the liver. Inhalation of the gas periodium: This product contains benzene, which can cause acute myeloid leukaemia, and n-hexane, which can be metabolized to compounds which are toxics for the nervous system. This product contains the barry takes the product scalar and the product contains the periodium can be the toxics of the barry takes. The product contains the product contains the product contains the toxics of the barry takes are barrows of the barry takes and taking, these are however not considered to be relevent in humans. Hadden contains the toxic of the barry takes are barrows and the barry takes are barrows and takes, these are however not considered to be relevent in humans. Hadden contains possible to the toxics that an other takes are barrows and takes, these are however net considered to be relevent in humans. Hadden contains possible to the toxics that an other takes are barrows and takes, these are however the takes and developmental toxicity to the nervous system of the feature. Other studes are barrows that sole contains are barrows addentified according to CECD 404. The test advances was applied to the intel data of the feature and takes that the sole and takes and the sole and takes and the sole and take and the toxic and the sole and take and the toxic and the sole and take and the toxic and the toxic and the toxic and the toxic and take and the toxic and take and the toxic	gut lymph, but most hydrocarbons partly separate from fats and undergo metabolism in the gut cell. The gut cell may play a major role in	
or the line inhibition of the gat. For periodic contains benzene, which can cause acute mysolid leukamis, and n-levanic, which can be metabolized to compounds which are toxics to the nervous system. This product contains thybeing and initial studies sugges high concentrations of tobure lead to hearing loss. This product contains thy benzene and naphtakene, from which arean tasked in spore wholene of tunour formation. Considered to the serve in the serve to the nervous system the interval sequence and the hearing spore wholene of tunour formation. Considered to the serve interval sequence and the serve task tasket. There are boxelers of considered to the interval sequence and the interval sequence and whole metabolized to cause mutations, including all resent studies in hory human subject (caush as in period to hearing, 100-195) con acute and keeping human site of the interval sequence and the levels within the serve task and whole metal effects such as lower brith weight and developmental british to the revolus segue of the feetus. Che standardis. Human effects. Protoged or repeated contact may cause delating of the site which can lead and evelopmental effects such as lower brith weight and developmental british to the origin contains. Human site setup in the setup in the standardism is the setup in the standardism and periodization of ofter materials. The site standardism was instanting to the site. There are also and the setup in the setup in the standarding and periodization of the setup induces in the standarding was inflating to the site. There are also and the setup in the setup in the standarding to the setup in the standarding of the site. There are also and the setup in the setup in the setup in the setup in the standarding in the Site of the setup in the standarding in the Site of the setup in the standarding in the Site of the setup in the standarding in the Site of the setup in the standarding in the Site of the setup in the standarding in the Site of the setup is the setup in the standard	determining the proportion of hydrocarbon that becomes available to be deposited unchanged in peripheral tissues such as in the body fat stores	
Inhaliation d the gas For performant, This product contains benzene, which can cause acute myolid leukaemia, and n-hexane, which can be metabolized to compound which are tools to the nervous system. This product contains tables suggest high concentrations of toluene lead to hearing loss. This product contains retry benzene and which narinal lesting shows which can be metabolized to be relevant in humane. Munifor-causing potential - Animal testing shows inhaling performa causes turours of the lever and kdhay; these are however not considered to be relevant in humane. Munifor-causing potential - Most suddles show that high concentration of submet (-0.1%) can cause developmental effects such as lower bink weight and developmental books who has high concentrations of bluene (-0.1%) can cause developmental effects such as lower bink weight and developmental potential - Host suddles show that high concentrations of bluene (-0.1%) can cause developmental effects such as lower bink weight and developmental potential - Host substance (-0.1%) can cause developmental effects with as lower bink weight and developmental potential of the substance was system of the lowers. Other studes effects on the forture. Human effects: Photoged or repeated contact may cause defating of the six bubarne, no edwnse effects on the forture. Human effects: Photoged or repeated contact may cause defating of the six bubarne, no edwnse, Med-defined to motogen and may make the six more susceptible to initiation and parentation by other materials. Animal testing shows that depositore to contactions. After renoval of the test substance, was needed in any of the six. The set substance was avereable within 0 days. Done the six contactions, the set substance was initiating to the six. The set substance was avereable within 0 days. Boo the six substance was needed in any of the 3 rabbits. Two further studies, performed according to 0.0000 (-0.0000000000000000000000000000	or the liver.	
For petroleum. The product contains berazene, which can cause acute myeliad leukaemis, and animal studies acuges high concernations of toluune lead to hearing (ses. This product contains telling acutes evidence of unnour formation. Cancer-causing potential: Animal testing shows heating petroleum causes incurs of the liver and kinker, these are however not considered to be relevant in humans. Mustaton-causing potential: Most studies involving gasoline have returned negative results regarding the potential to cause mutations. Including al recent studies in hinty fhuman subjects (such as in potrol service station alterdants). Reproductive toxicity, Animal studies also what high concentrations of tolosens (b) 150 can cause developmental effects such as bower birth weight and developmental toxicity to the nervous system. The studies show has thigh concentrations of tolosens (b) 150 can cause developmental effects such as bower birth weight and developmental toxicity to the nervous system. The studies show has the concentrations of tolosens the studies and the studies and the studies of the particity causes. The test studies are not avoid to the formation and persentials of tolosens the studies in the provide studies and the studies of the studies and the studies of the particity causes. The test studies are not avoid to the intext skin of rabbits for 4 hours under semancicularies correl altering within 4 days. Little of the studies are not even birtle down and the studies are not even birtle down and the studies of a tabbits. Could relead were required and the studies studies are down and the studies were revealed within 4 days. Little studies are not even birtle and the studies are not even birtle down and the studies are not even	inhalation of the day	
In empound, which are tools to the nervous system. This product costant solutes, and analysis using an infiguration commutation of monitors. Cancer-causing potential: Animal lessing shows inhaling patroleum causes tuncurs of the liver and kidney; these are however not considered to be relevant in humans. Mutation-causing potential: Most studies involving assolute have returned negative results regarding the potential to cause mutations, including all resent studies. In king human subject (such as in predict service studies and on causes developmental addets) to the revous system of the feets. Other causes developmental addets to the nervous system of the feets. Other causes developmental addets to the nervous system of the feets. Other causes developmental addets to the nervous system of the feets. Other causes developments are decised on the feets. Other causes developments are decised on the feets. Other causes developments are decised on the nervous system of the feets. Other causes developments are decised on the feets. Other causes developments are decised on the feets. Other causes developments are decised on the feets. Other causes developments are developmental addets to advance used statism causes ideal within a cause ideal within a statism shows that separate to gasoline over al lifetime can cause ideal causes ideal within a cause ideal causes. The relevance in humans is questionable. The shin minition originarized advances is cause ideal within a statism shows that substate was because a statism cause ideal within a	For particularity this product contains benzane, which can cause acute myeloid laukaemia, and p-beyane, which can be metabolized to	
boligodias which are tools to lear lendors system. The product obtains during and an instables sugges ingly contain anotes to location of the system of the	or periode unit. This product contains beitzerie, which can cause acted in yelou reukaering, and thiere and the metabolized to	
