

HARDENER for ULTRA FAST DRYING HS 1:2

Printing:	4/08/2020	Date of compilation: 17/04/2015	Revised: 3/06/2020	Version: 3 (Replaced 2)
SECT	TON 1: IDENT	TIFICATION		
1.1	Product iden	tifier: HARDENER for ULTRA FAST DRY	ING HS 1:2	
1.2	Recommende	ed uses and any restrictions on use o	or supply:	
	Relevant uses:	Car repair. For professional user only.		
	Uses advised a	gainst: All uses not specified in this secti	on or in section 7.3	
1.3	Supplier's de	tails:		
1.4	Phone.: +48 9- troton@troton. www.troton.pl Distributor: Wyatt Machine 388 Church Str Ph (09) 525 10	o - Zachodniopomorskie - Polska 4 35 123 94 - Fax: +48 94 35 126 22		

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
- 6.1E: Substances that are acutely toxic (Respiratory tract irritant), H335
- 6.3A: Substances that are irritating to the skin, H315
- 6.4A: Substances that are irritating to the eye, H319
- 6.5B: Substances that are contact sensitisers, H317

2.2 Label elements, including precautionary statements:

HSNO Act:

Warning



Hazard statements:

- 3.1C: H226 Flammable liquid and vapour
- 6.1E: H335 May cause respiratory irritation
- 6.3A: H315 Causes skin irritation
- 6.4A: H319 Causes serious eye irritation
- 6.5B: H317 May cause an allergic skin reaction

Precautionary statements:

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

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

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

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

4-chloro-a,a,a-trifluorotoluene; Hexamethylene diisocyanate, oligomers

2.3 Other hazards which do not result in classification:



HARDENER for ULTRA FAST DRYING HS 1:2

Printing: 4/08/2020 Date of compilation: 17/04/2015 Revised: 3/06/2020 Version: 3 (Replaced 2)

SECTION 2: HAZARDS IDENTIFICATION (continued)

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:	98-56-6	4-chloro-a,a,a-trifluorotoluene 3.1C: H226; 6.1E: H335; 6.3A: H315; 6.4A: H319 - Warning	50 - <75 %
CAS:	28182-81-2	Hexamethylene diisocyanate, oligomers 6.1D: H332; 6.1E: H335; 6.5B: H317 - Warning	25 - <50 %
CAS:	110-43-0	heptan-2-one 3.1C: H226; 6.1D: H302+H332; 6.3B: H316 - Warning	5 - <10 %
CAS:	122-51-0	Ethyl Orthoformate 3.1C: H226 - Warning	1 - <2,5 %

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.

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:

HARDENER for ULTRA FAST DRYING HS 1:2

Printing: 4/08/2020	Date of compilation: 17/04/2015	Revised: 3/06/2020	Version: 3 (Replaced 2)	

SECTION 5: FIRE-FIGHTING MEASURES (continued)

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

Personal precautions, protective equipment and emergency procedures: 6.1

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.

Environmental precautions from accidental spills and release;: 6.2

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

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.

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

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

7.2

15 °C Minimum Temp.:



