

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

VENTIL SAUBER 150 mL

Art.: 2001

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture:

Cleaner Solvent

(GB)

Uses advised against:

No information available at present.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) 1272/2008 (CLP) Hazard class Hazard category Hazard statement

Asp. Tox. Aquatic Chronic

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H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)





H304-May be fatal if swallowed and enters airways. H412-Harmful to aquatic life with long lasting effects.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children. P301+P310+P331-IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. P405-Store locked up. P501-Dispose of contents/container to special waste collection point.

EUH066-Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics Hydrocarbons, C10, aromatics, >1% naphthalene Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006.

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006.

When using: development of flammable vapour/air mixture possible.

Product can compose a film on the water surface, which can prevent oxygen exchange.

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a. 3.2 Mixture

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	
Registration number (REACH)	01-2119457273-39-XXXX
Index	
EINECS, ELINCS, NLP	918-481-9 (REACH-IT List.No.)
CAS	
content %	70-90
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304
Hydrocarbons, C10, aromatics, >1% naphthalene	
Registration number (REACH)	01-2119463588-24-XXXX
Index	
EINECS, ELINCS, NLP	919-284-0 (REACH-IT List-No.)
CAS	(64742-94-5)
content %	1-10
Classification according to Regulation (EC) 1272/2008 (CLP)	Carc. 2, H351
	STOT SE 3, H336
	Asp. Tox. 1, H304
	Aquatic Chronic 2, H411

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here.

Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here.

SECTION 4: First aid measures

4.1 Description of first aid measures Inhalation

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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 05.11.2015 / 0012 Replacing version dated / version: 21.08.2015 / 0011 Valid from: 05.11.2015 PDF print date: 05.11.2015 VENTIL SAUBER 150 mL Art.: 2001

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Consult doctor immediately. Danger of aspiration

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. With long-term contact: Irritation of the eyes Headaches Dizziness Nausea Product removes fat. Drying of the skin. Dermatitis (skin inflammation) Ingestion: Danger of aspiration Lung damage In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. **4.3 Indication of any immediate medical attention and special treatment needed** n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO2 Dry extinguisher Foam

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Oxides of nitrogen Toxic pyrolysis products. Flammable vapour/air mixtures Dangerous vapours heavier than air. In case of spreading near the ground, flashback to distance sources of ignition is possible. **5.3 Advice for firefighters** In case of fire and/or explosion do not breathe fumes.

Protective respirator with independent air supply. According to size of fire Full protection, if necessary. Cool container at risk with water. Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.



Avoid inhalation, and contact with eyes or skin. If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent) and dispose of according to Section 13.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Keep away from sources of ignition - Do not smoke.

Do not heat to temperatures close to flash point.

Take precautions against electrostatic charges.

Avoid contact with eyes or skin.

Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals. Store product closed and only in original packing. Not to be stored in gangways or stair wells. Solvent resistant floor Do not store with oxidizing agents. Store in a well ventilated place. Protect from direct sunlight and warming.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3

Chemical Name	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics Content %:70							
WEL-TWA: 800 mg/m3	WEL-STEL:							
Monitoring procedures:	 Draeger - Hydrocarbons 2/a (81 03) 	581)						
	 Draeger - Hydrocarbons 0,1%/c (81 	03 571)						
	- Compur - KITA-187 S (551 174)							
BMGV:		Other information:	(WEL acc. t	o RCP-method,				
		EH40)	-					
Chemical Name	Hydrocarbons, C10, aromatics, >1% naphthalene			Content %:1-10				
WEL-TWA: 500 mg/m3 (Aromatics				Ounchi /0.1-10				

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Monitoring procedures:	- [Draeger - Hydrocarbons 2/a (81 03	581)	
	- Г	Draeger - Hydrocarbons 0,1%/c (81	03 571)	
			00 01 1)	
	- (Compur - KITA-187 S (551 174)		
BMGV:			Other information:	
Chemical Name	Naphthalene			Content %:
WEL-TWA: 10 ppm (50 mg/m3) (E	EU)	WEL-STEL:		
Monitoring procedures:	- (Compur - KITA-153 U(C) (551 182)		
BMGV:			Other information:	
Chemical Name	Hydrocarbons, C11	1-C14, n-alkanes, isoalkanes, cyclic	cs, < 2% aromatics	Content %:
WEL-TWA: 1200 mg/m3 (>=C7 nd	ormal and branched	WEL-STEL: 2(II) (AGW)		
chain alkanes)				
Monitoring procedures:	- [Draeger - Hydrocarbons 2/a (81 03	581)	
	- [Draeger - Hydrocarbons 0,1%/c (81	03 571)	
		Compur - KITA-187 S (551 174)		
BMGV:			Other information:	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

Hydrocarbons, C10, aromatics, >1% naphthalene									
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note			
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	12,5	mg/kg bw/day				
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	150	mg/m3				
Consumer	Human - dermal	Long term, systemic effects	DNEL	7,5	mg/kg bw/day				
Consumer	Human - inhalation	Long term, systemic effects	DNEL	32	mg/m3				
Consumer	Human - oral	Long term, systemic effects	DNEL	7,5	mg/kg bw/day				

