

## Safety data sheet

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

#### 1.1. Product identifier

Product name **Perfect Line Economic VOC Activator Slow**

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

Intended use **Hardener for UHS paint.**

#### 1.3. Details of the supplier of the safety data sheet

Name **Perfect Line**  
Full address **Postbus 90117**  
District and Country **5000 LA TILBURG**  
**Netherlands**  
**T +31(0)85 744 11 18**

e-mail address of the competent person responsible for the Safety Data Sheet **Perfect Line**  
**info@perfectline.nl**

Product distribution by:

#### 1.4. Emergency telephone number

For urgent inquiries refer to **UNITED KINGDOM - POISON INFORMATION CENTERS**  
**• National Poisons Information Service (NPIS) - Tel: +44 844 8920111**

**INTEC s.r.l. - Technical Support: Tel. +39 0522 909727 (Monday - Friday: 8.30-12.00 and 14.00-17.30)**

### SECTION 2. Hazards identification

#### 2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Acute toxicity, category 4	H332	Harmful if inhaled.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Respiratory sensitization, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, category 3	H336	May cause drowsiness or dizziness.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



**SECTION 2. Hazards identification ... / >>**

Signal words: Danger

Hazard statements:

<b>H226</b>	Flammable liquid and vapour.
<b>H332</b>	Harmful if inhaled.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H334</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH204</b>	Contains isocyanates. May produce an allergic reaction.

Precautionary statements:

<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P233</b>	Keep container tightly closed.
<b>P264</b>	Wash thoroughly your hands after handling.
<b>P280</b>	Wear protective gloves / eye protection / face protection.
<b>P284</b>	[In case of inadequate ventilation] wear respiratory protection.
<b>P304+P340</b>	IF INHALED: remove person to fresh air and keep comfortable for breathing.
<b>P312</b>	Call a POISON CENTRE or a doctor if you feel unwell.

**Contains:** POLY (HEXAMETHYLENE DIISOCYANATE)  
N-BUTYL ACETATE  
XYLENE (REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE)  
Homopolymer of Isophorondiisocyanate

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**SECTION 3. Composition/information on ingredients**
**3.1. Substances**

Information not relevant

**3.2. Mixtures**
**Contains:**
**Identification                      x = Conc. %                      Classification 1272/2008 (CLP)**
**POLY (HEXAMETHYLENE DIISOCYANATE)**

CAS        28182-81-2    40 ≤ x &lt; 55                      Acute Tox. 4 H332, Resp. Sens. 1 H334, Skin Sens. 1 H317

EC        500-060-2

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Reg. no.    01-2119485796-17-xxxx

**XYLENE (REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE)**

CAS        25 ≤ x < 30                      Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304,  
STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Note C

EC        905-562-9

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Reg. no.    01-2119555267-33

**N-BUTYL ACETATE**

CAS        123-86-4        17 ≤ x &lt; 20                      Flam. Liq. 3 H226, STOT SE 3 H336, EUH066

EC        204-658-1

INDEX    607-025-00-1

Reg. no.    01-2119485493-29-xxxx

**SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM**

CAS        64742-95-6    2,5 ≤ x < 3                      Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, STOT SE 3 H336,  
Aquatic Chronic 2 H411, Note P

EC        918-668-5

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Reg. no.    01-2119455851-35

**SECTION 3. Composition/information on ingredients ... / >>****Homopolymer of Isophorondiisocyanate**CAS 53880-05-0  $2 \leq x < 3$  Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1B H317

EC 500-125-5

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Reg. no. 01-2119980716-25

**2-METHOXY-1-METHYLETHYL ACETATE**CAS 108-65-6  $0 \leq x < 1$  Flam. Liq. 3 H226

EC 203-603-9

INDEX 607-195-00-7

Reg. no. 01-2119475791-29

The full wording of hazard (H) phrases is given in section 16 of the sheet.

**SECTION 4. First aid measures****4.1. Description of first aid measures**

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

**4.2. Most important symptoms and effects, both acute and delayed**

Specific information on symptoms and effects caused by the product are unknown.

For symptoms and effects caused by the contained substances, see section 11.

**4.3. Indication of any immediate medical attention and special treatment needed**

Information not available

**SECTION 5. Firefighting measures****5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

**UNSUITABLE EXTINGUISHING EQUIPMENT**

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

**5.2. Special hazards arising from the substance or mixture****HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

**5.3. Advice for firefighters****GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

**6.2. Environmental precautions**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

**6.3. Methods and material for containment and cleaning up**

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of

## SECTION 6. Accidental release measures ... / >>

the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

### 7.3. Specific end use(s)

Information not available

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
HUN	Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da Republica I 26; 2012-02-06
EU	OEL EU	Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2016