In the nearing loads, in the product contains ency fear-ble and neghting encloses summurs of the liver and theorem of considered to be near-considered to the sin inflammation and may make the skin more susceptible to initiation and penetration by other matching to CECD 404. The test substance was applied to the initiat skin of nobbis for 4 nous under seminoschalare considered the substance within a substance initiation no penetrations. The single statistica to in abbits for 4 nous under seminoschalare the skin matching and considered to the skin. The single statistica to indicate the computerious lass of stabistics. The substance initiation in the skin matching and the skin. The substance initiation potential in the stabistics in the skin. The substance initiation in abbits in the skin. The substance initiation in abbits in the skin. The substance initiation in abbits in the skin. The substance initiation in abbits in the shine stabistics. The substance initiation in abbits in the shine substance initiation in abbits in the substance initiation in abbits in the substance initiatis abbits in the substance initis ab	compounds which are toxic to the nervous system. This product contains toluene, and animal studies suggest high concentrations of olderne lead	
Cancer-causing potential: Annual testing shows inhaling periodium causes tumours of the liver and kather; these are however not considered to be relevant in humans. Mutation-causing potential: Most studies involving gasoline have returned negative results regarding the potential to cause mutations, including all near studies in hing human studies's (such as in period service studies and read-tause). We applied and developmental buckty to the nervices system of the featus. Other studies allow no adverse effects on the featus. Human effects: Prolonged or regarded contact rays cause defaiting of the sith which can lead to six in has a lower built we use potential to vicity to the nervices system of the featus. Other studies allow no adverse effects on the relax. Animal testing shows that coposure to gasoline over a lettermined according to GECD 44. The test substance was applied to the intact skin of tabbits for 4 hours under semicockaive contitions. After removal of the test substance, no edma, substance was applied to the skin. The experiments under semicockaive contitions. After removal of the test substance, here dema, all well-defined to 14. In the set aubstance was interialing to the skin. The experiments contrast difference in the substance in the interial studies of a substance. The every interial to the diverse (grade 2) was observed in all antimats. Computicities interials relations and ordin at ny time stanting to the skin. The ever instance (grade 2) was observed in all antimats. Computicities interials in any of the 3 rabbits. Two further studies, grade by the A hum observation. Based on read-access from a structurally related substance within a study of a farabits. Two further studies, grade by the A hum observation. Based on read-access from a structurally related substance within a study of the stability of the environs. Cr-Cr-Gr, be-alkness for adverse for the substance belowed for the substance for the study repreted exports to the study of the stability of the nervise study and the	to nearing loss. This product contains ethyl benzene and naphthalene, from which animal testing shows evidence of tumour formation.	
be relevant in humans. Matation-cassing potential: Notes studies involving gasoline have returned negative results regarding the potential to cause mutations, including all recent studies in living human subjects (such as in petrol service station attendants). Reproductive toxicity: Animal studies show that high neonentrations of toxius. Other studies have no adverse effects such as lower birth weight and developmental loxicity to the nervous system of the locus. Other studies have no adverse effects on the focts. Human effects: Prolinged or regleated contact may cause developmental effects such as lower birth weight and developmental loxicity to the nervous system of the locus. Other studies have no adverse effects on the focts. A mant lessing barres that reported to spaceline over a listemic and according to GED API. The test advectment may make the skin of radiatis for 4 hours under seminoscharize anditions. After remonal of the test advectment, not advected edimet at moderate explorement were ronder hall threa eminoscharize anditions. After remonal of the test advectment, not edimet at moderate explorement were ronder hall threa eminoscharize profilement were remonscharize and the status of 0.1 mL of the test material into the conjunctival area of a mbits. To-colar reactions, server examined and scorer 1, 24, 48, 72 hours after administration, 4, 64 all reads save average were advected for the score advected in the advected in all arimals at the 72 hour evaluation. All renders was reversible within 7 days, to correlation development and any mained at any time point could be observed for the compounds togenes and coverding to the OSD ad 40, ethore advected form a secarcing the read-advects form a substance (light alkylate maphtha distiliate), no inhaliation repeated dose toxicity is experiment advecturally related substance for 0 burders by davided by the 4 hour observation. Based on read-access from a structurally related substance (light alkylate maphtha distiliate) no inhaliation repeated dose toxicity is	Cancer-causing potential: Animal testing shows inhaling petroleum causes tumours of the liver and kidney; these are however not considered to	
Mutation-causing potential: Most studies involving gasoline have roturned negative results regarding the potential to cause mutations, including all recent studies in hirdy human subjects (such as in potro) service station attendants). Reproductive toxicity: Animal studies show that high concentrations of toluere (-0.13%) can cause developmental effects such as lower birth weight and developmental toxicity to the nervous system of the featus. Other studies show no adverse effects on the featus. Human effects: Prolonged or repeated contact may cause defating of the skin which can lead to skin inflammation and may make the skin more susceptible to initiation and permetation by other materials. Animal testing shows that exposure to gasoline over a lifetime can cause kidney cancer, but the relevance in humans is questionable. The skin initiation potential of the test substance was determined according to OECD 404. The test substance was printed to initiato shi of rabbits for 4 hours under semicolausive conditions. After removal of the test substance was initiating to the skin. The eye imitation potential of the hydrocations, CT-C9, isoalkanse was determined according to UECD 404. The tots outsidence was initiating to the skin. Conjunctival redness (grade 2) was obsceneed in all animals. Conjunctival redness (grade 2) was obsceneed in all animals. Conjunctival redness (grade 2) was obsceneed in all animals. Conjunctival redness was needed for the compounds lapsed E and logar. Una constructive cause in the advective interval within a discusse and consting to CECD 404, showed that no occular interval within a discussion and other astronomic shows and edit of the state status and the advection of the state status and the advection and the advection and the advection of the state status and the state advection and the advecti	be relevant in humans.	
all recent studies in king human subjects (such as in pertol service station attendints). Reproductive outight - Animal Studies show that high concentrations of toluem (-0-1%) can cause developmental effects such as lower birth weight and developmental toxicity to the nervous system of the featus. Other studies show no adverse effects on the featus. Human effects: Prolonged or registed contact may cause defaulting of the skin which can lead to skin inflammation and may make the skin more susceptible to irritation and penetration by other materials. Animal testing shows that exposure to gasoline over all letime can cause kidney cancer, but the relevance in humans is questionable. The skin irritation potential of the test substance was determined according to DECD 40 The test substance was applied to the intact skin of rabbits for A hours under semicolauve conditions. After removal of the test substance, no setting to the skin. The eye inflamma potential of the test substance was determined by institution to 1.1 m. of the test material no the computed increases are reversible within 7 days. Borden tests conditions, the test substance was applied to the intact skin of rabbits for A hours under semiconselble within 7 days. Borden tests conditions, the test material no the computed increases was reversible within 7 days. Borden et agreess the structural test material in the for- computed increases was reversible within 7 days. Borden et agreess the structural test material showed slight erythema which completers subside by the 4 hour observation. Based on read-accos from a structurally related substance within a category approach, hydrocathons, CT-C3, isoaknese was consolidered to be askit sensitiser. Based on read-accos from a structurally related substance (fight alkylate naphth distillate), no inhalation repeated does toxicily is expected from the exposure to Hydrocathons, CT-C3, iso-alkanese. No need for classification according to DEOD and C1000000000000000000000000000000000000	Mutation-causing potential: Most studies involving gasoline have returned negative results regarding the potential to cause mutations, including	