Naphthalene						
Area of application	Exposure route / Environmental compartment	nental		Value	Unit	Note
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	3,57	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	25	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	25	mg/m3	
	Environment - freshwater		PNEC	2,4	µg/l	
	Environment - marine		PNEC	0,24	µg/l	
	Environment - sewage treatment plant		PNEC	2,9	mg/l	
	Environment - sediment, freshwater		PNEC	0,0672	mg/kg dry weight	
	Environment - sediment, marine		PNEC	0,0672	mg/kg dry weight	
	Environment - soil		PNEC	0,0533	mg/kg dry weight	

8.2 Exposure controls

8.2.1 Appropriate engineering controls

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Ensure good ventilation. This can be achieved by local suction or general air extraction. If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and at end of work. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection: Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection: Solvent resistant protective gloves (EN 374). If applicable Suitable are, e.g., safety gloves from KCL GmbH Co., D-36124 Eichenzell, e-mail vertrieb@kcl.de, following specifications: Protective Viton® / fluoroelastomer gloves (EN 374) Vitojec 890 Protective hand cream recommended. The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time. Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection: If OES or MEL is exceeded. Filter A2 P2 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: Not applicable

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid Colour: Yellow Characteristic Odour: Odour threshold: Not determined pH-value: n.a. Melting point/freezing point: Not determined Initial boiling point and boiling range: Not determined 61-66 °C (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < Flash point: 2% aromatics) Not determined Evaporation rate: Flammability (solid, gas): Not determined

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Lower explosive limit:

Upper explosive limit:

Vapour pressure: Vapour density (air = 1): Density: Bulk density: Solubility(ies): Water solubility: Partition coefficient (n-octanol/water): Auto-ignition temperature:

Decomposition temperature: Viscosity: Explosive properties: Oxidising properties:

9.2 Other information

Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content: 0,7 Vol-% (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) 6 Vol-% (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) Not determined Not determined 0,818 g/ml (20°C) Not determined Not determined Insoluble Not determined 235-315 °C (Ignition temperature Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) Not determined <7 mm2/s (40°C) Not determined No

Not determined Not determined Not determined Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested. **10.2 Chemical stability**

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

See also section 7. Heating, open flame, ignition sources **10.5 Incompatible materials**

See also section 7.

Avoid contact with strong oxidizing agents. 10.6 Hazardous decomposition products

See also section 5.2

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

Toxicity / effect	Endpoin t	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						negative, the real
						Naphthalene content is
						<1%



Reproductive toxicity:			n.d.a.
Specific target organ toxicity -			n.d.a.
single exposure (STOT-SE):			
Specific target organ toxicity -			n.d.a.
repeated exposure (STOT-RE):			
Aspiration hazard:			n.d.a.
Symptoms:			n.d.a.
Other information:			Classification according
			to calculation procedure.

Hydrocarbons, C10-C13, n-alka	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics									
Toxicity / effect	Endpoin	Value	Unit	Organism	Test method	Notes				
	t									
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat						
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit						
Acute toxicity, by inhalation:	LC50	>4951	mg/m3	Rat		Vapours				
Aspiration hazard:						Yes				
Other information:						Repeated exposure may				
						cause skin dryness or				
						cracking.				

Hydrocarbons, C10, aromatics, Toxicity / effect	Endpoin	Value	Unit	Organism	Test method	Notes
Toxicity / effect	t	value	Unit	Organishi	rest method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	
			5.5		Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute	
					Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>4688	mg/m3	Rat	OECD 403 (Acute	
					Inhalation Toxicity)	
Skin corrosion/irritation:					OECD 404 (Acute	Not irritant
					Dermal	
					Irritation/Corrosion)	
Serious eye damage/irritation:					OECD 405 (Acute Eye	Mild irritant
					Irritation/Corrosion)	
Respiratory or skin sensitisation:					OECD 406 (Skin	Not sensitizising,
					Sensitisation)	Analogous conclusion
Germ cell mutagenicity:					OECD 479 (Genetic	Negative
					Toxicology - In Vitro	
					Sister Chromatid	
					Exchange assay in	
					Mammalian Cells)	
Reproductive toxicity:					OECD 414 (Prenatal	Negative, Analogous
					Developmental	conclusion
Denne durations to visit a					Toxicity Study)	
Reproductive toxicity:					OECD 416 (Two-	Negative, Analogous
					generation	conclusion
					Reproduction Toxicity Study)	
Specific target organ toxicity -						Vapours may cause
single exposure (STOT-SE):						drowsiness and dizziness
Specific target organ toxicity -					OECD 408 (Repeated	Negative, Analogous
repeated exposure (STOT-RE):					Dose 90-Day Oral	conclusion
					Toxicity Study in	
					Rodents)	
Specific target organ toxicity -					OECD 413	Negative, Analogous
repeated exposure (STOT-RE):					(Subchronic Inhalation	conclusion
,					Toxicity - 90-Day	
					Study)	
Specific target organ toxicity -					OECD 452 (Chronic	Negative, Analogous
repeated exposure (STOT-RE):					Toxicity Studies)	conclusion
Aspiration hazard:						Yes

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Toxicity / effect	Endpoin	Value	Unit	Organism	Test method	Notes
	t					
Acute toxicity, by oral route:	LD50	490	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit		
Acute toxicity, by inhalation:	LC50	>340	mg/m3	Rat		1h
Skin corrosion/irritation:				Rabbit		Irritant, Classification
						according to Regulation
						(EC) 1272/2008 (CLP)
Serious eye damage/irritation:						Irritant, Classification
						according to Regulation
						(EC) 1272/2008 (CLP)
Symptoms:						lack of appetite, ataxia,
						breathing difficulties,
						unconsciousness,
						diarrhoea, cornea opacity,
						headaches, cramps,
						gastrointestinal
						disturbances, mucous
						membrane irritation,
						dizziness, nausea and
						vomiting.

