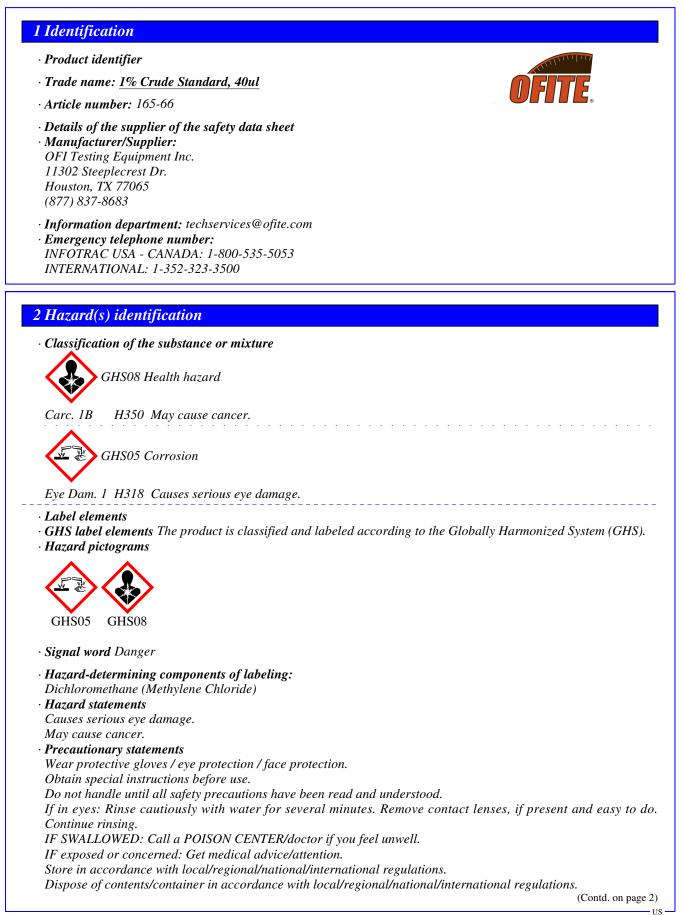
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Classification system:
 NFPA ratings (scale 0 - 4)
 Health = 1

 $1 \quad 0 \quad Fire = 0 \\ Fire = 0 \\ Reactivity = 0$ 

· HMIS-ratings (scale 0 - 4)

HEALTH1Health = 1FIRE0Fire = 0REACTIVITY0Reactivity = 0

· Other hazards

· Results of PBT and vPvB assessment

• **PBT:** Not applicable.

· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

• Dangerous comp	ponents:	
CAS: 67-63-0 Is	opropanol	99.009%
CAS: 75-09-2 D	ichloromethane (Methylene Chloride)	0.99%
• Table of Nonhaz	ardous Ingredients	
CAS: 8002-05-9	Petroleum	0.0002%
CAS: 108-88-3	Toluene	0.0001%
CAS: 1330-20-7	Xylene (Xylol)	0.0001%
CAS: 71-43-2	Benzene	0.0001%
CAS: 91-20-3	Naphthalene	0.0001%
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	0.0001%
CAS: 7783-06-4	Hydrogen Sulfide	0.0001%
CAS: 109-66-0	Pentane	0.0001%
CAS: 106-97-8	butane	0.0001%
CAS: 110-54-3	Hexane	0.0001%

# 4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.

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• *Indication of any immediate medical attention and special treatment needed No further relevant information available.* 

#### **5** Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### **6** Accidental release measures

- *Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.*
- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.

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

- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent.
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.
- Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.
- · Protective Action Criteria for Chemicals

CAS: 67-63-0	Isopropanol	400 ppm
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	200 ppm
CAS: 8002-05-9		1,100 mg/i
CAS: 108-88-3	Toluene	67 ppm
CAS: 1330-20-7	' Xylene (Xylol)	130 ppm
CAS: 71-43-2	Benzene	52 ppm
CAS: 91-20-3	Naphthalene	15 ppm
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	33 ppm
CAS: 7783-06-4	Hydrogen Sulfide	0.51 ppm
CAS: 109-66-0	Pentane	3000* ppn
CAS: 106-97-8	butane	5500* ppn
CAS: 110-54-3	Hexane	260 ppm
PAC-2:	·	
CAS: 67-63-0	Isopropanol	2000* ppm
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	560 ppm
CAS: 8002-05-9	Petroleum	1,800 mg/m2
CAS: 108-88-3	Toluene	560 ppm
CAS: 1330-20-7	Xylene (Xylol)	920* ppm
CAS: 71-43-2	Benzene	800 ppm