Reproductive toxicity. Animal studies show that high concentrations of toluene (-or) sity can cause developmental offects such as lower birth weight and developmental toxicity to the nervous system of the foctus. Other studies show no adverse effects on the foctus. Human effects: Prolonged or repeated contact may cause defating of the skin which can lead to skin inflammation and may make the skin more susceptible to initiation and permateriabin. Anima testing shows that exposure to gasoline over a lifetime can cause kidney cancer, but the relevance in humans is questionable. The skin initiation optimal of the lest substance varies defating of the skin which can lead to skin inflammation and may make the skin more susceptible to the animals. Initiating effects were reversible within 7 days. Under the test substance was applied to the intract skin of rabbits for 4 hours under semiclocular coording to 2CC3 40. Also, 2D were share application, the test substance was initiating to the skin. The eye initiation optimal of the hydrocarbons, CF-C3, isoakknes was determined a coording to 2DC3 40. Also, 2T hours alter application. At the 1 hour evaluation, Alter forebase was noted in all animals at the 72 hour evaluation. Alter forebase was noted in all animals at the 72 hour evaluation. Alter forebase was noted as coording to 2DC2 40. J showed that no occular inflation in any animal at any time point could be observed for the compounds bayed E and bayer. Character substance and the advectable in any of the 3 tabibas. Two further studies, performed according to 2DC2 40. J showed that no occular inflation in any animal at any time point could be observed for the compounds bayer E and bayer. Character and the top showed sight erythema which completely subside by the 4 hour observation. Based on read-access from a structurally related substance (Bit all algeba applich) activation according to be 2D around the structure and tabibas. Two furthers as and that the structure and the advecestation according to be showed sight any	all recent studies in living human subjects (such as in petrol service station attendants).	
weight and developmental toxicity to the nervous system of the focus. Other studies show no adverse effects on the focus. Human effects: Prioringoi or repeated contact may cause defating of the skin which can lead to skin inflammation and may make the skin more susceptible to irritation and penetration by other materials. Animal testing shows that exposure to gasoline over a lifetime can cause kidney cancer, but the relevance in humans is questionable. The skin irritation potential of the test substance was apterimed according to DCED 404. The test substance was applied to the intact skin of rabbits for 4 hours under semicoliculaive conditions. After removal of the test substance, no edue the stin substance was applied to the intact skin of rabbits for 4 heydrocarbons, C7-C9, isoakaawa was determined by instillation 0.1 nit. of the test material into the conjunctival sca 03 rabbits. Ocular reactions were examined and scored 1.24, 44, 27 hours after application. At the 1 hour evaluation, origuinctival referess (grade 2) was observed in all inimals. Conjunctival referess (grade 2) was also noted in all animals that 72 hour evaluation. All referess was reversible within 7 days. No comeal gazolity, intis or could in classica was noted in any of the 3 rabbits. Two further studies, performad according to OECD 440 showed hat no ocular intitation in any aming an suture pilot elastistication activation of the 3 structurally related substance (tit) analysis application according to the exposure to hydrocarbons, C7-69, iso-alkanes. No need for classification according to the DSD and CLP criteria for desisfication activation of hydrocarbons, C7-69, isoalkanes was assessed in a 12-week inhaliaton toxicity study in rats. In this study, metale the study other the study and substance (tit) and was in the repeated charboar to add of 200 program by materials that with the alpha-21-globulin-induced nephropathy in maler ats and that the test substance belongs to actegory of substance with a systenk with the alpha-22-globulin-induc	Reproductive toxicity: Animal studies show that high concentrations of toluene (>0.1%) can cause developmental effects such as lower birth	
Human effects: Protonged or repeated contact may cause defatting of the skin which can lead to skin inflammation and may make the skin more susceptible to initiation and penetration by other materials. Animal testing shows that exposure to gasoline over a lifetime can cause kidway cancer, but the relevance in humans is questionable. The skin initiation potential of the test substance was adtermined according to OECD 440. The test substance was applied to moderate explements were noted in all three animals. Initiation potential of the hist substance, no edema, but well-defined to moderate explements were substanced and social 1.24, 48, 72 three animals. Initiating to the skin. The exp initiation potential of the hydrocarbons, C7-C9, localar reactions were examined and social 1.24, 48, 72 three alternals. The availuation, conjunctival redness (grade C) was observed in all animals. Conjunctival redness (grade C) was observed for the conjunctival and redness was reacting to OECD 440, et 1.14, 48, 72 three alternals. The availuation, conjunctival redness (grade C) and constants was able noted in any of the 3 rabbits. Two revaluation. A final character and the reveals within a cataly exist. No consel depath; initis or conjunctival chemosis was ables noted in any of the 3 rabbits. Two further studies, performed according to OECD 440, et 1.14, 48, 72 threat fact antimistion, et al. a fact antimistic should a sight explored from the exposure to hydrocarbons, C7-C9, isocalkanes was ablesable by the 4 hour observation. Based on read-access from a structurally related substance (grad substance (grad substance) within control study in patient by structurally related substance within a catalogs approach, hydrocarbons, C7-C9, isocalkanes was ablesable to be a skin sensitiser. Based on read-access from a structurally related substance for the fourty/dys, 5 daywesk, for 1 daywesk thread and consistent with the apple-32-globalin-induced exploration in the explore the structurally related substance for the exposure to hydrocarbon	weight and developmental toxicity to the nervous system of the foetus. Other studies show no adverse effects on the foetus.	
succeptible to irritation and penetration by other materials. Animal testing shows that seposture to goadine over a lifetime can cause kidney cancer, but the relevance in humans is questionable. The skin irritation potential of the test substance was determined according to OECD 404. The test substance was applied to the initiat skin of rabbits for 4 hours under semicoclusive conditions. After removal of the test substance, no semicon, but well-defined to moderate environ- testing and the semicondition of the integration of the set substance was applied to the initiat substance was applied to a substance was applied to the initiat substance was applied to the initiat substance was applied to the initiat substance within a cateform application and tabeling the substance within a category approach, hydrocarbons, CP-C9, lisoalkanes are not considered to be a kin sensitistic. Based on read-access from a structurally related substance (bight alkylate naphtha disilled), no inhaliston repeated does toxing is expected from the exposure to four substance between structural in the protocarbons, the NOACE (Category of substance) and the test substance belongs to a category of substance substance belongs to a category of substance substance which are known for their ability to induce nephropathy was assessed in a 12-week inhalikation toxing structurally related substance belongs to a category of substance substance belongs to a category o	Human effects: Prolonged or repeated contact may cause defatting of the skin which can lead to skin inflammation and may make the skin more	
Aviand testing shows that exposure to graditine over a lifetime can cause kidward counting to QECD 444. The test substance was applied to the intact skin of rabbits for 4 hours under semicodusive conditions. After removal of the test substance, no edema, but well-defined moderate explorement node in all three annuals. Intributing effects were revealable within 9 days. Under the test exploration, no test and the test material into the conjunctival reduces (grade 0-1) was also noted in all annuals. Conjunctival reduces (grade 0-1) was also noted in all annuals. Conjunctival reduces (grade 0-1) was also noted in all annuals and all annuals. Conjunctival reduces (grade 0-1) was also noted in all annuals and the 72 hour evaluation. All reduces was restable within 7 days. No cornered capacity, into conjunctival reduces (grade 0-1) was also noted in any of the 3 rabbits. Two further studies, performed accounting to 0-200 showed that no occur intration in any annual at any time point could to observed for the compared by used lifet by the All work observed in the conjunctival reduces (grade 0-5), is coaliance, the conjunctival reduces the compared by used lifet by the All work observed in the conjunctival reduces the compared by the contexplex subscience (grade substance) and subscituant (grade subscituante) and subscituante (grade subscituante) and subs	suscentible to introduce of operation by other materials	
The skin initial esplane to gesulite over a institute call cause Automatic a control to the device of interface and interface and a control to the call cause Automatic and a control of the test substance was applied to the intact skin of rabbits for 4 hours under semicoclusive conditions. After removal of the test substance vas applied to the intact skin of rabbits for 4 hours under semicoclusive conditions. After removal of the test substance was applied to the intact skin of rabbits for 4 hours under semicoclusive conditions. Here substance was intrading to the skin. The eye inflation potential of the hydrocarbons, C7-Q3, isoalkances was determined by institution of 0.1 m. of the test substance was inflating to the skin. The eye inflation applied to the intact of a patient substance, or opiunctival redness (grade 0.1) was also noted in all animals at the 72 hour evaluation. All redness was are versible within 7 days. No comead opacity, inits or conjunctival chemosis was noted in any of the 3 rabbits. Two further studies, performed according to CCD 404) showed that no oclus rimation in any animal at any time point oculd be observed for the compounds losper E and losper C. In another study conduced similar to OECD 405, all hour after advacces from a structurally related substance within a category approach, hydrocarbons, C7-Q9, isoalkances are not considered within a category approach, hydrocarbons, C7-Q9, isoalkances are not considered to be a skin sensitier. Based on read-accoss from a structurally related substance of 6 hours/dx9, E daystweek, for 1 2 weeks resulted in male rat kidney offects consistent with the alpha2-y-globulin-induced enphropathy was sticity of hydrocarbons, C7-Q9, isoalkance was assessed in a 12 -week inhaliation toxicity study of the alpha2-y-globulin-induced enphropathy was sticity in the alpha2-y-globulin-induced enphropathy was sticity in the appropriate was stated and we take and alpha2-y-globulin-induced enphropathy was sticity inite to the category approach, here stake states and	Avine la tacting a devenue that averaging to gradeling and an average kideou espect, but the relevance in humane is questionable	
