According to Hazardous Substances (Safety Data Sheets) Notice 2017

HARDENER TO DIABOLIC 1:2

Printing: 2/03/2020 Date of compilation: 26/06/2011 Revised: 13/09/2019 Version: 4 (Replaced 3)

SECTION 1: IDENTIFICATION

1.1 Product identifier: HARDENER TO DIABOLIC 1:2

1.2 Recommended uses and any restrictions on use or supply:

Relevant uses: Car repair; hardener for coatings. For professional user only. Uses advised against: All uses not specified in this section or in section 7.3

1.3 Supplier's details:

Troton Sp. z o.o. Ząbrowo 14A

78-120 Gościno - Zachodniopomorskie - Polska Phone.: +48 94 35 123 94 - Fax: +48 94 35 126 22

troton@troton.com.pl www.troton.pl Distributor:

Wyatt Machine Tools (Rupes) NZ Limited 388 Church Street, Penrose, Auckland Ph (09) 525 1000; Fax (09) 525 1009

1.4 Emergency phone number: (8am-4pm)+48 094 35 123 94; 112

NZ Emergency 0800 992 881 (0800WYATT1)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

HSNO Act:

This product was classified in accordance with HSNO Act

- 3.1C: Flammable liquids: medium hazard, H226
- 6.1D: Substances that are acutely toxic, H332
- 6.1E: Substances that are acutely toxic (Respiratory tract irritant), H335
- 6.1E: Substances that are acutely toxic, H313
- 6.3A: Substances that are irritating to the skin, H315
- 6.3B: Substances that are mildly irritating to the skin, H316
- 6.5B: Substances that are contact sensitisers, H317
- 6.9B: Substances that are harmful to human target organs or systems (narcotic effects), H336
- 9.1C: Substances that are harmful in the aquatic environment, H412
- 9.1D: Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action, H402

2.2 Label elements, including precautionary statements:

HSNO Act:

Warning





Hazard statements:

- 3.1C: H226 Flammable liquid and vapour
- 6.1D: H332 Harmful if inhaled
- 6.1E: H335 May cause respiratory irritation
- 6.1E: H313 May be harmful in contact with skin
- 6.3A: H315 Causes skin irritation
- 6.3B: H316 Causes mild skin irritation
- 6.5B: H317 May cause an allergic skin reaction
- 6.9B: H336 May cause drowsiness or dizziness
- 9.1C: H412 Harmful to aquatic life with long lasting effects

Precautionary statements:

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SECTION 2: HAZARDS IDENTIFICATION (continued)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+P352: IF ON SKIN: Wash with plenty of soap and water

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P370+P378: In case of fire: Use ABC powder extinguisher to put it out

P403+P233: Store in a well-ventilated place. Keep container tightly closed

P403+P235: Store in a well-ventilated place. Keep cool

P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Substances that contribute to the classification

Hexamethylene diisocyanate, oligomers; Hydrocarbons, C9, aromatics (EC 200-753-7 <0,1%); 2-butoxyethyl acetate; m-xylene

2.3 Other hazards which do not result in classification:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Non-applicable

3.2 Mixtures:

Chemical description: Mixture composed of chemical products

Components:

In accordance with Part B: Concentration cut-offs for ingredients in mixtures for purpose of section 3 of Hazardous Substances (Safety Data Sheets) Notice 2017, the product contains:

	Identification	Chemical name/Classification	Concentration
CAS:	28182-81-2	Hexamethylene diisocyanate, oligomers 6.1D: H332; 6.1E: H335; 6.5B: H317 - Warning	25 - <50 %
CAS:	64742-95-6	Hydrocarbons, C9, aromatics (EC 200-753-7 < 0,1%) 3.1C: H226; 6.1E: H304; 6.1E: H335; 6.9B: H336; 9.1B: H411; 9.1D: H401 - Danger	10 - <25 %
CAS:	112-07-2	2-butoxyethyl acetate 3.1D: H227; 6.1D: H312+H332; 6.1E: H303 - Warning	10 - <25 %
CAS:	108-38-3	m-xylene 3.1C: H226; 6.1D: H312+H332; 6.3A: H315 - Warning	5 - <10 %
CAS:	106-42-3	p-xylene 3.1C: H226; 6.1D: H312+H332; 6.3A: H315 - Warning	5 - <10 %
CAS:	123-86-4	N-butyl acetate 3.1C: H226; 6.9B: H336 - Warning	5 - <10 %
CAS:	100-41-4	Ethylbenzene 3.1B: H225; 6.1D: H332; 6.1E: H303 - Danger	5 - <10 %
CAS:	763-69-9	Ethyl-3-ethoxypropionate 3.1C: H226; 6.1E: H303 - Warning	5 - <10 %
CAS:	108-65-6	2-methoxy-1-methylethyl acetate 3.1C: H226 - Warning	2,5 - <5 %