Toxicity / effect	Endpoin t	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5000	mg/m3	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion)	Analogous conclusion, Drying of the skin., Dermatitis (skin inflammation)
Serious eye damage/irritation:					OECD 405 (Acute Eye Irritation/Corrosion)	Analogous conclusion, Slightly irritant
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Not sensitizising (Analogous conclusion)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Analogous conclusion, Negative
Germ cell mutagenicity:					in vivo	Negative
Carcinogenicity:					OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Analogous conclusion, Negative
Reproductive toxicity:					OECD 414 (Prenatal Developmental Toxicity Study)	Analogous conclusion, Negative
Specific target organ toxicity - single exposure (STOT-SE):						Analogous conclusion, N indications of such an effect.
Specific target organ toxicity - repeated exposure (STOT-RE):					OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Analogous conclusion, Not to be expected
Aspiration hazard:						Harmful: may cause lung damage if swallowed.
Symptoms:						drying of the skin., headaches, fatigue, dizziness, nausea

SECTION 12: Ecological information

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Possibly more information on environmental effects, see Section 2.1 (classification). VENTIL SAUBER 150 mL

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:							n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and degradability:							Isolate as much as possible with an oil separator.
Bioaccumulative potential:							n.d.a.
Mobility in soil:							n.d.a.
Results of PBT and vPvB assessment							n.d.a.
Other adverse effects:							n.d.a.
Other information:							According to the recipe, contains no AOX.

Hydrocarbons, C10-C	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics						
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LL50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to daphnia:	EL50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to algae:	EL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Other organisms:	EL50	48h	>1000	mg/l	Tetrahymen pyriformis	,	

Hydrocarbons, C10, aromatics, >1% naphthalene							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LL50	96h	2-5	mg/l	Oncorhynchus mykiss		
Toxicity to daphnia:	EL50	48h	3-10	mg/l	Daphnia magna		
Toxicity to algae:	EL50	72h	11	mg/l	Pseudokirchneriell a subcapitata		
Toxicity to algae:	NOELR	72h	2,5	mg/l	Pseudokirchneriell a subcapitata		
Persistence and degradability:		28d	57,95	%	·		Readily biodegradable
Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	1,6	mg/l			Does not conform with EU classification.
Toxicity to daphnia:	EC50	48h	1,96	mg/l	Daphnia magna		Does not conform with EU classification.
Bioaccumulative potential:	BCF		>100				
Bioaccumulative potential:	Log Pow		3,3				

Hydrocarbons, C11-C14,	, n-alkanes, iso	balkanes,	cyclics, <	2% aromat	ics		
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
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Toxicity to fish:	LL50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
Toxicity to fish:	NOELR	28d	0,17	mg/l	Oncorhynchus mykiss	QSAR	
Toxicity to daphnia:	EL50	48h	>1000	mg/l	Dáphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to daphnia:	NOELR	21d	1,22	mg/l	Daphnia magna	QSÁR	
Toxicity to algae:	NOELR	72h	1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Toxicity to algae:	ErL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Persistence and degradability:		28d	69	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	
Persistence and degradability:		28d	69	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
Bioaccumulative potential:	Log Pow		6-8				
Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

07 07 04 other organic solvents, washing liquids and mother liquors

14 06 03 other solvents and solvent mixtures

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Implement substance recycling.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

UN number:



Transport by road/by rail (ADR/RID)

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Transport by road/by rail (ADR/RID)	
UN proper shipping name:	
Transport hazard class(es):	n.a.
Packing group:	n.a.
Classification code:	n.a.
LQ (ADR 2015):	n.a.
Environmental hazards:	Not applicable
Tunnel restriction code:	
Transport by sea (IMDG-code)	
UN proper shipping name:	
Transport hazard class(es):	n.a.
Packing group:	n.a.
Marine Pollutant:	n.a
Environmental hazards:	Not applicable
Transport by air (IATA)	
UN proper shipping name:	
Transport hazard class(es):	n.a.
Packing group:	n.a.
Environmental hazards:	Not applicable
Special precautions for user	
Unless specified otherwise, general measures for safe tr	ansport must be followed.
Transport in bulk according to Annex I	I of MARPOL and the IBC Code
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Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

For classification and labelling see Section 2.

Observe restrictions:

Comply with trade association/occupational health regulations.

Observe youth employment law (German regulation).

Observe law on protection of expectant mothers (German regulation). Directive 2010/75/EU (VOC):

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

> 89 %

2, 3, 8, 11, 12

Revised sections:

These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Asp. Tox. 1, H304	Classification based on test data.
Aquatic Chronic 3, H412	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3). H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H411 Toxic to aquatic life with long lasting effects.