The skin infration potential of the test substance was deprined according to CPLU 444 . In test substance was applied to the indict skin of rabbits for 4 horus under semicolasive conditions. After removal of the test substance, no adema, but well-defined to moderate erythema were noted in all three animals. Irritating effects were reversible within 3 days. Under the test conditions, the test substance was irritating to the skin. The eye irritation potential of the hydrocarbons, C7-C9, losalitances was determined by instillation of 0.1 mill of the stimulation, conjunctival redness (grade C-1) was able very conducted similar to CECD 405, at 1 hour after administration, 4 of 6 animals showed slight compounds lisopar E and lisopar C. In another study conducted similar to CECD 405, at 1 hour after administration, 4 of 6 animals showed slight erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance within a category approach, hydrocarbons, C7-C9, iso-alkanes. No need for classification according to tECD 400 all showed that or calar institution and lisbelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhibition toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhibition toxicity sludy in rats. In this study, repeated exposure to A00 or 1200 ppm of the test substance for 6 hoursiday. 5 days/week, for 12 weeks resulted in male rats likely effects consistent with the alpha-22-globulin-induced nephropathy in male rats. Under the rest and that the test substance beings to a category of substances which are throwing the sisted and were were stellar and that the test substance were interestively in hydrocarbons, C7-C9, isoalkanes, use and that the test substance beings to a category of substances which area transe, stellakae, calibala and that the test substance b	Animal testing shows that exposure to gasoline over a metine can cause kidney cancer, but the relevance in humans is duestionable.	
rabbits for 4 hours under semicoclusive conditions. After removal of the studistance, no edema, but weil-defined to moderate erythema were reversible within 5 days. Under the test conditions, the test substance was irritation to the skin. The eye irritation potential of the hydrocarbons, C7-C9, isoalkanes was determined by instillation of 0.1 mL of the test material into the conjunctival redness (grade 2) was observed in all animals. Conjunctival redness (grade 0-1) was also noted in all animals at the 72 hour evaluation. All redness was reversible within 7 days. No corneal opacity, intis or conjunctival redness was noted in any of the 3 rabbits. Two further studies, performed according to OECD 404) showed that no ocularitizat irritation in any animal at any time point could be observed for the compounds Isopar C. In another study: conducted similar to OECD 406, st 11 hour affer administration, 4 of 6 animals showed Sight erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance (light alkylata naphtha distillac), no inhalation repeated to be a skin sensitier. Based on read-across from a structurally related substance (light alkylata naphtha distillac), no inhalation repeated to be a skin sensitier. Based on read-across from a structurally related substance (light alkylata naphtha distillac), no inhalation repeated to be a skin sensitier. Based on read-across from a structurally related substance (light alkylata naphtha distillac), no inhalation repeated to be a skin sensitier. Based on read-across from a structurally related substance within a days. Charge evek inhalation toxicity study in rats. In this study, regeled exposure to hydrocarbons, C7-C9, isoalkanes was assessed in 12 week inhalation toxicity study in rats. In this study, regeled exposure to hydrocarbons, the substance borg for a classification and nate lings were unerakable. Under heptropathy was strictly limited to moder as a datther there substance which as known of their shills in t	The skin irritation potential of the test substance was determined according to OECD 404. The test substance was applied to the intact skin of	
noted in all three animals. Initiating effects were reversible within 6 days. Under the test conditions, the test substance was initiating to the skin. The evejerination potential of the hydrocathons, G7-C9, isoakkanes was determined by instillation of 0.1 m. of the test material into the conjunctival sace of a rabbits. Ocular reactions were examined and scored 1, 24, 48, 72 hours after application. At the 1 hour evaluation, conjunctival redness (grade 2) was observed in all animals. Conjunctival redness (grade C-1) was also noted in all animals at the 72 hour evaluation. All redness was reversible within 7 days. No corneal opacity, ittis or conjunctival redness (so noted he by all animals at the 72 hour evaluation. All redness was reversible within 7 days. No corneal opacity, ittis or conjunctival redness total by estimate of the compounds loopar E and loopar C. In another study conducted similar to OECD 405, at 1 hour after administration, 4 of 6 animals showed slight erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance (light alkylaten aphtha distillate), no inhalation repeated das toxicity is expected from the exosure to hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exopsure to 400 or 1200 pm of the test substance for 6 hours/day, 5 days/week, for 12 weeks resulted in maler takiney effects consistent with the alpha-22-globulin-induced nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rate nephropathy) was determined to be >1200ppm. The fact, that alpha-22-globulin-induced of hephropathy was strestly imited to male rats and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to ther exclusive expression of alpha-22-globulin-induced methods, PC-C9, suakasses, sealed as a not real ent	rabbits for 4 hours under semiocclusive conditions. After removal of the test substance, no edema, but well-defined to moderate erythema were	
The eye irritation potential of the hydrocarbons, C7-29, iscalkanes was determined by instillation of 0.1 mL of the test material into the conjunctival acrofa realistic. Occular reactions were examined and scored 1, 24, 48, 72 hours after application. At the 1 hour evaluation, conjunctival redness (grade 2) was observed in all animals. Conjunctival redness (grade 0-1) was also noted in all animals at the 72 hour evaluation. All redness was reversible within 7 days. No corneal opacity, initis or conjunctival redness was noted in any of the 3 rabibits. Two further studies, performed according to OECD 404 showed that no occuratival redness main at any time point could be observed for the compounds (sopar E. an another study conducted similar to OECD 406, st 11 hour reflect administration, 40 ef animals showed slight erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance (light alkylate naphtha disilled), no inhalation repeated to be a skin sensitiser. Based on read-across from a structurally related substance (light alkylate naphtha disilled), no inhalation repeated to be toxicity is expected from the exposure to hydrocarbons, C7-29, iso-alkanes. No need for classification according to the DSD and CLP criteria for classification and labelling. Systemic toxicity of hydrocarbons, C7-29, iso-alkanes was assessed in a 12 week inhalation toxicity study in rats . In this study, regeded exposure to 400 or 1200 pm of the test substance to for binurxiday, 5 days/week, for 12 weeks resulted in maler at kidney effects consistent with the alpha-2y-globulin-induced nephropathy in male rats. There was no treatment-related mortality and clinicity is expected from the exposure to hydrocarbons, C7-29, iso-alkanes. There was no treatment-related mortality and clinicity in markable. Under nephropathy in male rats the test substance belongs to a category of substances which are known for their ability to induce enphropathy in male rats due to their exclusi	noted in all three animals. Irritating effects were reversible within 9 days. Under the test conditions, the test substance was irritating to the skin.	
conjunctival sea of 3 rabbits. Coular reactions were examined and scored 1, 24, 48, 72 hours after application. At the 1 hour evaluation, conjunctival redness (grade 0) was observed in all annihast. Conjunctival rednemosis (grade 0-1) was also noted in all annihast at the 72 hour evaluation. All redness was reversible within 7 days. No corneal opacity, initis or conjunctival chemosis was noted in any of the 3 rabbits. Two further studies, performed according to the OECD 404) showed that no ocular initiation in any animal at any time point could be observed for the compounds Isopar E and Isopar C. In another study conducted similar to OECD 405, at 1 hour after administration, 4 of 6 animals showed slight erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance (light alkylate naphtha distillate), no inhalation repeated dose toxichy is expected from the exposure to hydrocarbons, C7-C9, Iso-alkanes was assessed in a 12-week inhalation toxicity taduy in rats. In this study, repeated exposure to 400 or 1200 ppm of the test substance of 6 hour/dkg, 5 days/week, for 12 weeks resulted in male rat kindyer effects consistent with the alpha-2-globulin-induced nephropathy in male rats. There was no treatment-related mortally and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was determined to be 31200pcm. The fact, that alpha-2-globulin-induced nephropathy in male rats due to their exclusive expression of alpha-2-gl-2-globulin-induced nephropathy in male rats due to their exclusive expression of alpha-2-gl-2-globulin-induced nephropathy in male rats due to their exclusive expression of alpha-2-gl-2-globulin, the protein known to play the crucial role in the onset of this diseas, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity 4 inhalation.	The eye irritation potential of the hydrocarbons, C7-C9, isoalkanes was determined by instillation of 0.1 mL of the test material into the	