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST-AID MEASURES

4.1 First aid instructions according to each relevant route of exposure;:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

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SECTION 4: FIRST-AID MEASURES (continued)

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

4.2 Most important symptoms and effects, acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

4.3 Indication of medical attention and its urgency:

Non-applicable

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Information on the appropriate type of extinguishers or fire-fighting agents:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO2). IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Advice on specific hazards that may arise from the substance:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

6.2 Environmental precautions from accidental spills and release;:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Advice on how to contain and clean up a spill or release:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

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SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems and with the minimum requirements for protecting the security and health of workers. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 15 °C

Maximum Temp.: 25 °C

Maximum time: 12 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Occupational exposure limits:

Substances whose workplace exposure standards (WES) have to be monitored in the work environment

Identification	OEL		
m-xylene	TWA	50 ppm	217 mg/m ³
CAS: 108-38-3	STEL		
p-xylene	TWA	50 ppm	217 mg/m ³
CAS: 106-42-3	STEL		
N-butyl acetate	TWA	150 ppm	713 mg/m ³
CAS: 123-86-4	STEL	200 ppm	950 mg/m ³
Ethylbenzene	TWA	100 ppm	434 mg/m ³
CAS: 100-41-4	STEL	125 ppm	543 mg/m ³

8.2 Engineering controls:

A.- Identification of the specific types of personal protective equipment

As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Remarks
Mandatory respiratory tract protection	Filter mask for gases and vapours (A)	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
Mandatory hand protection	NON-disposable chemical protective gloves (NBR), Breakthrough Time 480 min, thickness 0.4 mm	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application

D.- Ocular and facial protection

Pictogram	PPE	Remarks
Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Remarks
Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	For professional use only. Clean periodically according to the manufacturer's instructions.
Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
+	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	⊢	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011
Emergency shower		Eyewash stations	

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C: Liquid

Appearance: Fluid

Colour: Colourless

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Odour: Characteristic
Odour threshold: Non-applicable *

Volatility:

Initial boiling point and boiling range: 153 °C Vapour pressure at 20 °C: 455 Pa

Vapour pressure at 50 °C: 2356.67 Pa (2.36 kPa) Evaporation rate at 20 °C: Non-applicable *

Product description:

Density at 20 °C: 956.6 kg/m³
Relative density at 20 °C: 0.957

Dynamic viscosity at 20 °C: 3000 cP

Kinematic viscosity at 20 °C: 3136 cSt

Kinematic viscosity at 40 °C: Non-applicable * Concentration: Non-applicable * pH: Non-applicable * Vapour density at 20 °C: Non-applicable * Partition coefficient n-octanol/water 20 °C: Non-applicable * Solubility in water at 20 °C: Non-applicable * Solubility properties: Non-applicable * Non-applicable * Decomposition temperature: Melting point/freezing point: Non-applicable * Explosive properties: Non-applicable * Oxidising properties: Non-applicable *

Flammability:

Flash Point: 38 °C

Flammability (solid, gas): Non-applicable *

Autoignition temperature: 300 °C

Lower flammability limit: Not available

Upper flammability limit: Not available

Explosive:

Lower explosive limit:

Upper explosive limit:

Non-applicable *

Non-applicable *

9.2 Other information:

Surface tension at 20 °C:

Refraction index:

Non-applicable *

Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Chemical reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

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SECTION 10: STABILITY AND REACTIVITY (continued)

