



SAFETY DATA SHEET

Regulation (EC) nr. 1907/2006

19th of July 2018, SP04.00382 Rev. 0

1. NATURE OF THE MATERIALS AND MANUFACTURING COMPANY

IDENTIFICATION OF THE PRODUCT: DIRECT GLAZE CLEANER

USE OF THE PRODUCT: One component adhesion promoter for the automotive industry.

PRODUCT REGISTRATION NUMBER Not available.

COMPANY IDENTIFICATION: **INDASA – Indústria de Abrasivos, S. A.**
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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 data sheet 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 2 Aspiration hazard, category 1	H225 – Highly flammable liquid and vapour. H304 – May be fatal if swallowed and enters airways.
Serious eye damage, category 1 Skin irritation, category 2 Skin sensitization, category 1B Specific target organ toxicity – single exposure, category 3 Hazardous to the aquatic environment, chronic toxicity, category 2	H318 – Causes serious eye damage. H315 – Causes skin irritation. H317 – May cause an allergic skin reaction. H336 – May cause drowsiness or dizziness. H411 – Toxic 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:**



- Signal word:** Danger
- Hazard statements:** H225 - Highly flammable liquid and vapour.
H304 – May be fatal if swallowed and enters airways.
H318 - Causes serious eye damage.



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H315 – Causes skin irritation.
H317 - May cause an allergic skin reaction.
H336 - May cause drowsiness or dizziness.
H411 – Toxic to aquatic life with long lasting effects.

- Precautionary statements:**
P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources
P233 - Keep container tightly closed.
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves / eye protection / face protection.
P301+P310 – IF SWALLOWED: immediately call a POISON CENTER/doctor/...
P304+P340 - IF INHALED: remove person to fresh air and keep comfortable for breathing.
- Contains:**
HYDROCARBONS, C7, N-ALKANES, ISOALKANES, CYCLICS
N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.
TITANIUM N-BUTOXIDE
ETHYL ACETATE

VOC (Directive 2004/42/EC) :

Preparatory and cleaning - preparatory products.

VOC given in g/litre of product in a ready-to-use condition: 729,29

Limit value: 850,00

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%.

3. COMPOSITION/INFORMATION ON THE COMPONENTS

3.1 Substances: Information not relevant

3.2 Mixtures:

Contains:

Chemical name	(%)	N.º Identification		Classification 1272/2008 (CLP)	PBT / WEL
HYDROCARBONS, C7, N-ALKANES, ISOALKANES, CYCLICS	78 - 82	CAS:	-	Flam. Liq. 2 H225	-
		INDEX:	-	Asp. Tox. 1 H304	
		EC:	927-510-4	Skin Irrit. 2 H315	
		REACH:	01-2119475515-33	STOT SE 3 H336	
				Aquatic Chronic 2 H411	
ETHYL ACETATE	10,5 - 12	CAS:	141-78-6	Flam. Liq. 2 H225	-
		INDEX:	-	Eye Irrit. 2 H319	
		EC:	205-500-4	STOT SE 3 H336	
		REACH:	01-2119475103-46	EUH066	
TITANIUM N- BUTOXIDE		CAS:	5593-70-4	Flam. Liq. 3 H226	-
		INDEX:	-	Eye Dam. 1 H318	
		EC:	227-006-8	Skin Irrit. 2 H315	
		REACH:	01-2119967423-33-XXXX	STOT SE 3 H335	
				STOT SE 3 H336	



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N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE	3 – 3,5	CAS: INDEX: EC: REACH:	1760-24-3 - 217-164-6 01-2119970215-39-XXXX	Eye Dam. 1 H318 Skin Sens. 1B H317	
CYCLOHEXANONE	0 – 0,05	CAS: INDEX: EC: REACH:	108-94-1 606-010-00-7 01-2119453616-35-XXXX	Flam. Liq. 3 H226 Acute Tox. 4 H302 Acute Tox. 4 H312 Acute Tox. 4 H332 Eye Dam. 1 H318 Skin Irrit. 2 H315	

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

4. FIRST-AID MEASURES

4.1 Description of first aid measures

Inhalation	Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.
Skin contact	Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
Eye contact	Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
Ingestion	Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless 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.