conjunctival redness (grade 2) was observed in all animals. Conjunctival redness (grade 0-1) was also noted in all animals at the 72 hour evaluation. All redness was reversible within 7 days. No corneal opacity, iftis or conjunctival chemosis was noted in any of the 3 rabbits. Two further studies, performed according to OECD 404) showed that no occular irritation in any animal at any time point could be observed for the compounds laopar E and lsopar C. In another study conducted similar to OECD 405, at 1 hour after administration, 4 of 6 animals showed slight erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance (light allystate), no inhalation repeated dose toxicity is expected from the exposure to hydrocarbons, C7-C9, iso-alkanes. No need for classification according to the DSD and CLP oriteria for classification and labelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exposure to 400 or 1200 ppm of the test substance for 6 hours/day, 5 days/week, for 12 weeks resulted in maler at kidney effects consistent with the alpha-2p-globulin-induced nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was determined to be ± 1200pm. The fact, that alpha-2p-globulin-induced nephropathy was stricly limited to male rats and that the test substance belongs to a category of substances which are new routical role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity wia inhalation. The is worked category, enclasses are to any one radia were were clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cul	conjunctival sac of 3 rabbits . Ocular reactions were examined and scored 1, 24, 48, 72 hours after application. At the 1 hour evaluation,	
evaluation. All redness was reversible within 7 days. No correal opacity, initis or conjunctival chemosis was noted in any of the 3 rabbits. Two further studies, performed according to DCED 404) showed that no outil initiation in any animal at any time point could be observed for the compounds Isopar E and Isopar C. In another study conducted similar to DECD 405, at 1 hour after administration, 4 of 6 animals showed slight erythema which completely stubided by the 4 hour observated to be a skin sensitiser. Based on read-accoss from a structurally related substance within a category approach, hydrocarbons, C7-29, Isoaikanes are not considered to be a skin sensitiser. Based on read-accoss from a structurally related substance (light alkylate naphtha distillate), no inhaliation repeated dose toxicity is expected from the exposure to hydrocarbons, C7-C9, Iso-alkanes. No need for classification according to the DSD and CLP orient in or lation and labelling. Systemic toxicity of hydrocarbons, C7-C9, Iso-alkanes was assessed in a 12-week inhaliation toxicity study in rats . In this study, repeated exposure to 400 or 1200 ppm of the test substance for 6 hours/day, 5 days/week, for 12 weeks, resulted in male rat takiney effects consistent with the alpha-2y-globulin-induced nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was determined to be 1200pm. The fact, that sipha-2y-globulin-induced nephropathy in male rats due to their exclusive expression of alpha-2y-globulin, the protein known to play the crucial role in the unset, the observed of r1200 ppm by inhaliation. The in vivo genotoxicity of truther category approach, these results suggest that hydrocarbons, C7-C9, isoaikanes are not genotoxicity. In vivo Hydrocarbons, C7-C9, isoaikanes, scalkanes, isoaikanes, cyclics were not classoperito to mouse bone marrow cells. Iso-occane did not induce unschedued DNA synthesis in at hepatocyte cluture	conjunctival redness (grade 2) was observed in all animals. Conjunctival redness (grade 0-1) was also noted in all animals at the 72 hour	
further studies, performed according to QECD 40Å) showed that no cular irritation in any animal at any time point could be observed for the compounds Isopar E and Isopar C. In another study conducted similar to QECD 405, at 1 hour after administration, 4 of 6 animals showed slight erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance within a category approach, hydrocarbons, C7-09, isoalkanes are not considered to be a skin sensitier. Based on read-across from a structurally related substance (light alkylate naphth adistilles), no inhalation repeated dose toxicity is expected from the exposure to hydrocarbons, C7-09, iso-alkanes. No need for classification according to the DSD and CLP criteria for classification and labelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exposure to 400 or 1200 ppm of the test substance for 6 hours/day, 5 days/week, for 12 weeks resulted in male rat kidney effects consistent with the alpha-2µ-globulin-induced nephropathy in male rats. There was no tratament-related mortality and dirical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was determined to be 1200ppm. The fact, that alpha-2µ-globulin-induced hephropathy in male rats due to their exclusive expression of alpha-2µ-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity. In viv Mythocarbons, C7-04, isoalkanes esteed in a dominant lethal study (similar to OECD 478) showed ne evidence of genotoxicity. In vive Mythocarbons, C7-04, isoalkanes, scalakanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce	evaluation. All redness was reversible within 7 days. No corneal opacity, iritis or conjunctival chemosis was noted in any of the 3 rabbits. Two	
compounds Isopar E and Isopar C. In another study conducted similar to QECD 405, at 1 hour after administration, 4 of 6 animals showed slight erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance (light alkylate naphtha distillate), no inhalation repeated dose toxicity is expected from the exposure to hydrocarbons, C7-C9, iso-alkanes. No need for classification according to the DSD and CLP criteria for classification and labelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exposure to 400 or 1200 ppm of the test substance for 6 hours/day, 5 days/week, for 12 weeks resulted in male rat kidney effects consistent with the alpha-21-globulin-induced nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was determined to be 1200ppm. The fact, that alpha-21-globulin-induced nephropathy in male rats. there was no treatment-related mortality, and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rats ubstance belongs to a category of substances which are known for their axibity to induce nephropathy in male rats due to their exclusive expression of alpha-21-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional a dominant lethal study (similar to GEO 478) showed no evidence of genotoxicity in whore, C7-C9, isoalkanes, isoalkanes, socillas were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, alsoalkanes are not expected to share. Struckinase, socillas were not clastogenic	further studies, performed according to OECD 404) showed that no ocular irritation in any animal at any time point could be observed for the	
erythema which completely subsided by the 4 hour observation. Based on read-across from a structurally related substance within a category approach, hydrocarbons, C7-C9, isoalkanes are not considered to be a skin sensitiser. Based on read-across from a structurally related substance (light alkylate naphth adistillate), on inhalitation repeated dose toxicity is expected from the exposure to hydrocarbons, C7-C9, iso-alkanes. No need for classification according to the DSD and CLP oriteria for classification and labelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exposure to hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exposure to hydrocarbons, the NOAEC (excluding male rate hprinopathy) was determined to be >1200pm. The fact, that alpha-2µ-globulin-induced nephropathy was strictly limited to male rates and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to their exclusive expression of alpha-2µ-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vito Hydrocarbons, C7-C9, soalkanes tested in a dominal tehral study (similar to CECD 478) showed no evidence of genotoxicity in the trated male rates scalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unschedule DNA synthesis in rat hepatocyle cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxici. In vitro: Negat	compounds isopar E and isopar C. In another study conducted similar to OECD 405 at 1 hour after administration 4 of 6 animals showed slight	
substance (light alkylate naphtha distillate), no inhalation repeated dose toxicity is expected from the exposure to hydrocarbons, C7-C9, iso-alkanes. No need for classification according to the DSD and CLP criteria for classification and liabelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exposure to 400 or 1200 ppm of the test substance for 6 houriday. 5 daysweek, for 12 weeks resulted in male rat kidney effects consistent with the alpha-2y-globulin-induced nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was determined to be >1200ppm. The fact, that alpha-2y-globulin-induced nephropathy in male rats due to their exclusive expression of alpha-2y-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in vivo Hydrocarbons, C7-C9, isoalkanes, species were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected to induce emotoxicity vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity vivo. The available data indicate that hydrocarbons, C7-C9, i	anthema which completely subsided by the 4 bour observation. Based on read-proces from a structurally related substance within a category	