10.4 List of conditions to avoid or prevent a hazardous situation:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Information on incompatible substances or materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Information on hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
 - Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- B- Inhalation (acute effect):
 - Acute toxicity: Exposure in high concentration can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
 - Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Produces skin inflammation.
 - Contact with the eyes: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
 - IARC: Ethylbenzene (2B)
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
 - Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.
- F- Specific target organ toxicity (STOT) single exposure:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

H- Aspiration hazard:

Based on available data, the classification criteria are not met, however it does contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	A	cute toxicity	Genus
N-butyl acetate	LD50 oral	12789 mg/kg	Rat
CAS: 123-86-4	LD50 dermal	14112 mg/kg	Rabbit
	LC50 inhalation	23.4 mg/L (4 h)	Rat
Hexamethylene diisocyanate, oligomers	LD50 oral	5100 mg/kg	Rat
CAS: 28182-81-2	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Ethylbenzene	LD50 oral	3500 mg/kg	Rat
CAS: 100-41-4	LD50 dermal	15354 mg/kg	Rabbit
	LC50 inhalation	17.2 mg/L (4 h)	Rat
2-methoxy-1-methylethyl acetate	LD50 oral	8532 mg/kg	Rat
CAS: 108-65-6	LD50 dermal	5100 mg/kg	Rat
	LC50 inhalation	30 mg/L (4 h)	Rat
m-xylene	LD50 oral	1590 mg/kg	Mouse
CAS: 108-38-3	LD50 dermal	1100 mg/kg (ATEi)	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
p-xylene	LD50 oral	1590 mg/kg	Mouse
CAS: 106-42-3	LD50 dermal	1100 mg/kg (ATEi)	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Hydrocarbons, C9, aromatics (EC 200-753-7 <0,1%)	LD50 oral	>5000 mg/kg	
CAS: 64742-95-6	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L (4 h)	
2-butoxyethyl acetate	LD50 oral	2100 mg/kg	Rat
CAS: 112-07-2	LD50 dermal	1480 mg/kg	Rabbit
	LC50 inhalation	11 mg/L (4 h)	Rat
Ethyl-3-ethoxypropionate	LD50 oral	4300 mg/kg	Rat
CAS: 763-69-9	LD50 dermal	10000 mg/kg	Rabbit
	LC50 inhalation	6.1 mg/L (4 h)	Rat

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Ecotoxicity (aquatic and terrestrial):

Identification		Acute toxicity	Species	Genus
Hexamethylene diisocyanate, oligomers	LC50	Non-applicable		
CAS: 28182-81-2	EC50	Non-applicable		
	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
Hydrocarbons, C9, aromatics (EC 200-753-7 <0,1%)	LC50	1 - 10 mg/L (96 h)		Fish
CAS: 64742-95-6	EC50	1 - 10 mg/L		Crustacean
	EC50	1 - 10 mg/L		Algae
2-butoxyethyl acetate	LC50	80 mg/L (48 h)	Leuciscus idus	Fish
CAS: 112-07-2	EC50	37 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	500 mg/L (72 h)	Scenedesmus subspicatus	Algae

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification		Acute toxicity	Species	Genus
m-xylene	LC50	16 mg/L (96 h)	Carassius auratus	Fish
CAS: 108-38-3	EC50	9.56 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
p-xylene	LC50	2.6 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 106-42-3	EC50	8.5 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
N-butyl acetate	LC50	62 mg/L (96 h)	Leuciscus idus	Fish
CAS: 123-86-4	EC50	73 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	675 mg/L (72 h)	Scenedesmus subspicatus	Algae
Ethylbenzene	LC50	42.3 mg/L (96 h)	Pimephales promelas	Fish
CAS: 100-41-4	EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	63 mg/L (3 h)	Chlorella vulgaris	Algae
Ethyl-3-ethoxypropionate	LC50	45.3 mg/L (96 h)	Pimephales promelas	Fish
CAS: 763-69-9	EC50	785 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	120 mg/L (72 h)	Selenastrum capricornutum	Algae
2-methoxy-1-methylethyl acetate	LC50	161 mg/L (96 h)	Pimephales promelas	Fish
CAS: 108-65-6	EC50	481 mg/L (48 h)	Daphnia sp.	Crustacean
	EC50	Non-applicable		