		HARDENER for	r ULTRA FAST	DRYING HS	S 1:2				
rinting:	4/08/2020	Date of compilation: 17/04/2015	Revised: 3	3/06/2020	Version: 3 (Replaced 2)			
SECT	ION 7: HANDL	ING AND STORAGE (continue	d)						
	Maximum T	emp.: 25 °C							
	Maximum ti	me: 12 Months							
	B General con	ditions for storage							
	Avoid source	es of heat, radiation, static electricit	y and contact with	1 food. For addit	tional informati	ion see subse	ction 10.5		
7.3	Specific end u	se(s):							
		nstructions already specified it is not	t necessary to pro	vide any special	l recommendat	ion regarding	the uses of this		
	product.								
SECT	ION 8: EXPOS	URE CONTROLS/PERSONAL PI	ROTECTION						
8.1	Occupational	exposure limits:							
	Substances who	se workplace exposure standards	(WES) have to be	monitored in th	he work enviro	nment			
		Identification			Occupa	ational exposure	limits		
	heptan-2-one			TWA		50 ppm	233 mg/m ³		
8.2	CAS: 110-43-0 Engineering c	ontrols:		SIEL					
-	A Identification of the specific types of personal protective equipment								
		tative measure it is recommended to			quipment. For r	more informat	tion on Personal		
		quipment (storage, use, cleaning, m		of protection,	.) consult the in	nformation lea	aflet provided by		
		turer. For more information see sub on contained herein is a recomment		s some specifica	ation from the	labour risk pr	evention services		
	as it is not k	nown whether the company has ad							
	B Respiratory	protection							
	Pictogram	n PPE			Remarks	5			
		Filter mask for gases and vapo		Replace when there is a taste or smell of the contaminant inside the fa the contaminant comes with warnings it is recommended to use is					
				contaminant comes	c with warnings it	ic recommender			
	Mandator	y .		contaminant comes	s with warnings it equipmen				
	Mandator respiratory t protection	y ract		contaminant comes					
	respiratory t protection	y ract		contaminant comes					
	respiratory t protection	rection for the hands		contaminant comes		ıt.			

NON-disposable chemical protective gloves
(NRL), Breakthrough Time 480 min, thickness
0.4 mmThe 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

 Boarry proceedion		
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.

HARDENER for ULTRA FAST DRYING HS 1:2

TION 8: EXPOSURE CONTROLS	S/PERSONAL PROTECTION	l (continued)	
Pictogram	PPE		Remarks
Mandatory foot protection	ar for protection against chemical catic and heat resistant properties	Replace boots at	any sign of deterioration.
F Additional emergency measure	2S		
Emergency measure	Standards	Emergency measure	Standards
Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:20
Environmental exposure contr	rols:		
In accordance with the community		of the environment it is reco	mmended to avoid environment
spillage of both the product and it	s container. For additional infor	mation see subsection 7.1.	0
TION 9: PHYSICAL AND CHEM	ICAL PROPERTIES		
Information on basic physical	and chemical properties:		
For complete information see the			
Appearance:			
Physical state at 20 °C:	Liquid		
Appearance:	Fluid		
Colour:	Colourles	SS	
Odour:	Characte	eristic	
Odour threshold:	Non-app	licable *	
Volatility:			
Initial boiling point and boiling ran	ige: 138 °C		
Vapour pressure at 20 °C:	Non-app	licable *	
Vapour pressure at 50 °C:	3637.25	Pa (3.64 kPa)	
Evaporation rate at 20 °C:	Non-app	licable *	
Product description:			
Density at 20 °C:	1210 kg/	/m³	
Relative density at 20 °C:	1.21		
Dynamic viscosity at 20 °C:	Non-app	licable *	
Kinematic viscosity at 20 °C:	Non-app	licable *	
Kinematic viscosity at 40 °C:	Non-app	licable *	
Concentration:	Non-app	licable *	
pH:	Non-app	licable *	
Vapour density at 20 °C:	Non-app	licable *	
Partition coefficient n-octanol/wat	er 20 °C: Non-app	licable *	
Solubility in water at 20 °C:	Non-app	licable *	
	Non-app	licable *	
Solubility properties:		P	
Solubility properties: Decomposition temperature:	Non-app		
	Non-app Non-app		
Decomposition temperature:		licable *	



HARDENER for ULTRA FAST DRYING HS 1:2

Printing: 4/08/2020	Date of compilation: 17/04/2015	Revised: 3/06/2020	Version: 3 (Replaced 2)
SECTION 9: PHY	SICAL AND CHEMICAL PROPERTIES	6 (continued)	
Flammabil	ity:		
Flash Point:		45 °C	
Flammability	y (solid, gas):	Non-applicable *	
Autoignition	temperature:	180 °C	
Lower flamm	nability limit:	Not available	
Upper flamm	nability limit:	Not available	
Explosive:			
Lower explo	sive limit:	Non-applicable *	
Upper explo	sive limit:	Non-applicable *	
9.2 Other info	rmation:		
Surface tens	sion at 20 °C:	Non-applicable *	
Refraction in	ndex:	Non-applicable *	
*Not relevant	due to the nature of the product, not providing infor	mation 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.

