




HARDENER FOR V200 DTM PRIMER SEALER 1:4

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

- 1.1 Product identifier:** HARDENER FOR V200 DTM PRIMER SEALER 1:4
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
 Relevant uses: Hardener for coatings. For professional user only.
 Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
 Troton Sp. z o.o.
 Zabrowo 14A
 78-120 Goscinno - Zachodniopomorskie - Polska
 Phone.: +48 94 35 123 94 -
 Fax: +48 94 35 126 22
 troton@troton.com.pl
 www.troton.pl
- 1.4 Emergency telephone number:** (czynny od 8:00-16:00)+48 094 35 123 94; 112

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) n° 1272/2008:
 Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.
 Acute Tox. 4: Acute inhalation toxicity, Category 4, H332
 Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
 Eye Irrit. 2: Eye irritation, Category 2, H319
 Flam. Liq. 3: Flammable liquids, Category 3, H226
 Skin Irrit. 2: Skin irritation, Category 2, H315
 Skin Sens. 1: Sensitisation, skin, Category 1, H317
 STOT RE 2: Specific target organ toxicity if swallowed, repeated exposure, Category 2, H373
 STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335
 STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336
- 2.2 Label elements:**
CLP Regulation (EC) n° 1272/2008:
Warning
- 


- Hazard statements:**
 Acute Tox. 4: H332 - Harmful if inhaled
 Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects
 Eye Irrit. 2: H319 - Causes serious eye irritation
 Flam. Liq. 3: H226 - Flammable liquid and vapour
 Skin Irrit. 2: H315 - Causes skin irritation
 Skin Sens. 1: H317 - May cause an allergic skin reaction
 STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral)
 STOT SE 3: H335 - May cause respiratory irritation
 STOT SE 3: H336 - May cause drowsiness or dizziness
- Precautionary statements:**
 P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P261: Avoid breathing dust/fume/gas/mist/vapours/spray
 P271: Use only outdoors or in a well-ventilated area
 P280: Wear protective gloves/protective clothing/eye protection/face protection
 P302+P352: IF ON SKIN: Wash with plenty of water
 P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P403+P233: Store in a well-ventilated place. Keep container tightly closed
 P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively
- Supplementary information:**

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 2: HAZARDS IDENTIFICATION (continued)

EUH066: Repeated exposure may cause skin dryness or cracking
EUH204: Contains isocyanates. May produce an allergic reaction

Substances that contribute to the classification

Hexamethylene diisocyanate, oligomers; Xylene (mixture of isomers); Butyl Acetate; Hydrocarbons, C9, aromatics (Benzene < 0.1 % w/w)

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture composed of chemical products

Components:

In accordance with Annex II of Regulation (EC) n°1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 28182-81-2 EC: 931-274-8 Index: Non-applicable REACH:01-2119485796-17-XXXX	Hexamethylene diisocyanate, oligomers	Self-classified Regulation 1272/2008 Acute Tox. 4: H332; Skin Sens. 1: H317; STOT SE 3: H335 - Warning	25 - <50 %
CAS: 1330-20-7 EC: 215-535-7 Index: 601-022-00-9 REACH:01-2119488216-32-XXXX	Xylene (mixture of isomers)	Self-classified Regulation 1272/2008 Acute Tox. 4: H312+H332; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H335 - Danger	10 - <25 %
CAS: 123-86-4 EC: 204-658-1 Index: 607-025-00-1 REACH:01-2119485493-29-XXXX	Butyl Acetate	ATP CLP00 Regulation 1272/2008 Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Warning	10 - <25 %
CAS: 108-65-6 EC: 203-603-9 Index: 607-195-00-7 REACH:01-2119475791-29-XXXX	2-methoxy-1-methylethyl acetate	ATP ATP01 Regulation 1272/2008 Flam. Liq. 3: H226 - Warning	10 - <25 %
CAS: Non-applicable EC: 918-668-5 Index: Non-applicable REACH:01-2119455851-35-XXXX	Hydrocarbons, C9, aromatics (Benzene < 0.1 % w/w)	Self-classified Regulation 1272/2008 Aquatic Chronic 2: H411; Asp. Tox. 1: H304; Flam. Liq. 3: H226; STOT SE 3: H335; STOT SE 3: H336; EUH066 - Danger	2,5 - <5 %

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

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.