12.2 Persistence and degradability:

Identification	De	egradability	Biode	Biodegradability	
2-butoxyethyl acetate	BOD5	Non-applicable	Concentration	30 mg/L	
CAS: 112-07-2	COD	Non-applicable	Period	28 days	
	BOD5/COD	0.51	% Biodegradable	77.3 %	
p-xylene CAS: 106-42-3	BOD5	Non-applicable	Concentration	Non-applicable	
	COD	Non-applicable	Period	Non-applicable	
	BOD5/COD	0.92	% Biodegradable	Non-applicable	
N-butyl acetate	BOD5	Non-applicable	Concentration	Non-applicable	
CAS: 123-86-4	COD	Non-applicable	Period	5 days	
	BOD5/COD	0.79	% Biodegradable	84 %	
Ethylbenzene	BOD5	Non-applicable	Concentration	100 mg/L	
CAS: 100-41-4	COD	Non-applicable	Period	14 days	
	BOD5/COD	Non-applicable	% Biodegradable	90 %	
Ethyl-3-ethoxypropionate	BOD5	0.34 g O2/g	Concentration	6.6 mg/L	
CAS: 763-69-9	COD	2 g O2/g	Period	20 days	
	BOD5/COD	0.17	% Biodegradable	59 %	
2-methoxy-1-methylethyl acetate	BOD5	Non-applicable	Concentration	785 mg/L	
CAS: 108-65-6	COD	Non-applicable	Period	8 days	
	BOD5/COD	Non-applicable	% Biodegradable	100 %	

12.3 Potential to be bioaccumulative:

Identification	Bioaccumulation potential		
2-butoxyethyl acetate	BCF	3	
CAS: 112-07-2	Pow Log	1.51	
	Potential	Low	
m-xylene	BCF	15	
CAS: 108-38-3	Pow Log	3.2	
	Potential	Low	
p-xylene	BCF	15	
CAS: 106-42-3	Pow Log	3.15	
	Potential	Low	
N-butyl acetate	BCF	4	
CAS: 123-86-4	Pow Log	1.78	
	Potential	Low	

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification		Bioaccumulation potential		
Ethylbenzene		1		
CAS: 100-41-4	Pow Log	3.15		
		Low		
Ethyl-3-ethoxypropionate	BCF			
CAS: 763-69-9	Pow Log	2.95		
	Potential			
-methoxy-1-methylethyl acetate		1		
CAS: 108-65-6	Pow Log	0.43		
	Potential	Low		

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-butoxyethyl acetate	Koc	Non-applicable	Henry	5.532E-1 Pa·m³/mol
CAS: 112-07-2	Conclusion	Non-applicable	Dry soil	No
	Surface tension	Non-applicable	Moist soil	Yes
m-xylene	Koc	182	Henry	790.34 Pa·m³/mol
CAS: 108-38-3	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.826E-2 N/m (25 °C)	Moist soil	Yes
p-xylene	Koc	540	Henry	699.14 Pa·m³/mol
CAS: 106-42-3	Conclusion	Low	Dry soil	Yes
	Surface tension	2.792E-2 N/m (25 °C)	Moist soil	Yes
N-butyl acetate	Koc	Non-applicable	Henry	Non-applicable
CAS: 123-86-4	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.478E-2 N/m (25 °C)	Moist soil	Non-applicable
Ethylbenzene	Koc	520	Henry	798.44 Pa·m³/mol
CAS: 100-41-4	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.859E-2 N/m (25 °C)	Moist soil	Yes
Ethyl-3-ethoxypropionate	Koc	Non-applicable	Henry	Non-applicable
CAS: 763-69-9	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.753E-2 N/m (25 °C)	Moist soil	Non-applicable

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Appropriate and achievable disposal methods:

Special precautions to be taken during disposal:

Consult the authorized waste service manager on the assessment and disposal operations. In case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See epigraph 6.2.