apploach, inylocations, inclusion and the test of the construction of the average of the derivations fluint and value and the advance (light alkylate naphthal distillate), no inhalation repeated dose toxicity is expected from the exposure to hydrocarbons, C7-C9, iso-alkanes. No need for classification according to the DSD and CLP criteria for classification and labelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exposure to 400 or 1200 pm of the test substance for 6 hours/day, 5 days/week, for 12 weeks resulted in male rat kidney effects consistent with the alpha-2µ-globulin-induced nephropathy in male rats. There was no treatment-related motality and clinical lindings were unremarkable. Under the test conditions, the NOAEC (excluding male rat and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to their exclusive expression of alpha-2µ-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant terhal study (similar to CEOD 478) showed no evidence of genotoxicity in the gern cells of thesis in rat Hapotory coultres. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected for induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected for induce unschereal (MIC) and MIC and MIC and MI	approach budgestease C2 0 iscallages as pet considered to be a skill constitute. Read on read estradient under subject and	
sousiation, by the end for classification according to the DSD and CDP ritreria for classification and labelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exposure to 400 or 1200 ppm of the test substance for 6 hours/day, 5 days/week, for 12 weeks resulted in male rat kidney effects consistent with the alpha-2µ-globulin-induced nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was determined to be >1200ppm. The fact, that alpha-2µ-globulin-induced nephropathy in male rats and that the lest substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to their exclusive expression of alpha-2µ-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to CECD 478) showed no redigence of genotoxicity in the germ cells of threat males, socilase, socilas were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not genotoxicity in wito. Ngative Ames test with S. typhinurum TA 1535, TA 1537, TA 1538, TA 98 and TA 100, and E. coli WP2 and WP2 uvr A, with and without metabolic activation. Negative results in marmalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. Negative results in marmalian chromesong in bernetice of the category on mutagenicity (in vitro and in vivo) as well as	approach, hydrocarbonis, 67-05, is solariantes are not considered to be a skill sensitive. Dased on read-actors from a subcurating related	
Iso-alkanes. No need tor classification according to the USD and CLP onterna for classification and labelling. Systemic toxicity of hydrocarbons, C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rate. In this study, repeated exposure to 400 or 1200 ppm of the test substance for 6 hours/day, 5 days/week, for 12 weeks resulted in male rat kidney effects consistent with the alpha-2µ-globulin-induced nephropathy was determined to be >1200ppm. The fact, that alpha-2µ-globulin-induced nephropathy was strictly limited to male rats and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to their exclusive expression of alpha-2µ-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kindney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in they rated male rats exposed to 400 or 1200 ppm by inhalation. The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. ISo-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not speciet do induce genotoxicity in with rats. These results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity. No standard carcinogenicity studies are available for substances in the C7-C9 alignatice. Moreover, in invest	substance (light alkylate naphtha distillate), no innalation repeated dose toxicity is expected from the exposure to hydrocarbons, C7-C9,	
C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats. In this study, repeated exposure to 400 or 1200 ppm of the test substance for 6 hours/day, 5 days/week, for 12 weeks resulted in male rat kiney effects consistent with the alpha-2µ-globulin-induced nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was detended to a category of substances which are known for their ability to induce nephropathy in male rats and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to their exclusive expression of alpha-2µ-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to CECD 478) showed no evidence of genotoxicity in the germ cells of treated male rats exposed to 400 or 1200 ppm by inhalation. The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, isoalkanes tested in the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxic. In vivo: Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. Negative category or category, However, with regard to the molecular	iso-alkanes. No need for classification according to the DSD and CLP criteria for classification and labelling. Systemic toxicity of hydrocarbons,	
substance for 6 hours/day, 5 days/week, for 12 weeks resulted in male rat kidney effects consistent with the alpha-2µ-globulin-induced nephropathy in male rats. There was no treatment-related mortality and dirical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rats and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats. There was no treatment-related mortality and dirical findings were unremarkable. Under the test conditions, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: in vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in the gern cells of treated male rats exposed to 400 or 1200 ppm by inhalation . The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-otane did not induce unscheduled DNA synthesis in rat hepatocyte. Unit exact as exposed to evolutive. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotytic vitor). The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxic. In vito: Negative Ames test with S. typhimurium TA 1535, TA 1537, TA 1538, TA 98 and TA 100, and E. coli WP2 and WP2 und WP2 und A with and without metabolic activation. Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assess. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons, C7-C9, isoalkanes. They, need-across from obclust and without metabolic activation. Neweyr, with regard to the molecular	C7-C9, iso-alkanes was assessed in a 12-week inhalation toxicity study in rats . In this study, repeated exposure to 400 or 1200 ppm of the test	
nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the NOAEC (excluding male rat nephropathy) was determined to be >1200ppm. The fact, that alpha-2µ-globulin-induced nephropathy was strictly limited to male rats and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to their exclusive expression of alpha-2µ-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to CECD 478) showed no evidence of genotoxicity in the germ cells of treated male rats exposed to 400 or 1200 ppm by inhalation. The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes the latter with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. Negative results in regard to the molecular structure of the substances within the category no carcinogenicity studies are available for sub	substance for 6 hours/day, 5 days/week, for 12 weeks resulted in male rat kidney effects consistent with the alpha-2µ-globulin-induced	
NOAEC (excluding male rat nephropathy) was determined to be >1200pm. The fact, that alpha-2µ-globulin-induced nephropathy was strictly limited to male rats and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to their exclusive expression of alpha-2µ-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in the germ cells of treated male rats exposed to 400 or 1200 ppm by inhalation. The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7 -C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7 -C9, isoalkanes are not genotoxic. In vitro: Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative I dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons, C7-C9, isoalkanes. Thus, read-across from substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral ro	nephropathy in male rats. There was no treatment-related mortality and clinical findings were unremarkable. Under the test conditions, the	
limited to male rats and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in male rats due to their exclusive expression of alpha-2µ -globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in the gern cells of treated male rats exposed to 400 or 1200 ppm by inhalation. The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, soalkanes are not expected to induce genotoxicity in store. Testis as a not expected in a dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity on an indication for neoplastic lesions was observed. In addition, all substances within the category contain bearsene eveles below 0.01% Toxicity to reproduction: There are no data a	NOAEC (excluding male rat nephropathy) was determined to be >1200ppm. The fact, that alpha-2µ-globulin-induced nephropathy was strictly	