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	
			-to-isla			

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):

HARDENER for ULTRA FAST DRYING HS 1:2

g: 4/08/2020	Date of compilation: 17/04/2015	Revised: 3/06/2020	Versio	n: 3 (Replaced 2)	
TION 11: TOX	ICOLOGICAL INFORMATION (con	tinued)			
as dangero - Corrosiv respiratory	xicity : Based on available data, the cla us for inhalation. For more information ity/Irritability: Causes irritation in respir passages. th the skin and the eyes (acute effect):	see section 3.			
- Contact	with the skin: Produces skin inflammati with the eyes: Produces eye damage at s (carcinogenicity, mutagenicity and tox	fter contact.			
as dangero IARC: No - Mutager dangerous - Reprodu classified a E- Sensitizing		information see section 3 sification criteria are not net e section 3. the classification criteria formation see section 3.	3. met, as it does are not met, a	not contain substance s it does not contain s	es classified as ubstances
dangerous - Cutaneo	ory: Based on available data, the classif with sensitising effects. For more inform us: Prolonged contact with the skin car get organ toxicity (STOT) - single expos	nation see section 3. I result in episodes of alle			s classified as
Causes irrit	ation in respiratory passages, which is i	normally reversible and li	mited to the u	oper respiratory passa	iges.
G- Specific tar	get organ toxicity (STOT)-repeated exp	osure:			
	target organ toxicity (STOT)-repeated e contain substances classified as danger sed on available data, the classification		ore informatio	n see section 3.	
- Skin: Ba	for this effect. For more information see				
- Skin: Ba dangerous H- Aspiration I Based on a	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3.	e section 3.	ot contain subs	tances classified as da	angerous for
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation:	e section 3.	ot contain subs	tances classified as da	angerous for
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation:	e section 3. are not met, as it does no	ot contain subs	tances classified as da	angerous for
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance	e section 3. are not met, as it does no			
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification	e section 3. are not met, as it does no ses:	Acut	te toxicity	Genus
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification	e section 3. are not met, as it does no res:			
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic Hexamethylene d 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification	e section 3. are not met, as it does no res:	Acut 0 oral	e toxicity 5100 mg/kg	Genus
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic Hexamethylene d 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification	e section 3. are not met, as it does no res: LD5 LD5 LC5	Acut 0 oral 0 dermal	e toxicity 5100 mg/kg >5000 mg/kg	Genus
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic Hexamethylene d CAS: 28182-81-2 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification	e section 3. are not met, as it does no res: LD5 LD5 LD5 LD5 LD5 LD5	Acut 0 oral 0 dermal 0 inhalation	te toxicity 5100 mg/kg >5000 mg/kg 11 mg/L (4 h) (ATEi)	Genus Rat
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic Hexamethylene d CAS: 28182-81-2 4-chloro-a,a,a-tri 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification	e section 3. are not met, as it does no ses: LD5 LD5 LD5 LD5 LD5	Acut 0 oral 0 dermal 0 inhalation 0 oral	te toxicity 5100 mg/kg >5000 mg/kg 11 mg/L (4 h) (ATEi) 13000 mg/kg	Genus Rat
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic Hexamethylene d CAS: 28182-81-2 4-chloro-a,a,a-trii 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification	e section 3. are not met, as it does no res: LD5 LD5 LD5 LD5 LD5 LD5 LD5 LD5	Acut 0 oral 0 dermal 0 inhalation 0 oral 0 dermal	te toxicity 5100 mg/kg >5000 mg/kg 11 mg/L (4 h) (ATEi) 13000 mg/kg >5000 mg/kg	Genus Rat
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic Hexamethylene d CAS: 28182-81-2 4-chloro-a,a,a-tri CAS: 98-56-6 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification	e section 3. are not met, as it does no res: LD5 LD5 LD5 LD5 LD5 LD5 LD5 LD5 LD5 LD5	Acut 0 oral 0 dermal 0 inhalation 0 oral 0 dermal 0 inhalation	te toxicity 5100 mg/kg >5000 mg/kg 11 mg/L (4 h) (ATEi) 13000 mg/kg >5000 mg/kg >20 mg/L (4 h)	Genus Rat Rat
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic Hexamethylene d CAS: 28182-81-2 4-chloro-a,a,a-tri CAS: 98-56-6 heptan-2-one 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification	e section 3. are not met, as it does no ees: LD5 LD5 LD5 LC5 LD5 LC5 LD5 LC5 LD5 LD5 LD5 LD5 LD5 LD5 LD5 LD5 LD5 LD	Acut 0 oral 0 dermal 0 inhalation 0 oral 0 inhalation 0 inhalation 0 oral	te toxicity 5100 mg/kg >5000 mg/kg 11 mg/L (4 h) (ATEi) 13000 mg/kg >5000 mg/kg >20 mg/L (4 h) 500 mg/kg	Genus Rat Rat Rat Rat
 Skin: Ba dangerous H- Aspiration I Based on a this effect. Other inform Non-applicable Specific toxic Hexamethylene d CAS: 28182-81-2 4-chloro-a,a,a-tri CAS: 98-56-6 heptan-2-one 	for this effect. For more information see nazard: vailable data, the classification criteria a For more information see section 3. ation: cology information on the substance Identification lisocyanate, oligomers	e section 3. are not met, as it does no ees: LDS LDS LDS LDS LDS LDS LDS LDS LDS LDS	Acut 0 oral 0 dermal 0 inhalation 0 oral 0 inhalation 0 oral 0 oral 0 oral	e toxicity 5100 mg/kg >5000 mg/kg 11 mg/L (4 h) (ATEi) 13000 mg/kg >5000 mg/kg >20 mg/L (4 h) 500 mg/kg 10206 mg/kg	Genus Rat Rat Rat Rat Rat Rabbit