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:

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 4: FIRST AID MEASURES (continued)

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, both acute and delayed:

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

4.3 Indication of any immediate medical attention and special treatment needed:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

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

5.2 Special hazards arising from the substance or mixture:

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 Advice for firefighters:

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,...) in accordance with Directive 89/654/EC.

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 inertization agent. 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:

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 Methods and material for containment and cleaning up:

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.

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

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 7: HANDLING AND STORAGE (continued)

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 defined in Directive 94/9/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). 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: 9 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 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment

Identification	Environmental limits		
	IOELV (8h)	50 ppm	275 mg/m ³
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	IOELV (STEL)	100 ppm	550 mg/m ³
	Year	2015	
	IOELV (8h)	50 ppm	221 mg/m ³
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	IOELV (STEL)	100 ppm	442 mg/m ³
	Year	2015	

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Hexamethylene diisocyanate, oligomers CAS: 28182-81-2 EC: 931-274-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	1 mg/m ³	Non-applicable	0,5 mg/m ³
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	180 mg/kg	Non-applicable
	Inhalation	289 mg/m ³	289 mg/m ³	77 mg/m ³	Non-applicable
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	960 mg/m ³	960 mg/m ³	480 mg/m ³	480 mg/m ³
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	153,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	275 mg/m ³	Non-applicable
Hydrocarbons, C9, aromatics (Benzene < 0.1 % w/w) CAS: Non-applicable EC: 918-668-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	25 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	150 mg/m ³	Non-applicable

DNEL (General population):

Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	Oral	Non-applicable	Non-applicable	1,6 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	108 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	14,8 mg/m ³	Non-applicable
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	859,7 mg/m ³	859,7 mg/m ³	102,34 mg/m ³	102,34 mg/m ³
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Oral	Non-applicable	Non-applicable	1,67 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	54,8 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	33 mg/m ³	Non-applicable
Hydrocarbons, C9, aromatics (Benzene < 0.1 % w/w) CAS: Non-applicable EC: 918-668-5	Oral	Non-applicable	Non-applicable	11 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	11 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	32 mg/m ³	Non-applicable

PNEC:

Identification				
Hexamethylene diisocyanate, oligomers CAS: 28182-81-2 EC: 931-274-8	STP	38,3 mg/L	Fresh water	0,127 mg/L
	Soil	53182 mg/kg	Marine water	0,0127 mg/L
	Intermittent	1,27 mg/L	Sediment (Fresh water)	266700 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	26670 mg/kg
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	STP	6,58 mg/L	Fresh water	0,327 mg/L
	Soil	2,31 mg/kg	Marine water	0,327 mg/L
	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	12,46 mg/kg
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	STP	35,6 mg/L	Fresh water	0,18 mg/L
	Soil	0,0903 mg/kg	Marine water	0,018 mg/L
	Intermittent	0,36 mg/L	Sediment (Fresh water)	0,981 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,0981 mg/kg
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	STP	100 mg/L	Fresh water	0,635 mg/L
	Soil	0,29 mg/kg	Marine water	0,0635 mg/L
	Intermittent	6,35 mg/L	Sediment (Fresh water)	3,29 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,329 mg/kg



8.2 Exposure controls:

A.- General security and hygiene measures in the work place



As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. 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

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours		EN 405:2001+A1:2009	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	Labelling	CEN Standard	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves		EN 374-1:2003 EN 374-3:2003/AC:2006 EN 420:2003+A1:2009	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.