GB

Asp. Tox. — Aspiration hazard Aquatic Chronic — Hazardous to the aquatic environment - chronic Carc. — Carcinogenicity STOT SE — Specific target organ toxicity - single exposure - narcotic effects

Any abbreviations and acronyms used in this document:

AC Article Categories according, according to acc., acc. to ACGIH American Conference of Governmental Industrial Hygienists Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the ADR International Carriage of Dangerous Goods by Road) AOEL Acceptable Operator Exposure Level AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP) Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF Bioconcentration factor BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation) Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol) BHT BMGV Biological monitoring guidance value (EH40, UK) BOD Biochemical oxygen demand BSEF Bromine Science and Environmental Forum bw body weight CAS **Chemical Abstracts Service** CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques CIPAC Collaborative International Pesticides Analytical Council CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) CMR carcinogenic, mutagenic, reproductive toxic COD Chemical oxygen demand CTFA Cosmetic, Toiletry, and Fragrance Association DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon DT50 Dwell Time - 50% reduction of start concentration DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes) dw dry weight e.g. for example (abbreviation of Latin 'exempli gratia'), for instance ЕČ European Community ECHA European Chemicals Agency EEA European Economic Area EEC European Economic Community EINECS European Inventory of Existing Commercial Chemical Substances ELINCS European List of Notified Chemical Substances FN European Norms United States Environmental Protection Agency (United States of America) EPA ERC **Environmental Release Categories** Exposure scenario ES etc. et cetera EU **European Union** EWC European Waste Catalogue Fax. Fax number general aen. Globally Harmonized System of Classification and Labelling of Chemicals GHS GWP Global warming potential Hen's Egg Test - Chorionallantoic Membrane HFT-CAM HGWP Halocarbon Global Warming Potential IARC International Agency for Research on Cancer



Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 05.11.2015 / 0012 Replacing version dated / version: 21.08.2015 / 0011 Valid from: 05.11.2015 PDF print date: 05.11.2015 VENTIL SAUBER 150 mL Art.: 2001 International Air Transport Association IATA IBC Intermediate Bulk Container IBC (Code) International Bulk Chemical (Code) Inhibitory concentration IC IMDG-code International Maritime Code for Dangerous Goods including, inclusive incl. IUCLID International Uniform ChemicaL Information Database LC lethal concentration lethal concentration 50 percent kill LC50 LCLo lowest published lethal concentration LD Lethal Dose of a chemical LD50 Lethal Dose, 50% kill LDLo Lethal Dose Low LOAEL Lowest Observed Adverse Effect Level LOEC Lowest Observed Effect Concentration LOEL Lowest Observed Effect Level Limited Quantities 10 MARPOL International Convention for the Prevention of Marine Pollution from Ships not applicable n.a. not available n.av. n.c. not checked n d a no data available NIOSH National Institute of Occupational Safety and Health (United States of America) No Observed Adverse Effective Concentration NOAEC NOAEL No Observed Adverse Effect Level NOEC No Observed Effect Concentration NOEL No Observed Effect Level **Ozone Depletion Potential** ODP OECD Organisation for Economic Co-operation and Development organic org. polycyclic aromatic hydrocarbon PAH PBT persistent, bioaccumulative and toxic PC Chemical product category ΡE Polyethylene PNEC Predicted No Effect Concentration POCP Photochemical ozone creation potential parts per million ppm PROC Process category PTFE Polytetrafluorethylene REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals) **REACH-IT List-No.** 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT. RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail) SADT Self-Accelerating Decomposition Temperature SAR Structure Activity Relationship SU Sector of use SVHC Substances of Very High Concern Telephone Tel. ThOD Theoretical oxygen demand TOC Total organic carbon TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances) United Nations Recommendations on the Transport of Dangerous Goods UN RTDG VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria)) VOC Volatile organic compounds very persistent and very bioaccumulative vPvB WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK). WHO World Health Organization wwt wet weight The statements made here should describe the product with regard to the necessary safety precautions - they are

not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

GB



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2001 VALVE CLEAN 150ml

Liqui Moly GmbH

Chemwatch: 65-8494

Version No: 2.1.1.1

Safety Data Sheet according to OSHA HazCom Standard (2012) requirements

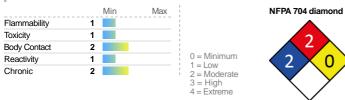
SECTION 1 IDENTIFICATION

Product Identifier			
Product name	2001 VALVE CLEAN 150ml		
Synonyms	Item No: 2001		
Other means of identification	Not Available		
Recommended use of the chemical and restrictions on use			
Relevant identified uses	Additive.		

SECTION 2 HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

CHEMWATCH HAZARD RATINGS



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

Classification	Flammable Liquid Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Specific target organ toxicity - repeated exposure Category 2, Aspiration Hazard Category 1, Acute Aquatic Hazard Category 3, Chronic Aquatic Hazard Category 3
Label elements	
GHS label elements	
SIGNAL WORD	DANGER
Hazard statement(s)	
H227	Combustible liquid
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H373	May cause damage to organs.

Issue Date: 18/08/2016

Continued...

Chemwatch Hazard Alert Code: 2

H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

Hazard(s) not otherwise specified

Not Applicable

Precautionary statement(s) Prevention

P210	eep away from heat/sparks/open flames/hot surfaces No smoking.					
P260	Do not breathe dust/fume/gas/mist/vapours/spray.					
P273	Avoid release to the environment.					
P280	Wear protective gloves/protective clothing/eye protection/face protection.					