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):

LC50 inhalation

49.3 mg/L (4 h)

Rat



HARDENER for ULTRA FAST DRYING HS 1:2

	ON 12: ECOLOGICAL INFORMAT		lueu)							
	Identification				Acute toxicity		Speci	es		Genus
	Hexamethylene diisocyanate, oligomers		LC50	No	on-applicable					
	CAS: 28182-81-2		EC50	No	on-applicable					
			EC50	10)00 mg/L (72 h)		Scenedesmus	subspica	atus	Algae
	heptan-2-one		LC50	13	31 mg/L (96 h)		Pimephales	promela	IS	Fish
	CAS: 110-43-0		EC50	No	on-applicable					
			EC50	No	on-applicable					
	Ethyl Orthoformate		LC50	59	92 mg/L (48 h)		Leuciscus	s idus		Fish
	CAS: 122-51-0		EC50	61	l7 mg/L (48 h)		Daphnia r	magna		Crustacea
			EC50	No	on-applicable					
2	Persistence and degradability:									
	Identification		D	egra	adability		Biodegradability			
	Ethyl Orthoformate	В	OD5		Non-applicable Conce Non-applicable Period				600 m	ig/L
	CAS: 122-51-0	С	OD						13 da	days
		В	OD5/COD		Non-applicable	% Bi	odegradable		95 %	
3	Potential to be bioaccumulative:									
	Id	dentification					Bioaccu	mulatior	n poten	tial
	heptan-2-one				BC	BCF 7				
	CAS: 110-43-0				Po	Pow Log 1.98				
						Po	tential	Low		
4	Mobility in soil:									
	Identification		Ab	Absorption/desorption			Vola		itility	
	4-chloro-a,a,a-trifluorotoluene	к	ос		Non-applicable		Henry		Non-a	pplicable
	CAS: 98-56-6	C	onclusion		Non-applicable		Dry soil		Non-a	pplicable
		s	urface tensio	n	2.144E-2 N/m (-27 °C)	73.15	3.15 Moist soil		Non-a	pplicable
	heptan-2-one	К	ос		280		Henry		17.12	Pa·m³/mol
	CAS: 110-43-0	C	onclusion		Moderate		Dry soil		Yes	
		S	urface tensio	n	2.612E-2 N/m (25	°C)	Moist soil		Yes	