4.3 Indication of any immediate medical attention and special treatment needed

Information not available.

5. FIRE-FIGHTING 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 fire-fighters

GENERAL INFORMATION: Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health.



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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 firefighting 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).

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. |
| 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. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Check incompatibility for container material in section 7. 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. |

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. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. 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. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment. |
| 7.2. Conditions for safe storage, including any incompatibilities | Store only in the original container. Store the containers sealed, in a well-ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 3 |
| 7.3. Specific end use(s) | Information not available |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- | | |
|--------------------------------|--|
| 8.1. Control parameters | |
|--------------------------------|--|



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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
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ - ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
EU	OEL EU	Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2016

Hazardous ingredients:

HYDROCARBONS, C7, N-ALKANES, ISOALKANES, CYCLICS					
Threshold Limit Value					
Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	1500	-	3000	-
TLV-ACGIH	-	2085	500	-	-

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	-	-	VND	149 mg/kg/d	-	-	-	-
Inhalation	-	-	VND	447mg/m3	-	-	VND	2085mg/m3
Skin	-	-	VND	149mg/kg	-	-	VND	300mg/kg/d

ETHYL ACETATE					
Threshold Limit Value					
Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
AGW	DEU	1500	400	3000	800
MAK	DEU	1500	400	3000	800
VLA	ESP	1460	400	-	-
VLEP	FRA	1400	400	-	-
WEL	GBR	-	200	-	400
TLV	GRC	1400	400	-	-
GVI	HRV	-	200	-	400
OEL	NLD	550	-	1100	-
NDS	POL	200	-	600	-
MAK	SWE	500	150	1100	300
OEL	EU	734	200	1468	400
TLV-ACGIH	-	1441	400	-	-



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Predicted no-effect concentration – PNEC

Normal value in fresh water	0,26	mg/l
Normal value in marine water	0,026	Mg/l
Normal value for fresh water sediment	1,25	mg/kg
Normal value for marine water sediment	0,125	mg/kg
Normal value for water, intermittent release	1,65	mg/l
Normal value of STP microorganisms	650	mg/l
Normal value for the terrestrial compartment	0,24	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	-	-	VND	4,5mg/kg	-	-	-	-
Inhalation	734mg/m3	734mg/m3	367mg/m3	367mg/m3	1468mg/m3	1468mg/m3	734mg/m3	734mg/m3
Skin	-	-	VND	37mg/kg	-	-	VND	63mg/kg

CYCLOHEXANONE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	80	20	80	20	SKIN
VLA	ESP	41	10	82	20	SKIN
VLEP	FRA	41	10	81,6	20	
WEL	GBR	41	10	82	20	SKIN
TLV	GRC	200	50	400	100	
GVI	HRV	41	10	81,6	20	SKIN
VLEP	ITA	41	10	81,6	20	SKIN
OEL	NLD			50		SKIN
NDS	POL	40		80		
MAK	SWE	41	10	81	20	SKIN
OEL	EU	41	10	81,6	20	SKIN
TLV-ACGIH		80	20	201	50	

Predicted no-effect concentration – PNEC

Normal value in fresh water	0,0329	mg/l
Normal value in marine water	0,0329	Mg/l
Normal value for fresh water sediment	0,0951	mg/kg
Normal value for the terrestrial compartment	0,0143	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation							20mg/m3	20mg/m3
Skin							VND	20mg/kg/d

Legend:

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



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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.