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CAS: 91-20-3	Naphthalene	(Contd. of page 2
	•	83 ppm
	Ethylbenzene, Anhydrous, 99.8%	1100* ppm
CAS: 7783-06-4		27 ppm
01101 109 00 0	Pentane	33000*** ppm
CAS: 106-97-8	butane	17000** ppm
CAS: 110-54-3	Hexane	2900* ppm
· PAC-3:		
CAS: 67-63-0	Isopropanol	12000** ppm
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	6,900 ppm
CAS: 8002-05-9	Petroleum	40,000 mg/m3
CAS: 108-88-3	Toluene	3700* ppm
CAS: 1330-20-7	Xylene (Xylol)	2500* ppm
CAS: 71-43-2	Benzene	4000* ppm
CAS: 91-20-3	Naphthalene	500 ppm
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	1800* ppm
CAS: 7783-06-4	Hydrogen Sulfide	50 ppm
CAS: 109-66-0	Pentane	200000*** ppm
CAS: 106-97-8	butane	53000*** ppm
CAS: 110-54-3	Hexane	8600** ppm

#### 7 Handling and storage

- · Handling:
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities

· Storage:

- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

· Additional information about design of technical systems: No further data; see item 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

CAS: 67-63-0 Isopropanol

PEL Long-term value: 980 mg/m<sup>3</sup>, 400 ppm

REL Short-term value: 1225 mg/m<sup>3</sup>, 500 ppm

Long-term value: 980 mg/m<sup>3</sup>, 400 ppm

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TLV	Short-term value: 984 mg/m <sup>3</sup> , 400 ppm
	Long-term value: 492 mg/m³, 200 ppm BEI
CAS:	75-09-2 Dichloromethane (Methylene Chloride)
PEL	Short-term value: 125 ppm
	Long-term value: 25 ppm see 29 CFR 1910.1052
REL	See Pocket Guide App. A
TLV	Long-term value: 174 mg/m³, 50 ppm BEI
Ingre	edients with biological limit values:
CAS:	e 67-63-0 Isopropanol
	40 mg/L
	LD50 Intraperitoneal: urine
	Time: end of shift at end of workweek LD50: Acetone (background, nonspecific)
	275-09-2 Dichloromethane (Methylene Chloride)
	0.3 mg/L
	LD50 Intraperitoneal: urine
	Time: end of shift
	LD50: Dichloromethane (semi-quantitative)
Addi	tional information: The lists that were valid during the creation were used as basis.
Expo	sure controls
	onal protective equipment:
	ral protective and hygienic measures:
	away from foodstuffs, beverages and feed.
	ediately remove all soiled and contaminated clothing.
	hands before breaks and at the end of work.
	protective clothing separately. I contact with the eyes.
	l contact with the eyes. I contact with the eyes and skin.
	thing equipment:
	se of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use
	ratory protective device that is independent of circulating air.
Prote	ection of hands:
ſ	
	Protective gloves
	Thole and gibres
	love material has to be impermeable and resistant to the product/ the substance/ the preparation.
	to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the
	ical mixture. tion of the glove material on consideration of the penetration times, rates of diffusion and the degradation
	rial of gloves
	election of the suitable gloves does not only depend on the material, but also on further marks of quality and

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product 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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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• Eye protection:

(Contd. of page 5)



Tightly sealed goggles

· Body protection: Protective work clothing

Information on basic physical and c	hemical properties	
General Information		
Appearance:		
Form: Color:	Liquid Light brown	
Odor:	Light brown Characteristic	
Odor: Odor threshold:	Not determined.	
pH-value at 20 °C (68 °F):	0	
Change in condition		
Melting point/Melting range:	-89.5 °C (-129 °F)	
Boiling point/Boiling range:	$108 \ ^{\circ}C \ (226 \ ^{\circ}F)$	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	425 °C (797 °F)	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	2 Vol %	
Upper:	12 Vol %	
Vapor pressure at 20 °C (68 °F):	43 hPa (32 mm Hg)	
Density at 20 °C (68 °F):	0.80683 g/cm <sup>3</sup> (6.733 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octanol/wate	e <b>r):</b> Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	100.0 %	
VOC content:	99.0 %	
	798.8 g/l / 6.67 lb/gl	

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· Other information

No further relevant information available.

# **10** Stability and reactivity

· Reactivity No further relevant information available.

· Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

### **11 Toxicological information**

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxi	city Estimates)
Inhalative	I C 50/4 h

Inhalative	LC50/4 h	30.3 mg/l (rat)
CAS: 67-63-0 Iso	opropanol	
Oral	LD50	5045 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)
CAS: 75-09-2 Di	chloromethane (Methylene	Chloride)
Oral	LD50	1600 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4 h	52000 mg/l (rat)
Irritation of skin	Skin Corrosion/Irritation	Irritating (rabbit) (Draize)
Irritation of eyes	Eye damage/eye irritation	irritating (rabbit)

#### · Primary irritant effect:

• on the skin: No irritant effect.

• on the eye: Strong irritant with the danger of severe eye injury.

· Sensitization: No sensitizing effects known.

• Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

#### · Carcinogenic categories

· IARC (Internatio	onal Agency for Research on Cancer)	
CAS: 67-63-0	Isopropanol	3
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	28
CAS: 8002-05-9	Petroleum	3
CAS: 108-88-3	Toluene	3
CAS: 1330-20-7	Xylene (Xylol)	3
CAS: 71-43-2	Benzene	1
		(Contd. on page

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		(Contd. of page 7)
CAS: 91-20-3	Naphthalene	2B
CAS: 100-41-4	<i>Ethylbenzene</i> , Anhydrous, 99.8%	28
· NTP (Nationa	l Toxicology Program)	
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	R
CAS: 71-43-2	Benzene	K
CAS: 91-20-3	Naphthalene	R
	cupational Safety & Health Administration)	
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	
CAS: 71-43-2	Benzene	

# **12** Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:

· General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· Results of PBT and vPvB assessment

- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

# **13 Disposal considerations**

- $\cdot$  Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number		
· DOT, ADN, IMDG, IATA	Not regulated	
· UN proper shipping name		
· DOT, ADN, IMDG, IATA	Not regulated	

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		(Contd. of page 8
· Transport hazard class(es)		
· DOT, ADN, IMDG, IATA		
· Class	Not regulated	
· Packing group		
· DOT, IMDG, IATA	Not regulated	
· Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Not applicable.	
• Transport in bulk according to Annex	II of	
MARPOL73/78 and the IBC Code	Not applicable.	
· UN "Model Regulation":	Not regulated	

# **15 Regulatory information**

 $\cdot$  Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  Sara

CAS: 7783-06-4	Hydrogen Sulfide
	ecific toxic chemical listings):
CAS: 67-63-0	Isopropanol
CAS: 75-09-2	Dichloromethane (Methylene Chloride)
CAS: 108-88-3	Toluene
CAS: 1330-20-7	Xylene (Xylol)
CAS: 71-43-2	Benzene
CAS: 91-20-3	Naphthalene
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%
	Hydrogen Sulfide
CAS: 110-54-3	Hexane
,	ubstances Control Act):
All ingredients a	ire listed.
Proposition 65	
Chemicals know	yn to cause cancer:
CAS: 75-09-2	Dichloromethane (Methylene Chloride)
CAS: 71-43-2	Benzene
CAS: 91-20-3	Naphthalene
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%
Chemicals know	on to cause reproductive toxicity for females:
None of the ingr	edients is listed.
Chemicals know	on to cause reproductive toxicity for males:
CAS: 71-43-2 B	enzene
Chemicals know	yn to cause developmental toxicity:
CAS: 108-88-3	Toluene
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CAS: 71-43-2 1	Benzene	(Contd. of page
· Carcinogenic ca	5	
	ental Protection Agency)	
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	L
CAS: 108-88-3	Toluene	II
CAS: 1330-20-7	Xylene (Xylol)	Ι
CAS: 71-43-2	Benzene	A, K/L
CAS: 91-20-3	Naphthalene	C, CBI
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	D
CAS: 7783-06-4	Hydrogen Sulfide	I
CAS: 110-54-3	Hexane	II
· TLV (Threshold	Limit Value established by ACGIH)	<u> </u>
CAS: 67-63-0	Isopropanol	A
CAS: 75-09-2	Dichloromethane (Methylene Chloride)	A
CAS: 108-88-3	Toluene	A
CAS: 1330-20-7	Xylene (Xylol)	A
CAS: 71-43-2	Benzene	A
CAS: 91-20-3	Naphthalene	A
CAS: 100-41-4	Ethylbenzene, Anhydrous, 99.8%	A
· NIOSH-Ca (Nat	ional Institute for Occupational Safety and Health)	
CAS: 75-09-2 D	ichloromethane (Methylene Chloride)	
CAS: 71-43-2 Be	enzene	
· GHS label eleme	nts The product is classified and labeled according to the Gla	obally Harmonized System (GHS)

· Hazard pictograms



· Signal word Danger

· Hazard-determining components of labeling: Dichloromethane (Methylene Chloride) · Hazard statements Causes serious eye damage. May cause cancer. · Precautionary statements Wear protective gloves / eye protection / face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. IF exposed or concerned: Get medical advice/attention. Store in accordance with local/regional/national/international regulations. Dispose of contents/container in accordance with local/regional/national/international regulations. (Contd. on page 11)

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· National regulations:

- Additional classification according to Decree on Hazardous Materials: Carcinogenic hazardous material group III (dangerous).
- Information about limitation of use: Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Environment protection department.
- · Contact:
- Date of preparation / last revision Revision 0.0 05/12/2016: Creation date for SDS.STN Revision 0.1, 07-03-2017: Reviewed SDS. STN 07/03/2017 / -
- · Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit **BEI:** Biological Exposure Limit Eye Dam. 1: Serious eye damage/eye irritation - Category 1 Carc. 1B: Carcinogenicity - Category 1B