male rats due to their exclusive expression of alpha-2µ-globulin, the protein known to play the crucial role in the onset of this disease, the observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in the germ cells of treated male rats exposed to 400 or 1200 ppm by inhalation. The in vivo genotoxicity of thrifer category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxicit. In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons, C7-C9, isoalkanes. They are used to vivol as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances. They, repare dose toxicity or microscopic alteration), neither genotoxicity or on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies. They are across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indi	limited to male rats and that the test substance belongs to a category of substances which are known for their ability to induce nephropathy in	
observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to DECD 478) showed no evidence of genotoxicity in the germ cells of treated male rats exposed to 400 or 1200 ppm by inhalation. The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not genotoxic. In vitro: Negative Ames test with 5. typhimurium TA 1535, TA 1537, TA 1538, TA 98 and TA 100, and E. coll WP2 and WP2 uvr A, with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative I carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons, c7-C9, isoalkanes is substances of the category on mutagenicity (in vitro and in vico) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity on an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic alterations in male and female reproductive organs were observed. The only significant e	male rats due to their exclusive expression of alpha-2µ -globulin, the protein known to play the crucial role in the onset of this disease, the	
experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons, C7-C9, isoalkanes tested in a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in the germ cells of treated male rats exposed to 400 or 1200 ppm by inhalation . The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxic. In vitro: Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macr	observed effects in the kidney have to be regarded as species-specific and are not relevant for risk assessment in humans. Therefore, additional	
a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in the germ cells of treated male rats exposed to 400 or 1200 ppm by inhalation . The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxic. In vitro: Negative Ames test with S. typhimurium TA 1535, TA 1537, TA 1538, TA 98 and TA 100, and E. coli WP2 and WP2 uvr A, with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons, Cr40, However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, Cr40, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive origens were observed. The only significant effect wa	experimental data were used to evaluate repeated dose toxicity via inhalation. Genetic toxicity: In vivo Hydrocarbons. C7-C9. isoalkanes tested in	
ppm by inhalation. The in vivo genotoxicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxic. In vitro: Negative Ames test with S. typhimurium TA 1535, TA 1537, TA 1538, TA 98 and TA 100, and E. coli WP2 and WP2 urr A, with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons, C7-C9, isoalkanes. Thus, regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in bale and female reproductive organs were observed. The only significant effect was reduced bod	a dominant lethal study (similar to OECD 478) showed no evidence of genotoxicity in the germ cells of treated male rats exposed to 400 or 1200	
were not clastogenic to mouse bone marrow cells. Iso-octane did not induce unscheduled DNA synthesis in rat hepatocyte cultures. Based on the category approach, these results suggest that hydrocarbons, C7 -C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxic. In vitro: Negative Ames test with S. typhimurium TA 1535, TA 1537, TA 1538, TA 98 and TA 100, and E. coli WP2 and WP2 uvr A, with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain because levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and o	nom by inhalation. The in vivo genotovicity of further category members has been tested. Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	
the category approach, these results suggest that hydrocarbons, C7 -C9, isoalkanes are not expected to induce genotoxicity in vivo. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not genotoxic. In vitro: Negative Ames test with S. typhimurium TA 1535, TA 1537, TA 1538, TA 98 and TA 100, and E. coli WP2 and WP2 uvr A, with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vito and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg	were not clastication to more generative and section and point induce unscheduled. Native statistics, inductor, indu	
available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in Wr0. The available data indicate that hydrocarbons, C7-C9, isoalkanes are not expected to induce genotoxicity in Wr0. The 1537, TA 1538, TA 98 and TA 100, and E. coli WP2 and WP2 uvr A, with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reprodu	the category approach these results suggest that by department of 2, 20 is applying and applying applying the synthesis in the resulting applying the synthesis in the results and the results and the synthesis in the results and the results a	
available data indicate that hydrocarbons, <i>u</i> - <i>v</i> - <i>s</i> , isolativaties are not genotoxic. In vitro: negative Arties test with S. typhillmUM TA 1535, TA 1537, TA 1538, TA 98 and TA 100, and E. coli WP2 and WP2 uvr A, with and without metabolic activation. In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	une category approach, intest results suggest that injurceation is, $CT \sim Q_3$ , isolateaties are not expected to induce genoloxicity in Vioc. The available data indicate that hidrogeneous category and constrained by the Amas test with $Q_3$ by the Vioc. The constraints of the Amas test with $Q_3$ by the Vioc. The constraints and the Vioc. The constraints of the Vioc. The Constraints of the Vioc. The Constraints of the Vioc. The Vio	
1537, IA 1538, IA 95 and IA 100, and E. coll WP2 and WP2 urr A, with and without metabolic activation. Negative results in mammalian chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. Negative results in mammalian micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	avanable data indicate intar hydrocarbonis, C7-C9, isolarkanes are not genotoxic. In vitro, Negalive Arites test Win S, typnimunum TA 1533, TA	
chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative in dominant lethal, micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	1537, IA 1538, IA 98 and IA 100, and E. coli VP2 and VP2 uvr A, with and without metabolic activation. Negative results in mammalian	
micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	chromosomal aberration and gene mutation tests, the latter with and without metabolic activation. In vivo: Negative in dominant lethal,	
standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	micronucleus and unscheduled DNA synthesis assays. Endpoint Conclusion: No adverse effect observed (negative) Carcinogenicity: No	
molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	standard carcinogenicity studies are available for substances in the C7-C9 aliphatic hydrocarbons category. However, with regard to the	
substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	molecular structure of the substances within the category no carcinogenic potential is expected. Moreover, in investigations with various	
genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below 0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	substances of the category on mutagenicity (in vitro and in vivo) as well as in repeated dose toxicity studies (oral route and via inhalation), neither	
0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons, C7-C9, isoalkanes. Thus, read-across from a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	genotoxicity nor an indication for neoplastic lesions was observed. In addition, all substances within the category contain benzene levels below	
a structurally related substance (commercial hexane) was performed, for which reliable information exists. Hexane exposure did not induce adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	0.01% Toxicity to reproduction: There are no data available on the effects on fertility of hydrocarbons. C7-C9. isoalkanes. Thus. read-across from	
adverse effects on fertility. Reproductive indices were similar in exposed and control groups. No macroscopic or microscopic alterations in male and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	a structurally related substance (commercial becape) was performed for which reliable information exists. Herane exposure did not induce	
and female reproductive organs were observed. The only significant effect was reduced body weight in the F1 and F2 generations in both sexes in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	adverse effects on fertility. Reproductive indices were similar in exposed and control arruins. No macroscopic adversions in male	
in the 9000 ppm exposure group both in adults and offspring. The NOAEC for both male and female rats (adults and offspring) was 3000 ppm (corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	and formals reproductive processing the poly similar in exposed and control groups, the macroscopic of microscopic difficulties in both source	
(corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	and remain reproductive organs were observed. The only significant energy was reduced body weight in the PT and PZ generations in both sectors	
(corresponding to 10560 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	in the your pprint exposure group born in aduits and orispring. The NOAEC for born male and remain rats (aduits and offspring) was 3000 ppm	
reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	(corresponding to 1050 mg/m3). The LOAEC for these groups was 9000 ppm based on reduced body weight. There were no adverse effects on	
	reproduction; therefore the NOAEC for reproduction is 9000 ppm which corresponds to 31680 mg/m3. *REACh Dossier	