### XYLENE (REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE)

#### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	440	100	880	200	SKIN
VLA	ESP	221	50	442	100	SKIN
VLEP	FRA	221	50	442	100	SKIN
WEL	GBR	220	50	441	100	
VLEP	ITA	221	50	442	100	SKIN
OEL	EU	221	50	442	100	SKIN
TLV-ACGIH		434	100	651	150	

#### Predicted no-effect concentration - PNEC

Normal value in fresh water	0,25	mg/l
Normal value in marine water	0,25	mg/l
Normal value for marine water sediment	14,33	mg/kg
Normal value for the terrestrial compartment	2,41	mg/kg

**SECTION 8. Exposure controls/personal protection ... / >>**
**N-BUTYL ACETATE**
**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	DEU	480	100	960	200
VLA	ESP	724	150	965	200
VLEP	FRA	710	150	940	200
WEL	GBR	724	150	966	200
AK	HUN	950		950	
TLV-ACGIH			50		150

**SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM**
**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
OEL	EU	100	20		

**2-METHOXY-1-METHYLETHYL ACETATE**
**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	270	50	270	50	
MAK	DEU	270	50	270	50	
VLA	ESP	275	50	550	100	SKIN
VLEP	FRA	275	50	550	100	SKIN
WEL	GBR	274	50	548	100	
AK	HUN	275		550		
VLEP	ITA	275	50	550	100	SKIN
VLE	PRT	275	50	550	100	SKIN
OEL	EU	275	50	550	100	SKIN

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

**8.2. Exposure controls**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

**HAND PROTECTION**

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

**SKIN PROTECTION**

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required. Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

**SECTION 9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Appearance	liquid
Colour	colourless
Odour	characteristic
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	124 °C
Boiling range	Not available
Flash point	23 ≤ T ≤ 60 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	1,1 % (V/V)
Upper inflammability limit	7,5 % (V/V)
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	10,7 mbar
Vapour density	Not available
Relative density	1,00
Solubility	Not miscible or difficult to mix with water.
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	370 °C
Decomposition temperature	Not available
Viscosity	>20,5 mm <sup>2</sup> /sec (40°C)
Explosive properties	Not available
Oxidising properties	Not available

**9.2. Other information**

Total solids (250°C / 482°F)	2,47 %		
VOC (Directive 2010/75/EC) :	26,66 %	-	266,59 g/litre
VOC (volatile carbon) :	16,83 %	-	168,33 g/litre

**SECTION 10. Stability and reactivity****10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

**N-BUTYL ACETATE**

Decomposes on contact with: water.

**2-METHOXY-1-METHYLETHYL ACETATE**

Stable in normal conditions of use and storage.

With the air it may slowly develop peroxides that explode with an increase in temperature.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions**

The vapours may also form explosive mixtures with the air.

**N-BUTYL ACETATE**

Risk of explosion on contact with: strong oxidising agents. May react dangerously with: alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with: air.

**2-METHOXY-1-METHYLETHYL ACETATE**

May react violently with: oxidising substances, strong acids, alkaline metals.

**10.4. Conditions to avoid**

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

**N-BUTYL ACETATE**

Avoid exposure to: moisture, sources of heat, naked flames.

**SECTION 10. Stability and reactivity ... / >>****10.5. Incompatible materials****N-BUTYL ACETATE**

Incompatible with: water, nitrates, strong oxidants, acids, alkalis, zinc.

**2-METHOXY-1-METHYLETHYL ACETATE**

Incompatible with: oxidising substances, strong acids, alkaline metals.

**10.6. Hazardous decomposition products**

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

**SECTION 11. Toxicological information****11.1. Information on toxicological effects****N-BUTYL ACETATE**

In humans the substance's vapours cause irritation to the eyes and nose. In the event of repeated exposure, there is skin irritation, dermatosis (with dryness and flaking of the skin) and keratitis.

**ACUTE TOXICITY**

LC50 (Inhalation - vapours) of the mixture:	12,50 mg/l
LC50 (Inhalation - mists / powders) of the mixture:	Not classified (no significant component)
LD50 (Oral) of the mixture:	Not classified (no significant component)
LD50 (Dermal) of the mixture:	>2000 mg/kg

**2-METHOXY-1-METHYLETHYL ACETATE**

LD50 (Oral)	8530 mg/kg Rat
LD50 (Dermal)	> 5000 mg/kg Rat

**N-BUTYL ACETATE**

LD50 (Oral)	> 6400 mg/kg Rat
LD50 (Dermal)	> 5000 mg/kg Rabbit
LC50 (Inhalation)	21,1 mg/l/4h Rat

**SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM**

LD50 (Oral)	> 8 mg/kg ratto
LD50 (Dermal)	> 3160 mg/kg ratto
LC50 (Inhalation)	> 6193 mg/l/4h ratto

**XYLENE (REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE)**

LD50 (Oral)	3523 mg/kg Rat
LD50 (Dermal)	12126 mg/kg Rabbit
LC50 (Inhalation)	27,124 mg/l/4h Rat