Precautionary statement(s) Response

P301+P310	F SWALLOWED: Immediately call a POISON CENTER or doctor/physician.				
P331	Do NOT induce vomiting.				
P362	Take off contaminated clothing and wash before reuse.				
P370+P378	In case of fire: Use alcohol resistant foam or normal protein foam for extinction.				

Precautionary statement(s) Storage

P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Precautionary statement(s) Disposal

P501

Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
64742-48-9.	80-90	alkanes, C11-13-iso-
1330-20-7	10-<20	xylene
64742-94-5	1-5	solvent naphtha petroleum, heavy aromatic
91-20-3	0.1-<1	naphthalene

SECTION 4 FIRST-AID MEASURES

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Wash out immediately with fresh running water. 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. Seek medical attention without delay; if pain persists or recurs seek medical attention. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.
Inhalation	 If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.
Ingestion	 If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. Avoid giving milk or oils. Avoid giving alcohol. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.

Most important symptoms and effects, both acute and delayed

See Section 11

Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

SECTION 5 FIRE-FIGHTING MEASURES

Extinguishing media

- Foam.
- Dry chemical powder.BCF (where regulations permit).
- Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility	Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result				
Special protective equipment and precautions for fire-fighters					
Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area. 				
Fire/Explosion Hazard	 Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include; carbon dioxide (CO2) other pyrolysis products typical of burning organic materialMay emit poisonous fumes.May emit corrosive fumes. 				

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	 Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	Moderate hazard. Clear area of personnel and move upwind. Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves.

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe hand	ling
Safe handling	 The conductivity of this material may make it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 100 upS/m., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid. DO NOT allow clothing wet with material to stay in contact with skin Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <=7 m/sec). Avoid splash filling. Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
Other information	 Store in original containers. Keep containers securely sealed. No smoking, naked lights or ignition sources. Store in a cool, dry, well-ventilated area.
Conditions for safe storage	ge, including any incompatibilities
Suitable container	 Metal can or drum Packaging as recommended by manufacturer. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	 Vigorous reactions, sometimes amounting to explosions, can result from the contact between aromatic rings and strong oxidising agents. Aromatics can react exothermically with bases and with diazo compounds. For alkyl aromatics: The alkyl side chain of aromatic rings can undergo oxidation by several mechanisms. The most common and dominant one is the attack by oxidation at benzylic carbon as the intermediate formed is stabilised by resonance structure of the ring. Following reaction with oxygen and under the influence of sunlight, a hydroperoxide at the alpha-position to the aromatic ring, is the primary oxidation product formed (provided a hydrogen atom is initially available at this position) - this product is often short-lived but may be stable dependent on the nature of the aromatic substitution; a secondary C-H bond is more easily attacked than a primary C-H bond whilst a tertiary C-H bond is even more susceptible to attack

by oxygen
 Monoalkylbenzenes may subsequently form monocarboxylic acids; alkyl naphthalenes mainly produce the corresponding naphthalene carboxylic acids.
 Oxidation in the presence of transition metal salts not only accelerates but also selectively decomposes the hydroperoxides.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
US OSHA Permissible Exposure Levels (PELs) - Table Z1	alkanes, C11-13-iso-	Oil mist, mineral	5 mg/m3	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	alkanes, C11-13-iso-	Mineral oil, excluding metal working fluids - Pure, highly and severely refined / Mineral oil, excluding metal working fluids - Poorly and mildly refined	5 mg/m3	Not Available	Not Available	TLV® Basis: URT irr
US NIOSH Recommended Exposure Limits (RELs)	alkanes, C11-13-iso-	Heavy mineral oil mist, Paraffin oil mist, White mineral oil mist	5 mg/m3	10 mg/m3	Not Available	Not Available
US OSHA Permissible Exposure Levels (PELs) - Table Z1	xylene	Xylenes (o-, m-, p-isomers)	435 mg/m3 / 100 ppm	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	xylene	Xylene (all isomers)	100 ppm	150 ppm	Not Available	TLV® Basis: URT & eye irr; CNS impair; BEI
US OSHA Permissible Exposure Levels (PELs) - Table Z1	naphthalene	Naphthalene	50 mg/m3 / 10 ppm	Not Available	Not Available	Not Available
US ACGIH Threshold Limit Values (TLV)	naphthalene	Naphthalene	10 ppm	Not Available	Not Available	TLV® Basis: URT irr; cataracts; hemolytic anemia
US NIOSH Recommended Exposure Limits (RELs)	naphthalene	Naphthalin, Tar camphor, White tar	50 mg/m3 / 10 ppm	75 mg/m3 / 15 ppm	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3	
alkanes, C11-13-iso-	Naphtha, hydrotreated heavy; (Isopar L-rev 2)	171 ppm	171 ppm	570 ppm	
xylene	Xylenes	Not Available	Not Available	Not Available	
naphthalene	Naphthalene	15 ppm	15 ppm	500 ppm	
Ingredient	Original IDLH Revised IDLH				
alkanes, C11-13-iso-	Not Available Not Available				
xylene	1,000 ppm	900 ppm	900 ppm		
solvent naphtha petroleum, heavy aromatic	Not Available	Not Available	Not Available		
naphthalene	500 ppm	250 ppm	250 ppm		