Respiratory protection:	In case of exceeding the threshold value (eg, TLV-TWA) of the substance or one or more of the substances present in the product, it is advisable to wear a mask with filter type A for organic vapors, the class (1, 2 or 3) must be chosen according to the limit concentration of use (1000, 5000 or 10000 ppm) (ref. standard EN 14387).
Hand protection:	Protect your hands with work gloves, category III (ref. standard EN 374). For the final choice of material you need to assess the type of use. In case of contact for the short term or as protection against splashes, use gloves made of nitrile (0.3mm thickness, permeation time >480 min.). In the event of continued exposure use butyl rubber gloves (0.4mm thickness, permeation time > 480 min.). Contaminated gloves should be removed.
Eye protection:	Wear a hood visor or protective visor combined with airtight goggles (see standard EN 166).
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.
Environmental:	The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: liquid

Colour: transparent

Odour: solvent

Odour threshold: Not available.

pH: Not available.

Melting point / freezing point: Not available.

Initial boiling point: >35°C

Boiling range: 75 – 85 °C

Flash point: -4°C.

Evaporation rate: Not available.



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Flammability (solid, gas): Not available.

Lower in flammability limit: Not available.

Upper in flammability limit: Not available.

Lower explosive limit: Not available.

Upper explosive limit: Not available.

Vapour pressure: 60 hPa

Vapour density: Not available.

Relative density: 0,73 Kg/l

Solubility: Not available.

Partition coefficient: n-octanol/water: Not available.

Auto-ignition temperature: Not available

Decomposition temperature: Not available.

Viscosity: Not available

Explosive properties: Not available.

Oxidising properties: Not available.

9.2. Other information:

VOC (Directive 2004/42/EC): 99,90% - 729,29 g/l

10. STABILITY AND REACTIVITY

10.1 Reactivity:

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

ETHYL ACETATE

Decomposes slowly into acetic acid and ethanol under the effect of light, air and water.

CYCLOHEXANONE

CYCLOHEXANONE: may condense under the effect of heat to form resinous compounds. Attacks various types of plastic.

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.

ETHYL ACETATE

Risk of explosion on contact with: alkaline metals,hydrides,oleum.May react violently with: fluorine,strong oxidising agents,chlorosulphuric acid,potassium tert-butoxide.Forms explosive mixtures with: air.

CYCLOHEXANONE

CYCLOHEXANONE: risk of explosion on contact with: hydrogen peroxide, nitric acid, heat, mineral acids. Can react violently with oxidising agents. Forms explosive mixtures with the air.



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10.4 Conditions to avoid:	Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition. ETHYL ACETATE Avoid exposure to: light, sources of heat, naked flames. CYCLOHEXANONE CYCLOHEXANONE: avoid exposure to sources of heat and naked flames.
10.5 Incompatible materials:	ETHYL ACETATE Incompatible with: acids, bases, strong oxidants, aluminium, nitrates, chlorosulphuric acid. Incompatible materials: plastic materials.
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.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation - vapours) of the mixture: Not classified (no significant component)

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: Not classified (no significant component)

N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

LD50 (Oral) 2704 mg/kg Rattus sp.

LD50 (Dermal) > 2009 mg/kg Rattus sp.

LC50 (Inhalation) 1,96 mg/l Rattus sp.

CYCLOHEXANONE

LD50 (Oral) 1535 mg/kg Rattus sp.

LD50 (Dermal) 948 mg/kg Oryctolagus sp.

LC50 (Inhalation) 8000 mg/l/4h Rattus sp.

HYDROCARBONS, C7, N-ALKANES, ISOALKANES, CYCLICS

LD50 (Oral) > 8 mg/kg Rattus sp.

LD50 (Dermal) > 2800 mg/kg Oryctolagus sp.

LC50 (Inhalation) > 23,3 mg/l/4h Rattus sp.

ETHYL ACETATE

LD50 (Oral) 5620 mg/kg Rattus sp.

LD50 (Dermal) > 20000 mg/kg Oryctolagus sp.

LC50 (Inhalation) 1600 mg/kg Oryctolagus sp.

SKIN CORROSION / IRRITATION

Causes skin irritation



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SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

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 drowsiness or dizziness

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Toxic for aspiration

12. ECOLOGICAL INFORMATION

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

12.1. Toxicity

N-[3-(TRIMETHOXYSILYL)PROPYL]ETHYLENEDIAMINE.