Acute Toxicity	×	Carcinogenicity	×
Skin Irritation/Corrosion	✓	Reproductivity	×
Serious Eye Damage/Irritation	×	STOT - Single Exposure	×
Respiratory or Skin sensitisation	×	STOT - Repeated Exposure	×
Mutagenicity	×	Aspiration Hazard	×
		Legend: 🗙 – Data either n	ot available or does not fill the criteria for classification

X – Data either not available or does not fill the criteria for classification Data available to make classification

## **SECTION 12 Ecological information**

Toxicity					
	Endpoint	Test Duration (hr)	Species	Value	Source
Stoner E302 Rocket Release	Not Available	Not Available	Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
heptane	NOEC(ECx)	504h	Crustacea	0.17mg/l	2
	LC50	96h	Fish	3446.8mg/L	4
	EC50	48h	Crustacea	0.64mg/l	2

	Endpoint	Test Duration (hr)	Species	Value	Source
naphtha petroleum, light alkylate	NOEC(ECx)	72h	Algae or other aquatic plants	0.1mg/l	1
	LC50	96h	Fish	0.11mg/l	2
	EC50	72h	Algae or other aquatic plants	13mg/l	1
	EC50	48h	Crustacea	0.4mg/l	2
	EC50	96h	Algae or other aquatic plants	64mg/l	2
	Endpoint	Test Duration (hr)	Species	Value	Source
dimethyl ether	NOEC(ECx)	48h	Crustacea	>4000mg/l	1
	LC50	96h	Fish	1783.04mg/l	2
	EC50	48h	Crustacea	>4400mg/L	2
	EC50	96h	Algae or other aquatic plants	154.917mg/l	2
Legend:	Extracted from a Ecotox database - Bioconcentratio	IUCLID Toxicity Data 2. Europe ECHA a - Aquatic Toxicity Data 5. ECETOC Aqu on Data 8. Vendor Data	Registered Substances - Ecotoxicological Informat iatic Hazard Assessment Data 6. NITE (Japan) - Bi	ion - Aquatic Toxicity 4. L oconcentration Data 7. M	JS EPA, IETI (Japan,

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. **DO NOT** discharge into sewer or waterways.

## Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
heptane	LOW	LOW
dimethyl ether	LOW	LOW

## **Bioaccumulative potential**

Ingredient	Bioaccumulation
heptane	HIGH (LogKOW = 4.66)
dimethyl ether	LOW (LogKOW = 0.1)

## Mobility in soil

Ingredient	Mobility
heptane	LOW (KOC = 274.7)
dimethyl ether	HIGH (KOC = 1.292)

## **SECTION 13 Disposal considerations**

Waste treatment methods				
Product / Packaging disposal	<ul> <li>DO NOT allow wash water from cleaning or process equipment to enter drains.</li> <li>It may be necessary to collect all wash water for treatment before disposal.</li> <li>In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>Where in doubt contact the responsible authority.</li> <li>Consult State Land Waste Management Authority for disposal.</li> <li>Discharge contents of damaged aerosol cans at an approved site.</li> <li>Allow small quantities to evaporate.</li> <li>DO NOT incinerate or puncture aerosol cans.</li> <li>Bury residues and emptied aerosol cans at an approved site.</li> </ul>			

## **SECTION 14 Transport information**

Labels Required	
Marine Pollutant	
HAZCHEM	Not Applicable

## Land transport (ADG)

UN number	1950
UN proper shipping name	AEROSOLS

Transport hazard class(es)	Class 2.1 Subrisk Not	1ot Applicable		
Packing group	Not Applicable			
Environmental hazard	Environmentally hazardous			
Special precautions for user	Special provisions63 190 277 327 344 381Limited quantity1000ml			

## Air transport (ICAO-IATA / DGR)

UN number	1950			
UN proper shipping name	Aerosols, flammable	Aerosols, flammable		
Transport hazard class(es)	ICAO/IATA Class ICAO / IATA Subrisk ERG Code	2.1 Not Applicable 10L		
Packing group	Not Applicable			
Environmental hazard	Environmentally hazardous			
Special precautions for user	Special provisions         Cargo Only Packing Instructions         Cargo Only Maximum Qty / Pack         Passenger and Cargo Packing Instructions         Passenger and Cargo Maximum Qty / Pack         Passenger and Cargo Limited Quantity Packing Instructions         Passenger and Cargo Limited Maximum Qty / Pack		A145 A167 A802 203 150 kg 203 75 kg Y203 30 kg G	

#### Sea transport (IMDG-Code / GGVSee)

UN number	1950				
UN proper shipping name	AEROSOLS	AEROSOLS			
Transport hazard class(es)	IMDG Class     2.1       IMDG Subrisk     Not Applicable				
Packing group	Not Applicable				
Environmental hazard	Marine Pollutant				
Special precautions for user	EMS Number Special provisions Limited Quantities	F-D, S-U 63 190 277 327 344 381 959 1000 ml			

## Transport in bulk according to Annex II of MARPOL and the IBC code Not Applicable

## Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Product name	Group
heptane	Not Available
naphtha petroleum, light alkylate	Not Available
dimethyl ether	Not Available

### Transport in bulk in accordance with the ICG Code

Product name	Ship Type
heptane	Not Available
naphtha petroleum, light alkylate	Not Available
dimethyl ether	Not Available

## **SECTION 15 Regulatory information**

## Safety, health and environmental regulations / legislation specific for the substance or mixture

## heptane is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

naphtha petroleum, light alkylate is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australian Inventory of Industrial Chemicals (AIIC) Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

#### dimethyl ether is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) -Schedule 5 Australian Inventory of Industrial Chemicals (AIIC)

#### **National Inventory Status**

National Inventory	Status
Australia - AIIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (heptane; naphtha petroleum, light alkylate; dimethyl ether)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	No (naphtha petroleum, light alkylate)
Korea - KECI	Yes
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	Yes
Taiwan - TCSI	Yes
Mexico - INSQ	No (naphtha petroleum, light alkylate)
Vietnam - NCI	Yes
Russia - FBEPH	No (naphtha petroleum, light alkylate)
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.

#### **SECTION 16 Other information**

Revision Date	10/12/2021
Initial Date	10/03/2017

#### **SDS Version Summary**

Version	Date of Update	Sections Updated	
5.1	22/07/2020	Classification	
6.1	10/12/2021	Classification change due to full database hazard calculation/update.	

#### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

#### Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average PC-STEL: Permissible Concentration-Short Term Exposure Limit IARC: International Agency for Research on Cancer ACGIH: American Conference of Governmental Industrial Hygienists STEL: Short Term Exposure Limit TEEL: Temporary Emergency Exposure Limit。 IDLH: Immediately Dangerous to Life or Health Concentrations ES: Exposure Standard **OSF: Odour Safety Factor** NOAEL :No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection OTV: Odour Threshold Value BCF: BioConcentration Factors **BEI: Biological Exposure Index** AIIC: Australian Inventory of Industrial Chemicals DSL: Domestic Substances List NDSL: Non-Domestic Substances List IECSC: Inventory of Existing Chemical Substance in China EINECS: European INventory of Existing Commercial chemical Substances ELINCS: European List of Notified Chemical Substances NLP: No-Longer Polymers ENCS: Existing and New Chemical Substances Inventory KECI: Korea Existing Chemicals Inventory NZIoC: New Zealand Inventory of Chemicals PICCS: Philippine Inventory of Chemicals and Chemical Substances TSCA: Toxic Substances Control Act TCSI: Taiwan Chemical Substance Inventory INSQ: Inventario Nacional de Sustancias Químicas NCI: National Chemical Inventory

FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

This document is copyright.

Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.