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.
Personal protection	
Eye and face protection	 Safety glasses with side shields. Chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	 Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice. Suitability and durability of glove type is dependent on usage.
Body protection	See Other protection below

2001 VALVE CLEAN 150ml

Other protection	Overalls.P.V.C. apron.Barrier cream.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

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:

2001 VALVE CLEAN 150ml

Material	CPI
BUTYL	С
BUTYL/NEOPRENE	С
HYPALON	С
NAT+NEOPR+NITRILE	С
NATURAL+NEOPRENE	С
NEOPRENE	С
NEOPRENE/NATURAL	С
NITRILE	С
NITRILE+PVC	С
PE/EVAL/PE	С
PVA	С
PVC	С
PVDC/PE/PVDC	С
TEFLON	С
VITON	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

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	Light yellow clear liquid with characteristic odour; not miscible with water.			
Physical state	Liquid	Relative density (Water = 1)	0.802	
Odour	Not Available	Partition coefficient n-octanol / water	Not Available	
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available	
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available	
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	<7	
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable	
Flash point (°C)	>61	Taste	Not Available	
Evaporation rate	Not Available	Explosive properties	Not Available	
Flammability	Combustible.	Oxidising properties	Not Available	
Upper Explosive Limit (%)	Not Available	Surface Tension (dyn/cm or mN/m)	Not Available	
Lower Explosive Limit (%)	Not Available	Volatile Component (%vol)	Not Available	
Vapour pressure (kPa)	Not Available	Gas group	Not Available	
Solubility in water (g/L)	Immiscible	pH as a solution (1%)	Not Available	
Vapour density (Air = 1)	Not Available	VOC g/L	Not Available	

SECTION 10 STABILITY AND REACTIVITY

Reactivity See section 7

Respiratory protection

Type A-P 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	A-AUS P2	-	A-PAPR-AUS / Class 1 P2
up to 50 x ES	-	A-AUS / Class 1 P2	-
up to 100 x ES	-	A-2 P2	A-PAPR-2 P2 ^

^ - 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)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

Chemical stability	 Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
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

Information on toxicological effects

Accidental ingestion of the material may be damaging to the heal ingestion of petroleum hydrocarbons can irritate the pharynx, oes Symptoms include a burning mouth and throat; larger amounts cr abdominal swelling, unconsciousness and convulsions. This material can cause inflammation of the skin on contact in sor The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this Entry into the blood-stream, through, for example, cuts, abrasions	sophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. an cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, me persons. n		
The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this Entry into the blood-stream, through, for example, cuts, abrasions	n		
	This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Open cuts, abraded or irritated skin should not be exposed to this material 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.		
This material can cause eye irritation and damage in some perso	ins.		
defects. Substance accumulation, in the human body, may occur and may	or long periods. It can be assumed that it contains a substance which can produce severe cause some concern following repeated or long-term occupational exposure. nay produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, n drying and cracking and redness of the skin.		
ΤΟΧΙΟΙΤΥ	IRRITATION		
Not Available	Not Available		
TOXICITY	IRRITATION		
Dermal (rabbit) LD50: >1900 mg/kg ^[1]	Nil reported		
Oral (rat) LD50: >4500 mg/kg ^[1]			
ΤΟΧΙΟΙΤΥ	IRRITATION		
Dermal (rabbit) LD50: >1700 mg/kg ^[2]	Eye (human): 200 ppm irritant		
Inhalation (rat) LC50: 5000 ppm/4hr ^[2]	Eye (rabbit): 5 mg/24h SEVERE		
Oral (rat) LD50: 4300 mg/kg ^[2]	Eye (rabbit): 87 mg mild		
	Skin (rabbit):500 mg/24h moderate		
ΤΟΧΙCΙΤΥ	IRRITATION		
dermal (rat) LD50: >2000 mg/kg ^[1]	[PETROFIN]		
Inhalation (rat) LC50: >0.59 mg/L/4hr ^[2]	Eye (rabbit): Irritating		
Oral (rat) LD50: >2000 mg/kg ^[1]			
TOXICITY	IRRITATION		
dermal (rat) LD50: >2500 mg/kg ^[2]	Eye (rabbit): 100 mg - mild		
Oral (rat) LD50: 490 mg/kg ^[2]	Skin (rabbit):495 mg (open) - mild		
1. Value obtained from Europe ECHA Registered Substances - A extracted from RTECS - Register of Toxic Effect of chemical Sub	Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data bstances		
	tefects. Substance accumulation, in the human body, may occur and may Constant or exposure over long periods to mixed hydrocarbons m and reduced liver and kidney function. Skin exposure may result in Prolonged or repeated skin contact may cause drying with crack TOXICITY Not Available TOXICITY Dermal (rabbit) LD50: >1900 mg/kg ^[1] Oral (rat) LD50: >4500 mg/kg ^[1] Oral (rat) LD50: >4500 mg/kg ^[2] Inhalation (rat) LC50: 5000 ppm/4hr ^[2] Oral (rat) LD50: 4300 mg/kg ^[2] TOXICITY dermal (rat) LD50: >0.59 mg/L/4hr ^[2] Oral (rat) LD50: >2000 mg/kg ^[1] Inhalation (rat) LC50: >0.59 mg/L/4hr ^[2] Oral (rat) LD50: >2000 mg/kg ^[1] Inhalation (rat) LC50: >0.59 mg/L/4hr ^[2] Oral (rat) LD50: >2000 mg/kg ^[1] TOXICITY dermal (rat) LD50: >2000 mg/kg ^[2] Oral (rat) LD50: >2000 mg/kg ^[2] TOXICITY dermal (rat) LD50: >2500 mg/kg ^[2] Oral (rat) LD50: >2500 mg/kg ^[2]		