- CONTINUED ON NEXT PAGE -

Safety data sheet



According to 1907/2006/EC (REACH), 2015/830/EU

HARDENER FOR V200 DTM PRIMER SEALER 1:4





SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face mask		EN 166:2001 EN 167:2001 EN 168:2001 EN ISO 4007:2012	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Bodily protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties		EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2001 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	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		EN 13287:2008 EN ISO 20345:2011 EN 13832-1:2006	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2002	 Eyewash stations	DIN 12 899 ISO 3864-1:2002

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

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 °C:	Non-applicable
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

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
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	137 °C
Vapour pressure at 20 °C:	798 Pa

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

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Vapour pressure at 50 °C:	4224 Pa (4 kPa)
Evaporation rate at 20 °C:	Non-applicable *
Product description:	
Density at 20 °C:	973 kg/m ³
Relative density at 20 °C:	Non-applicable *
Dynamic viscosity at 20 °C:	3000 cP
Kinematic viscosity at 20 °C:	3082,77 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 *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Flammability:	
Flash Point:	30 °C
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	315 °C
Lower flammability limit:	Not available
Upper flammability limit:	Not available
9.2 Other information:	
Surface tension at 20 °C:	Non-applicable *
Refraction index:	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 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.

10.4 Conditions to avoid:

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 Incompatible materials:

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

10.6 Hazardous decomposition products:

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 10: STABILITY AND REACTIVITY (continued)

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, as it does not contain 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: Produces eye damage after contact.

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.
- 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: 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.
- Skin: Repeated exposure may cause skin dryness or cracking

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	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Hexamethylene diisocyanate, oligomers CAS: 28182-81-2 EC: 931-274-8	LD50 oral	5100 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	LD50 oral	8532 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rat
	LC50 inhalation	30 mg/L (4 h)	Rat

Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Hydrocarbons, C9, aromatics (Benzene < 0.1 % w/w) CAS: Non-applicable EC: 918-668-5	>2000 mg/kg	>2000 mg/kg	
	>2000 mg/kg	>2000 mg/kg	
	>20 mg/L (4 h)	>20 mg/L (4 h)	
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	2100 mg/kg	1100 mg/kg (ATEi)	Rat
	1100 mg/kg (ATEi)	11 mg/L (4 h) (ATEi)	Rat
	11 mg/L (4 h) (ATEi)		
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	12789 mg/kg	14112 mg/kg	Rat
	14112 mg/kg	23,4 mg/L (4 h)	Rabbit
	23,4 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 Toxicity:

Identification	Acute toxicity		Species	Genus
	LC50	EC50		
Hexamethylene diisocyanate, oligomers CAS: 28182-81-2 EC: 931-274-8	Non-applicable	Non-applicable		
	Non-applicable	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
	1000 mg/L (72 h)			
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	13.5 mg/L (96 h)	0.6 mg/L (96 h)	Oncorhynchus mykiss	Fish
	0.6 mg/L (96 h)	10 mg/L (72 h)	Gammarus lacustris	Crustacean
	10 mg/L (72 h)		Skeletonema costatum	Algae
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	62 mg/L (96 h)	73 mg/L (24 h)	Leuciscus idus	Fish
	73 mg/L (24 h)	675 mg/L (72 h)	Daphnia magna	Crustacean
	675 mg/L (72 h)		Scenedesmus subspicatus	Algae
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	161 mg/L (96 h)	481 mg/L (48 h)	Pimephales promelas	Fish
	481 mg/L (48 h)	Non-applicable	Daphnia sp.	Crustacean
	Non-applicable			
Hydrocarbons, C9, aromatics (Benzene < 0.1 % w/w) CAS: Non-applicable EC: 918-668-5	1 - 10 mg/L (96 h)	1 - 10 mg/L		Fish
	1 - 10 mg/L	1 - 10 mg/L		Crustacean
	1 - 10 mg/L			Algae

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
	BOD5	COD	Concentration	Period
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	Non-applicable	Non-applicable	Concentration	Non-applicable
	Non-applicable	0.79	Period	5 days
	0.79		% Biodegradable	84 %
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	Non-applicable	Non-applicable	Concentration	785 mg/L
	Non-applicable	Non-applicable	Period	8 days
	Non-applicable		% Biodegradable	100 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
	BCF	Pow Log
Xylene (mixture of isomers) CAS: 1330-20-7 EC: 215-535-7	9	2.77
	2.77	Low
	Low	
Butyl Acetate CAS: 123-86-4 EC: 204-658-1	4	1.78
	1.78	Low
	Low	
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	1	0.43
	0.43	Low
	Low	