LC50 - for Fish 168 mg/l/96h Pimephales promelas
EC50 - for Algae / Aquatic Plants 5 mg/l/72h

CYCLOHEXANONE

LC50 - for Fish 527 mg/l/96h Pimephales promelas

HYDROCARBONS, C7, N-ALKANES, ISOALKANES, CYCLICS

LC50 - for Fish > 13,4 mg/l/96h Oncorhynchus mykiss
EC50 - for Crustacea 3,2 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants 12 mg/l/72h Pseudokirchneriella subcapitata

ETHYL ACETATE

LC50 - for Fish > 212 mg/l/96h
EC50 - for Crustacea 260 mg/l/48h Daphnia pulex

12.2. Persistence and degradability:

CYCLOHEXANONE

Solubility in water 0,1 - 100 mg/l

ETHYL ACETATE

Solubility in water > 10000 mg/l
Rapidly biodegradable



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12.3. Bio accumulative potential:

CYCLOHEXANONE
Partition coefficient: n-octanol/water 0,86

ETHYL ACETATE
Partition coefficient: n-octanol/water 0,68
BCF 30

12.4. Mobility in soil:

CYCLOHEXANONE
Partition coefficient: soil/water 1,18

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%.

12.6. Other adverse effects:

Information not available.

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.

14. TRANSPORT INFORMATION

14.1. UN number

ADR / RID, IMDG, IATA: 1139

14.2. UN proper shipping name

ADR / RID: COATING SOLUTION
IMDG: COATING SOLUTION
IATA: COATING SOLUTION

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: II



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14.5. Environmental hazards

ADR / RID: Environmentally Hazardous

IMDG: Marine Pollutant

IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.



14.6. Special precautions for user

ADR / RID: HIN - Kemler: 33 Limited Quantities: 5 L Tunnel restriction code: (D/E)

Special Provision: -

IMDG: EMS: F-E, S-E Limited Quantities: 5 L

IATA: Cargo: Maximum quantity: 60 L Packaging instructions: 364

Pass.: Maximum quantity: 5 L Packaging instructions: 353

Special Instructions: A3

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

Information not relevant

15. REGULATORY INFORMATION

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

Seveso category – Directive 2012/18/EC P5c-E2

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 authorization (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.

VOC (Directive 2004/42/EC):

Preparatory and cleaning - preparatory products.

WGK 2: Hazard to waters

15.2. Chemical safety assessment

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



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16. OTHER INFORMATION

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

Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Use descriptor system:

ERC 2	Formulation of preparations
ERC 8b	Wide dispersive indoor use of reactive substances in open systems
PC 14	Metal surface treatment products, including galvanic and electroplating products
PC 15	Non-metal-surface treatment products
PROC 10	Roller application or brushing
PROC 15	Use as laboratory reagent
PROC 3	Use in closed batch process (synthesis or formulation)
PROC 4	Use in batch and other process (synthesis) where opportunity for exposure arises
PROC 5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)
PROC 8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
PROC 8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
PROC 9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
SU 10	Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
SU 15	Manufacture of fabricated metal products, except machinery and equipment
SU 17	General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment
SU 19	Building and construction work

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

DNEL: Derived No Effect Level

EmS: Emergency Schedule

GHS: Globally Harmonized System of classification and labelling of chemicals



SAFETY DATA SHEET

Regulation (EC) nr. 1907/2006

19th of July 2018, SP04.00382 Rev. 0

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 bio accumulative 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 Bio accumulative as for REACH Regulation
WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY:

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EU) 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
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament

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

Other information's:

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

The purpose of this safety sheet is to describe the products in terms of health and safety and not as a product specification, guaranteeing their properties.

The information on this Data Sheet is accurate to the best of our knowledge as to the proper use and handling of this product under normal conditions. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with other products or any other process is the responsibility of the user.

The information does not form part of any contractual agreement. It remains the user's responsibility to adhere existing laws and regulations.

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