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



HARDENER for ULTRA FAST DRYING HS 1:2

Printing: 4/08/2020	Date of	f compilation: 17/04/2015	Revised: 3/06/2020	Version: 3 (Replaced 2)		
SECTION 14: TRANS	SPORT	INFORMATION (continued)				
3	14.2 14.3 14.4 14.5 14.6	UN number: UN proper shipping name: UN dangerous goods class and subsidiary risk: Labels: UN Packing Group: Environmental hazards: Special precautions for user Physico-Chemical properties: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	UN1263 PAINT 3 3 III No see section 9 Non-applicable			
Transport of	dangero	us goods by sea:				
With regard to IMDG 39-18:						
3	14.2 14.3 14.4 14.5 14.6	UN number: UN proper shipping name: UN dangerous goods class and subsidiary risk: Labels: UN Packing Group: Environmental hazards: Special precautions for user Physico-Chemical properties: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	UN1263 PAINT 3 3 III No see section 9 Non-applicable			
Transport of	dangero	us goods by air:				
With regard to	IATA/ICA	AO 2020:				
3	14.2 14.3 14.4 14.5	UN number: UN proper shipping name: UN dangerous goods class and subsidiary risk: Labels: UN Packing Group: Environmental hazards: Special precautions for user	UN1263 PAINT 3 J III No			
	14.7	Physico-Chemical properties: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	see section 9 Non-applicable			

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



HARDENER for ULTRA FAST DRYING HS 1:2

Printing: 4/08/2020	Date of compilation: 17/04/2015	Revised: 3/06/2020	Version: 3 (Replaced 2)
SECTION 16: OTH	ER INFORMATION		
This safety dat Substances (S Texts of the H317: May cau H335: May cau H315: Causes H226: Flamma	afety Data Sheets) Notice 2017 legislative phrases mentioned in sec use an allergic skin reaction use respiratory irritation		and format of safety data sheets of Hazardous
The phrases in	legislative phrases mentioned in see dicated do not refer to the product itself ponents which appear in section 3		or informative purposes and refer to the
HSNO Act:	ponenta which appear in section s		
6.1D: H302++ 6.1D: H332 - 6.1E: H335 - I 6.3A: H315 - (6.3B: H316 - (6.4A: H319 - (Flammable liquid and vapour 1332 - Harmful if swallowed or if inhaled Harmful if inhaled May cause respiratory irritation Causes skin irritation Causes mild skin irritation Causes serious eye irritation May cause an allergic skin reaction		
Advice relate	ed to training:		
and interpreta	g is recommended to prevent industrial tion of this safety data sheet, as well as liographical sources:		duct, in order to facilitate their comprehension
https://www.e			
•	s and acronyms:		
IMDG: Interna IATA: Internat ICAO: Internat COD: Chemica BOD5: 5-day t BCF: Bioconce LD50: Lethal C CL50: Lethal C EC50: Effective Log-POW: Oct	Dose 50 oncentration 50 e concentration 50 anol-water partition coefficient coefficient of organic carbon	Act	
HSR002662	ation:		
II3KUU2002			

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.