12.4 Mobility in soil:

- CONTINUED ON NEXT PAGE -

Safety data sheet

According to 1907/2006/EC (REACH), 2015/830/EU

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
Butyl Acetate	Koc	Non-applicable	Henry	Non-applicable
CAS: 123-86-4	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 204-658-1	Surface tension	2,478E-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 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP3 Flammable, HP4 Irritant — skin irritation and eye damage, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity, HP13 Sensitising

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and 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 recommend disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) n°1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2015 and RID 2015:



- 14.1 UN number:** UN1263
- 14.2 UN proper shipping name:** PAINT RELATED MATERIAL
- 14.3 Transport hazard class(es):** 3
- Labels:** 3
- 14.4 Packing group:** III
- 14.5 Dangerous for the environment:** No
- 14.6 Special precautions for user**
 - Special regulations: 163, 367, 640E, 650
 - Tunnel restriction code: D/E
 - Physico-Chemical properties: see section 9
 - Limited quantities: 5 L
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 38-16:

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number:** UN1263
- 14.2 UN proper shipping name:** PAINT RELATED MATERIAL
- 14.3 Transport hazard class(es):** 3
Labels: 3
- 14.4 Packing group:** III
- 14.5 Dangerous for the environment:** No
- 14.6 Special precautions for user**
Special regulations: 163, 223, 955
EmS Codes: F-E, S-E
Physico-Chemical properties: see section 9
Limited quantities: 5 L
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2017:



- 14.1 UN number:** UN1263
- 14.2 UN proper shipping name:** PAINT RELATED MATERIAL
- 14.3 Transport hazard class(es):** 3
Labels: 3
- 14.4 Packing group:** III
- 14.5 Dangerous for the environment:** No
- 14.6 Special precautions for user**
Physico-Chemical properties: see section 9
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable
Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable
Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable
Article 95, REGULATION (EU) No 528/2012: Non-applicable
REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

HARDENER FOR V200 DTM PRIMER SEALER 1:4

SECTION 15: REGULATORY INFORMATION (continued)

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- “whoopee” cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- stink bombs.

Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with:

‘For professional users only’.

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

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.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) N° 1907/2006 (Regulation (EC) N° 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

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
- H412: Harmful to aquatic life with long lasting effects
- H315: Causes skin irritation
- H373: May cause damage to organs through prolonged or repeated exposure (Oral)
- H332: Harmful if inhaled
- H226: Flammable liquid and vapour
- H319: Causes serious eye irritation

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

CLP Regulation (EC) n° 1272/2008:

HARDENER FOR V200 DTM PRIMER SEALER 1:4**SECTION 16: OTHER INFORMATION (continued)**

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled
 Acute Tox. 4: H332 - Harmful if inhaled
 Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects
 Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways
 Eye Irrit. 2: H319 - Causes serious eye irritation
 Flam. Liq. 3: H226 - Flammable liquid and vapour
 Skin Irrit. 2: H315 - Causes skin irritation
 Skin Sens. 1: H317 - May cause an allergic skin reaction
 STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral)
 STOT SE 3: H335 - May cause respiratory irritation
 STOT SE 3: H336 - May cause drowsiness or dizziness

Classification procedure:

Skin Sens. 1: Calculation method
 STOT SE 3: Calculation method
 STOT SE 3: Calculation method
 Aquatic Chronic 3: Calculation method
 Skin Irrit. 2: Calculation method
 STOT RE 2: Calculation method
 Acute Tox. 4: Calculation method
 Flam. Liq. 3: Calculation method (2.6.4.3)
 Eye Irrit. 2: Calculation method

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:

<http://esis.jrc.ec.europa.eu>
<http://echa.europa.eu>
<http://eur-lex.europa.eu>

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
 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
 LC50: Lethal Concentration 50
 EC50: Effective concentration 50
 Log-POW: Octanol-water partition coefficient
 Koc: Partition coefficient of organic carbon

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, 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.