ALKANES, C11-13-ISO-	for C10-12-isoparaffins:
XYLENE	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. The substance is classified by IARC as Group 3: NOT classifiable as to its carcinogenicity to humans. Evidence of carcinogenicity may be inadequate or limited in animal testing. Reproductive effector in rats

SOLVENT NAPHTHA PETROLEUM, HEAVY AROMATIC	for petroleum: This product contains benzene which is known to cause acute myeloid leukaemia and n-hexane which has been shown to metabolize to compounds which are neuropathic. This product contains toluene. There are indications from animal studies that prolonged exposure to high concentrations of toluene may lead to hearing loss. This product contains ethyl benzene and naphthalene from which there is evidence of tumours in rodents Carcinogenicity: Inhalation exposure to mice causes liver tumours, which are not considered relevant to humans.		
NAPHTHALENE	The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.		
XYLENE & NAPHTHALENE	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.		
Acute Toxicity	0	Carcinogenicity	0
Skin Irritation/Corrosion	¥	Reproductivity	0
Serious Eye Damage/Irritation	✓	STOT - Single Exposure	0
Respiratory or Skin sensitisation	0	STOT - Repeated Exposure	✓
Mutagenicity	\otimes	Aspiration Hazard	✓
		•	 Data available but does not fill the criteria for classification Data required to make classification available

🚫 – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
alkanes, C11-13-iso-	EC50	96	Algae or other aquatic plants	64mg/L	2
xylene	EC50	24	Crustacea	0.711mg/L	4
xylene	LC50	96	Fish	0.0013404mg/L	4
xylene	EC50	48	Crustacea	>3.4mg/L	2
xylene	EC50	72	Algae or other aquatic plants	4.6mg/L	2
xylene	NOEC	73	Algae or other aquatic plants	0.44mg/L	2
solvent naphtha petroleum, heavy aromatic	EC50	48	Crustacea	=0.95mg/L	1
solvent naphtha petroleum, heavy aromatic	EC50	72	Algae or other aquatic plants	<1mg/L	1
solvent naphtha petroleum, heavy aromatic	LC50	96	Fish	0.58mg/L	2
solvent naphtha petroleum, heavy aromatic	EC50	48	Crustacea	0.76mg/L	2
solvent naphtha petroleum, heavy aromatic	NOEC	96	Algae or other aquatic plants	0.12mg/L	2
naphthalene	BCF	12	Fish	10.2mg/L	4
naphthalene	EC50	0.05	Crustacea	0.00000085mg/L	4
naphthalene	EC50	48	Crustacea	0.004729473mg/L	4
naphthalene	LC50	96	Fish	0.213mg/L	4
naphthalene	NOEC	48	Fish	0.012817mg/L	4
naphthalene	EC50	72	Algae or other aquatic plants	ca.0.4- ca.0.5mg/L	2

Legend:

Extracted from 1. TOCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological information - Aquatic Toxicity 3. EPIWIN Suite V3. 12 Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) -Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites. **DO NOT** discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
xylene	HIGH (Half-life = 360 days)	LOW (Half-life = 1.83 days)
naphthalene	HIGH (Half-life = 258 days)	LOW (Half-life = 1.23 days)

Bioaccumulative potential

Ingredient	Bioaccumulation
xylene	MEDIUM (BCF = 740)
solvent naphtha petroleum, heavy aromatic	LOW (BCF = 159)

naphthalene H	HIGH (BCF = 18000)
Mobility in soil	
Ingredient N	Mobility
naphthalene L	LOW (KOC = 1837)

SECTION 13 DISPOSAL CONSIDERATIONS

te treatment methods	
	DO NOT allow wash water from cleaning or process equipment to enter drains.
	It may be necessary to collect all wash water for treatment before disposal.
	In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
Product / Packaging	Where in doubt contact the responsible authority.
disposal	 Recycle wherever possible or consult manufacturer for recycling options.
	Consult State Land Waste Authority for disposal.
	 Bury or incinerate residue at an approved site.
	Recycle containers if possible, or dispose of in an authorised landfill.