Regulations related to waste management:

Legislation related to waste management:

Imports and Exports (Restrictions) Prohibition Order (No 2) 2004

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to NZS 5433.1:2012 Transport of dangerous goods on land

According to Hazardous Substances (Safety Data Sheets) Notice 2017

HARDENER TO DIABOLIC 1:2

3

Printing: 2/03/2020 Date of compilation: 26/06/2011 Revised: 13/09/2019 Version: 4 (Replaced 3)

SECTION 14: TRANSPORT INFORMATION (continued)



14.1 UN number: UN1263 **14.2 UN proper shipping name:** PAINT

14.3 UN dangerous goods class and subsidiary risk:

Labels: 3

14.4 UN Packing Group: III14.5 Environmental hazards: No

14.6 Special precautions for user

Physico-Chemical properties: see section 9 **14.7 Transport in bulk according** Non-applicable

to Annex II of MARPOL 73/78 and the IBC Code:

Transport of dangerous goods by sea:

With regard to IMDG 38-16:



14.1 UN number: UN1263
14.2 UN proper shipping name: PAINT
14.3 UN dangerous goods class and subsidiary risk:

Labels: 3

14.4 UN Packing Group: III

14.5 Environmental hazards: No

14.6 Special precautions for user

Physico-Chemical properties: see section 9 **14.7 Transport in bulk according** Non-applicable

to Annex II of MARPOL 73/78 and the IBC Code:

Transport of dangerous goods by air:

With regard to IATA/ICAO 2020:



14.1 UN number: UN1263
14.2 UN proper shipping name: PAINT
14.3 UN dangerous goods class and subsidiary risk:

Labels: 3
14.4 UN Packing Group: III
14.5 Environmental hazards: No
14.6 Special precautions for user

Physico-Chemical properties: see section 9 **14.7 Transport in bulk according** Non-applicable

to Annex II of MARPOL 73/78 and the IBC Code:

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Relevant regulatory requirements:

Health and Safety at Work (Hazardous Substances) Regulations 2017

Health and Safety at Work Act 2015

Hazardous Substances (Classification) Notice 2017

Hazardous Substances (Labelling) Notice 2017

According to Hazardous Substances (Safety Data Sheets) Notice 2017

HARDENER TO DIABOLIC 1:2

Printing: 2/03/2020 Date of compilation: 26/06/2011 Revised: 13/09/2019 Version: 4 (Replaced 3)

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Schedule 1: Content and format of safety data sheets of Hazardous Substances (Safety Data Sheets) Notice 2017

Texts of the legislative phrases mentioned in section 2:

H317: May cause an allergic skin reaction

H335: May cause respiratory irritation

H336: May cause drowsiness or dizziness

H315: Causes skin irritation

H316: Causes mild skin irritation

H412: Harmful to aquatic life with long lasting effects

H402: Harmful to aquatic life

H313: May be harmful in contact with skin

H332: Harmful if inhaled

H226: Flammable liquid and vapour

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

HSNO Act:

3.1B: H225 - Highly flammable liquid and vapour

3.1C: H226 - Flammable liquid and vapour

3.1D: H227 - Combustible liquid

6.1D: H312+H332 - Harmful in contact with skin or if inhaled

6.1D: H332 - Harmful if inhaled

6.1E: H304 - May be fatal if swallowed and enters airways

6.1E: H303 - May be harmful if swallowed

6.1E: H335 - May cause respiratory irritation

6.3A: H315 - Causes skin irritation

6.5B: H317 - May cause an allergic skin reaction

6.9B: H336 - May cause drowsiness or dizziness

9.1B: H411 - Toxic to aquatic life with long lasting effects

9.1D: H401 - Toxic to aquatic life

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

https://www.epa.govt.nz/

Abbreviations and acronyms:

HSNO Act: Hazardous substances and new organisms Act IMDG: International maritime dangerous goods code

IATA: International Air Transport Association ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5-day biochemical oxygen demand

BCF: Bioconcentration factor LD50: Lethal Dose 50

CL50: Lethal Concentration 50 EC50: Effective concentration 50

Log-POW: Octanol-water partition coefficient Koc: Partition coefficient of organic carbon

Other information:

GROUP STANDARD

HSR002662

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.