LIQUID

Safety Data Sheet
Enkolan

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product identifier	Enkolan
1.2	Relevant identified uses of the substance or mixture and uses advised against	
	Use of the substance/mixture:	Liquid applied waterproofing
1.3	Details of the supplier of the safety data sheet: Street: Place: Telephone: Telefax E-mail: Internet: Responsible department:	ENKE-Werk Johannes Enke GmbH & Co. KG Hamburger Str. 16 40221 Düsseldorf, Germany +49 (0) 211 / 30 40 74 +49(0)211/ 39 37 18 info@enke-werk.de www.enke-werk.de/en On weekdays between 7 a.m. and 4 p.m.
1.4	Emergency telephone:	Poison Information Centre (24h): +49 (0) 551 / 19 240

SECTION 2: HAZARD IDENTIFICATION

2.1	Classification of the substance or mixture	
	Regulation (EC) No. 1272/2008	
	This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.	
2.2	Label elements	
	Regulation (EC) No. 1272/2008	
	Special labelling of certain mixtures	
	EUH208	Contains octhilinone (ISO); 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.
	EUH210	Safety data sheet available on request
2.3	Other hazards	The product hydrolyses quickly in the presence of water to: Polymers and Methanol (CAS 67-56-1).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2	Mixtures
	Chemical characterization
	Mixture of silane-terminated polyurethanes and fillers
	Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
2768-02-7	trimethoxyvinylsilane			< 1 %
	220-449-8			
	Flam. Liq. 3, Acute Tox. 4; H226 H332			
67-56-1	methanol			< 0,1 %
	200-659-6	603-001-00-X		
	Flam. Liq. 2, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3, STOT SE 1; H225 H331 H311 H301 H370 **			

	Full text of H and EUH statements: see section 16.

SECTION 4: FIRST AID MEASURES

4.1	Description of first aid measures	
	After inhalation	Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary.
	After contact with skin	After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
	After contact with eyes	Rinse immediately carefully and thoroughly with eye-bath or water. In case of eye irritation consult an ophthalmologist.
	After ingestion	Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician immediately.
4.2	Most important symptoms and effects, both acute and delayed	No information available.
4.3	Indication of any immediate medical attention and special treatment needed	Treat symptomatically. Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

SECTION 5: FIREFIGHTING MEASURES

5.1	Extinguishing media	
	Suitable extinguishing media	Co-ordinate fire-fighting measures to the fire surroundings. Water mist, Extinguishing powder, alcohol resistant foam, Carbon dioxide, Sand.
5.2	Special hazards arising from the substance or mixture	Non-flammable. In case of fire may be liberated: Nitrogen oxides (NOx)
5.3	Advice for firefighters	In case of fire: Wear self-contained breathing apparatus.
	Additional information	Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1	Personal precautions, protective equipment and emergency procedures	Avoid contact with eyes and skin. Avoid breathing dust/fume/gas/mist/vapours/spray.
6.2	Environmental precautions	Do not allow to enter into surface water or drains.
6.3	Methods and material for containment and cleaning up	Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.
6.4	Reference to other sections	Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: HANDLING AND STORAGE

7.1	Precautions for safe handling	
	Advice on safe handling	Provide adequate ventilation as well as local exhaustion at critical locations. Special danger of slipping by leaking/spilling product. Keep away from clothing as well as other incompatible materials. (SECTION 10: Stability and reactivity)
	Advice on protection against fire and explosion	The product hydrolyses quickly in the presence of water to: Polymers and Methanol (CAS 67-56-1). Vapours can form explosive mixtures with air. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.
7.2	Conditions for safe storage, including any incompatibilities	
	Requirements for storage rooms and vessels	Keep container tightly closed in a cool, well-ventilated place.
	Advice on storage compatibility	No special measures are necessary.
	Further information on storage conditions	Protect from moisture. Keep/Store only in original container.
7.3	Specific end use(s)	Liquid applied waterproofing

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1	Control parameters	
	Exposure limits (EH40)	

CAS No	Substance	ppl	mg/m³	fibres/ml	Category	Origin
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL

	Additional advice on limit values	The product hydrolyses quickly in the presence of water to: Polymers and Methanol (CAS 67-56-1)
8.2	Exposure controls	
	Protective and hygiene measures	Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.
	Eye/face protection	Wear eye protection/face protection.
	Hand protection	When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Our recommendation is as follows: Suitable materials for prolonged, direct contact (at least protection index 6, corresponding to> 480 minutes permeation time according to EN 374): Neoprene®, Viton®, PVC, butyl or nitrile rubber. Dispose of contaminated gloves. With proper, optimized operation, only short-term contact and liquid splashes are to be expected, therefore, according to DGUV Information 212-007, a glove with a minimum protection class of 1 (<10 min) is sufficient. It must be ensured that the gloves are changed at short notice in case of chemical contact.
	Skin protection	Wear suitable protective clothing.
	Respiratory protection	In case of inadequate ventilation wear respiratory protection.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties		
	Physical State	Liquid	
	Colour	Grey	
	Odour	Menthol	
			Test Method
	pH-Value	not determined	
	Changes in the physical state		
	Melting point:	not determined	
	Initial boiling point and boiling range:	not determined	
	Flash point:	132°C	
	Flammability		
	Solid:	not applicable	
	Gas:	not applicable	
	Lower explosion limits:	not determined	
	Upper explosion limits:	not determined	
	Auto-ignition temperature		
	Solid:	not applicable	
	Gas:	not applicable	
	Decomposition temperature:	not determined	
	Oxidizing properties		
	Not oxidising.		
	Vapour pressure:	not determined	
	Density (at 23 °C):	1,3 g/cm³	
	Water solubility:	easily soluble	
	Solubility in other solvents		
	not determined		
	Partition coefficient:	not determined	
	Viscosity / dynamic: (at 20 °C)	~ 8000 mPa·s	
	Vapour density:	not determined	
	Evaporation rate:	not determined	
9.2	Other information		
	Solid content:	not determined	