SECTION 14 TRANSPORT INFORMATION

Labels Required	
Marine Pollutant	NO
Land transport (DOT): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS	

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

SECTION 15 REGULATORY INFORMATION

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

ALKANES, C11-13-ISO-(64742-48-9.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air Contaminants
US - Alaska Limits for Air Contaminants	US - Washington Permissible exposure limits of air contaminants
US - California Permissible Exposure Limits for Chemical Contaminants	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
US - California Proposition 65 - Carcinogens	US ACGIH Threshold Limit Values (TLV)
US - Hawaii Air Contaminant Limits	US ACGIH Threshold Limit Values (TLV) - Carcinogens
US - Idaho - Limits for Air Contaminants	US National Toxicology Program (NTP) 13th Report Part A Known to be Human Carcinogens
US - Michigan Exposure Limits for Air Contaminants	US NIOSH Recommended Exposure Limits (RELs)
US - Minnesota Permissible Exposure Limits (PELs)	US OSHA Permissible Exposure Levels (PELs) - Table Z1
US - Oregon Permissible Exposure Limits (Z-1)	US Priority List for the Development of Proposition 65 Safe Harbor Levels - No Significant Risk
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	Levels (NSRLs) for Carcinogens and Maximum Allowable Dose Levels (MADLs) for
US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants	Chemicals Causing Reproductive Toxicity
	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
XYLENE(1330-20-7) IS FOUND ON THE FOLLOWING REGULATORY LISTS	
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
Monographs	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Alaska Limits for Air Contaminants	Contaminants
US - California OEHHA/ARB - Acute Reference Exposure Levels and Target Organs (RELs)	US - Washington Permissible exposure limits of air contaminants
US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs	US ACGIH Threshold Limit Values (TLV)
(CRELs)	US ACGIH Threshold Limit Values (TLV) - Carcinogens
US - California Permissible Exposure Limits for Chemical Contaminants	US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)
US - Hawaii Air Contaminant Limits	US EPA Carcinogens Listing
US - Idaho - Limits for Air Contaminants	US EPCRA Section 313 Chemical List
US - Michigan Exposure Limits for Air Contaminants	US OSHA Permissible Exposure Levels (PELs) - Table Z1
US - Minnesota Permissible Exposure Limits (PELs)	US Spacecraft Maximum Allowable Concentrations (SMACs) for Airborne Contaminants
US - Oregon Permissible Exposure Limits (Z-1)	
03 - Olegon Fernissible Exposure Limits (2-1)	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

SOLVENT NAPHTHA PETROLEUM, HEAVY AROMATIC(64742-94-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory

NAPHTHALENE(91-20-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC	US - Vermont Permissible Exposure Limits Table Z-1-A Final Rule Limits for Air Contaminants
Monographs	US - Vermont Permissible Exposure Limits Table Z-1-A Transitional Limits for Air
US - Alaska Limits for Air Contaminants	Contaminants
US - California - Proposition 65 - Priority List for the Development of MADLs for Chemicals	US - Washington Permissible exposure limits of air contaminants
Causing Reproductive Toxicity	US - Washington Toxic air pollutants and their ASIL, SQER and de minimis emission values
US - California OEHHA/ARB - Chronic Reference Exposure Levels and Target Organs (CRELs)	US - Wyoming Toxic and Hazardous Substances Table Z1 Limits for Air Contaminants
	US ACGIH Threshold Limit Values (TLV)
US - California Permissible Exposure Limits for Chemical Contaminants	US ACGIH Threshold Limit Values (TLV) - Carcinogens
US - California Proposition 65 - Carcinogens	US ATSDR Minimal Risk Levels for Hazardous Substances (MRLs)
US - California Proposition 65 - No Significant Risk Levels (NSRLs) for Carcinogens	US EPA Carcinogens Listing
US - Hawaii Air Contaminant Limits	US EPCRA Section 313 Chemical List
US - Idaho - Limits for Air Contaminants	US National Toxicology Program (NTP) 13th Report Part B. Reasonably Anticipated to be a
US - Michigan Exposure Limits for Air Contaminants	Human Carcinogen
US - Minnesota Permissible Exposure Limits (PELs)	US NIOSH Recommended Exposure Limits (RELs)
US - New Jersey Right to Know - Special Health Hazard Substance List (SHHSL):	US OSHA Permissible Exposure Levels (PELs) - Table Z1
Carcinogens	US Toxic Substances Control Act (TSCA) - Chemical Substance Inventory
US - Oregon Permissible Exposure Limits (Z-1)	
US - Tennessee Occupational Exposure Limits - Limits For Air Contaminants	

Federal Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SECTION 311/312 HAZARD CATEGORIES

Immediate (acute) health hazard	Yes
Delayed (chronic) health hazard	Yes
Fire hazard	Yes
Pressure hazard	No
Reactivity hazard	No

US. EPA CERCLA HAZARDOUS SUBSTANCES AND REPORTABLE QUANTITIES (40 CFR 302.4)

Name	Reportable Quantity in Pounds (Ib)	Reportable Quantity in kg
Xylene (mixed)	100	45.4
Naphthalene	100	45.4

State Regulations

US. CALIFORNIA PROPOSITION 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm

US - CALIFORNIA PREPOSITION 65 - CARCINOGENS & REPRODUCTIVE TOXICITY (CRT): LISTED SUBSTANCE

Soots, tars, and mineral oils (untreated and mildly treated oils and used engine oils), Naphthalene Listed

National Inventory	Status
Australia - AICS	Υ
Canada - DSL	Y
Canada - NDSL	N (alkanes, C11-13-iso-; naphthalene; xylene; solvent naphtha petroleum, heavy aromatic)
China - IECSC	Υ
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (alkanes, C11-13-iso-)
Korea - KECI	Y
New Zealand - NZIoC	Υ
Philippines - PICCS	Y
USA - TSCA	Υ
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

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 Chemwatch: **65-8494** Version No: **2.1.1.1**

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 OSF: Odour Safety Factor NOAEL :No Observed Adverse Effect Level LOAEL: Lowest 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