**Homopolymer of Isophorondiisocyanate**

LD50 (Oral)	> 2000 mg/kg ratto
LC50 (Inhalation)	4,1 mg/l/4h ratto

**SKIN CORROSION / IRRITATION**

Causes skin irritation

**SERIOUS EYE DAMAGE / IRRITATION**

Causes serious eye irritation

**RESPIRATORY OR SKIN SENSITISATION**

Sensitising for the skin

**GERM CELL MUTAGENICITY**

Does not meet the classification criteria for this hazard class

**CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

**REPRODUCTIVE TOXICITY**

Does not meet the classification criteria for this hazard class

**STOT - SINGLE EXPOSURE**

May cause respiratory irritation

**SECTION 11. Toxicological information ... / >>**
**STOT - REPEATED EXPOSURE**

May cause damage to organs

**ASPIRATION HAZARD**

Does not meet the classification criteria for this hazard class

**SECTION 12. Ecological information**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity**
**SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM**

LC50 - for Fish 9,2 mg/l/96h oncorhynchus mykiss

EC50 - for Algae / Aquatic Plants 3,2 mg/l/48h daphnia magna

**Homopolymer of Isophorondiisocyanate**

LC50 - for Fish &gt; 100 mg/l/96h Danio rerio

EC50 - for Crustacea &gt; 100 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants &gt; 100 mg/l/72h Desmodesmus subspicatus

**12.2. Persistence and degradability**
**POLY (HEXAMETHYLENE DIISOCYANATE)**

Solubility in water 0,1 - 100 mg/l

Degradability: information not available

**2-METHOXY-1-METHYLETHYL ACETATE**

Solubility in water &gt; 10000 mg/l

Rapidly degradable

**N-BUTYL ACETATE**

Solubility in water 1000 - 10000 mg/l

**SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM**

Rapidly degradable

**XYLENE (REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE)**

Solubility in water &gt; 100 mg/l

**12.3. Bioaccumulative potential**
**POLY (HEXAMETHYLENE DIISOCYANATE)**

Partition coefficient: n-octanol/water 5,54

BCF 367,7

**2-METHOXY-1-METHYLETHYL ACETATE**

Partition coefficient: n-octanol/water 1,2

**N-BUTYL ACETATE**

Partition coefficient: n-octanol/water 2,3

BCF 15,3

**XYLENE (REACTIVE MIXTURE OF ETHYLBENZENE, m-XYLENE AND p-XYLENE)**

BCF 25,9

**12.4. Mobility in soil**
**POLY (HEXAMETHYLENE DIISOCYANATE)**

Partition coefficient: soil/water 7,3

**N-BUTYL ACETATE**

Partition coefficient: soil/water &lt; 3

**SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM**

Partition coefficient: soil/water 1,78

**12.5. Results of PBT and vPvB assessment**

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

**SECTION 12. Ecological information ... / >>****12.6. Other adverse effects**

Information not available

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

**SECTION 14. Transport information****14.1. UN number**

ADR / RID, IMDG, IATA: 1263

**14.2. UN proper shipping name**

ADR / RID: PAINT or PAINT RELATED MATERIAL

IMDG: PAINT or PAINT RELATED MATERIAL

IATA: PAINT or PAINT RELATED MATERIAL

**14.3. Transport hazard class(es)**

ADR / RID: Class: 3 Label: 3

IMDG: Class: 3 Label: 3

IATA: Class: 3 Label: 3

**14.4. Packing group**

ADR / RID, IMDG, IATA: III

**14.5. Environmental hazards**

ADR / RID: NO

IMDG: NO

IATA: NO

**14.6. Special precautions for user**ADR / RID: HIN - Kemler: 30  
Special Provision: 640E

Limited Quantities: 5 L

Tunnel restriction code: (D/E)

IMDG: EMS: F-E, S-E

Limited Quantities: 5 L

IATA: Cargo:

Maximum quantity: 220 L

Packaging instructions: 366

Pass.:

Maximum quantity: 60 L

Packaging instructions: 355

Special Instructions:

A3, A72, A192

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

Information not relevant

**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**SECTION 15. Regulatory information ... / >>**

Seveso Category - Directive 2012/18/EC: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3 - 40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

**15.2. Chemical safety assessment**

No chemical safety assessment has been processed for the mixture and the substances it contains.

**SECTION 16. Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Resp. Sens. 1</b>	Respiratory sensitization, category 1
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Skin Sens. 1B</b>	Skin sensitization, category 1B
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H226</b>	Flammable liquid and vapour.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H334</b>	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>H317</b>	May cause an allergic skin reaction.
<b>H336</b>	May cause drowsiness or dizziness.
<b>H411</b>	Toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH066</b>	Repeated exposure may cause skin dryness or cracking.
<b>EUH204</b>	Contains isocyanates. May produce an allergic reaction.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008

**SECTION 16. Other information ... / >>>**

- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- ECHA website

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.