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	No hazardous reaction when handled and stored according to provisions.
10.2	Chemical stability	The product is stable under storage at normal ambient temperatures.
10.3	Possibility of hazardous reactions	No known hazardous reactions.
10.4	Conditions to avoid	None
10.5	Incompatible materials	Reacts with: Water, Acid and Base. Formation of: Methanol (CAS 67-56-1)
10.6	Hazardous decomposition products	No known hazardous decomposition products

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
2768-02-7	trimethoxyvinylsilane				
	oral	LD50 7120 mg/kg	Rat	OECD 401	
	dermal	LD50 > 3460 mg/kg	Rabbit	OECD 402	
	inhalative (4 h) vapour	LC50 16,79 mg/l	Rat		
	inhalative aerosol	ATE 1,5 mg/l			
	inhalative (4 h) gas	LC50 2773 ppm	Rat	OECD 403	
67-56-1	methanol				
	oral	ATE 100 mg/kg			
	dermal	ATE 300 mg/kg			
	inhalative vapour	ATE 3 mg/l			
	inhalative aerosol	ATE 0,5 mg/l			

Additional information on tests	The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].
Further information	May produce an allergic reaction.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity — The product is not: Ecotoxic.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] | [d]	Species	Source	Method
2768-02-7	trimethoxyvinylsilane						
	Acute fish toxicity	LC50	191 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50	210 mg/l	72 h	Selenastrum capricornutum		
	Acute crustacea toxicity	EC50	169 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202	
	Crustacea toxicity	NOEC	28 mg/l	21 d	Daphnia magna (Big water flea)		

12.2 Persistence and degradability — The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
2768-02-7	trimethoxyvinylsilane			
	Biochemical oxygen demand (BOD)	51%	28	
	Moderately/partially biodegradable.			

12.3 Bioaccumulative potential — The product has not been tested.

12.4	Mobility in soil	The product has not been tested.
12.5	Results of PBT and vPvB assessment	The product has not been tested.
12.6	Other adverse effects	No information available.
	Further information	Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	
	Advice on disposal Disposal of packaging:	Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Adhering to the official regulations, it can be disposed of in appropriate incinerator. Cured residual material can be disposed of with household waste. Containers have to be emptied completely and free of drops after final product removal. Emptied packages can be returned to the partners of Kreislaufsystem Blechverpackungen Stahl (Recycling system for metal containers). Collection points are provided by the ENKE company as user of the mark.
	Waste disposal number of waste from residues/unused products	080410 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants other than those mentioned in 08 04 09
	Waste disposal number of used product	080410 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants other than those mentioned in 08 04 09
	Contaminated packaging	Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: TRANSPORT INFORMATION

Land transport (ADR/RID)		
14.1	UN number:	No dangerous good in sense of this transport regulation.
14.2	UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3	Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4	Packing group:	No dangerous good in sense of this transport regulation.
Inland waterways transport (ADN)		
14.1	UN number:	No dangerous good in sense of this transport regulation.
14.2	UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3	Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4	Packing group:	No dangerous good in sense of this transport regulation.
Marine transport (IMDG)		
14.1	UN number:	No dangerous good in sense of this transport regulation.
14.2	UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3	Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4	Packing group:	No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)		
14.1	UN number:	No dangerous good in sense of this transport regulation.

14.2	UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3	Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4	Packing group:	No dangerous good in sense of this transport regulation.
14.5	Environmental hazards	
	ENVIRONMENTALLY HAZARDOUS:	no
14.6	Special precautions for user	No information available.
14.7.	Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable

SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/ legislation specific for the substance or mixture	
	EU regulatory information	
	Additional information	To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC
	National regulatory information	
	Water contaminating class (D): Skin resorption/Sensitization:	1 - slightly water contaminating Causes allergic hypersensitivity reactions.
15.2	Chemical safety assessment	Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: OTHER INFORMATION

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
IATA:	International Air Transport Association
GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
EINECS:	European Inventory of Existing Commercial Chemical Substances
ELINCS:	European List of Notified Chemical Substances
CAS:	Chemical Abstracts Service
LC50:	Lethal concentration, 50%
LD50:	Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H311	Toxic in contact with skin
H331	Toxic if inhaled
H332	Harmful if inhaled
H370	Causes damage to organs
EUH208	Contains octhilinone (ISO); 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.
EUH210	Safety data sheet available on request.

Last update date (ENKE-Werk)	05.07.2018
Moy Materials Ltd version prepared by	Martin Bidewell

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.