SAFETY DATA SHEET



HARDENER HV 957

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : HARDENER HV 957

Product code : 00058430

Product description :

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

Product use : Hardener for adhesive systems

1.3 Details of the supplier of the safety data sheet

Supplier: Huntsman Advanced Materials (Europe)BVBA

Everslaan 45

3078 Everberg / Belgium Tel.: +41 61 299 20 41 Fax: +41 61 299 20 40

e-mail address of person responsible for this SDS

: Global_Product_EHS_AdMat@huntsman.com

1.4 Emergency telephone number

Supplier

Telephone number : EUROPE: +32 35 75 1234

France ORFILA: +33(0)145425959

ASIA: +65 6336-6011 China: +86 20 39377888 Australia: 1800 786 152 New Zealand: 0800 767 437 USA: +1/800/424.9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317

Ingredients of unknown

toxicity

: Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 90.4%

Ingredients of unknown

ecotoxicity

: Percentage of the mixture consisting of ingredient(s) of unknown hazards to the

aguatic environment: 90.4%

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : C; R34

Human health hazards: Causes burns. May cause sensitisation by skin contact.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Date of issue / Date of revision : 14 November 2011 1/13

HARDENER HV 957 2/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue 14 November 2011 Version 1.01

SECTION 2: Hazards identification

Hazard pictograms

Signal word : Danger

Causes severe skin burns and eye damage. **Hazard statements**

May cause an allergic skin reaction.

Precautionary statements

Prevention : Wear protective gloves: >8 hours (breakthrough time): butyl rubber, Ethyl Vinyl

Alcohol Laminate (EVAL). Wear eye or face protection. Wear protective clothing.

: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable Response

> for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. IF IN EYES:

Immediately call a POISON CENTER or physician.

: Store locked up. **Storage**

Dispose of contents and container in accordance with all local, regional, national and **Disposal**

international regulations.

Hazardous ingredients

Supplemental label

elements

: N(3-dimethylaminopropyl)-1,3-propylenediamine

According to Directive 99/45/EC, Article 6, Paragraph 1b, classification derived from direct toxicological testing of the preparation take precedence over classification

derived from using the conventional (calculation) method.

Special packaging requirements

Containers to be fitted

with child-resistant fastenings

: Yes, applicable.

Tactile warning of danger : Yes, applicable.

2.3 Other hazards

Other hazards which do not result in classification : Not available.

SECTION 3: Composition/information on ingredients

Substance/mixture Mixture

			<u>Classification</u>		
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
N(3- dimethylaminopropyl)- 1,3-propylenediamine	CAS: 10563-29-8	7 - 13	Xn; R21/22 C; R34 R43	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317	[1]
			See section 16 for the full text of the R- phrases declared above	See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

Date of issue / Date of revision : 14 November 2011 2/13

HARDENER HV 957 3/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 Version : 1.01

SECTION 3: Composition/information on ingredients

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact

: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact

: Causes serious eye damage.

Inhalation

: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact

: Causes severe burns. May cause an allergic skin reaction.

Ingestion

: May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Date of issue / Date of revision : 14 November 2011 3/13

HARDENER HV 957 4/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 Version : 1.01

SECTION 4: First aid measures

Eye contact: Adverse symptoms may include the following:

pain watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Ingestion: Adverse symptoms may include the following:

stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : Symptomatic treatment and supportive therapy as indicated. Following severe exposure the patient should be kept under medical review for at least 48 hours.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing

media

: None known.

nitrogen oxides

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide carbon monoxide

5.3 Advice for firefighters

Special precautions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

Date of issue / Date of revision : 14 November 2011

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is

4/13

inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any

information in Section 8 on suitable and unsuitable materials. See also the information in "For non-amorganous parsonnel"

information in "For non-emergency personnel".

Wellmid Electronics (Shenzhen) Co., Ltd. Web: www.wellmid.com Email: wellmid@wellmid.com Tel: 86-755-28168941 Fax: 86-755-22648848

HARDENER HV 957 5/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 Version : 1.01

SECTION 6: Accidental release measures

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: 2 to 40°C (35.6 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Storage hazard class Huntsman Advanced Materials

: Storage class 8, Corrosive substances

HARDENER HV 957 6/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 Version 1.01

SECTION 7: Handling and storage

7.3 Specific end use(s)

: Not available. Recommendations **Industrial sector specific** : Not available.

solutions

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

procedures

Recommended monitoring : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Derived effect levels

No DELs available.

Predicted effect concentrations

No PECs available.

8.2 Exposure controls

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Material of gloves for long term application (BTT>480min):

: butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL)

Material of gloves for short term/splash application (10min<BTT<480min): : nitrile rubber

(BTT = Break Through Time)

HARDENER HV 957 7/13

Date of printing : 14 November 2011 MSDS no. : 00058430

: 14 November 2011 **Date of issue** Version 1.01

SECTION 8: Exposure controls/personal protection

Use gloves approved to relevant standards e.g. EN 374 (Europe), F739 (US). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers. Additional information can be found for instance at

www.gisbau.de.

Personal protective equipment for the body should be selected based on the task **Body protection**

being performed and the risks involved and should be approved by a specialist

before handling this product.

: Appropriate footwear and any additional skin protection measures should be Other skin protection

selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

: In case of inadequate ventilation wear respiratory protection. Respirator selection Respiratory protection

must be based on known or anticipated exposure levels, the hazards of the product

and the safe working limits of the selected respirator.

Environmental exposure

controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some

cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Colour : Light yellow **Odour** Slight

Odour threshold : Not available.

: 12 [Conc. (% w/w): 50%] pН

Melting point/freezing point : Not available. Initial boiling point and boiling : >200°C

range

: Closed cup: 110°C [DIN 51758 EN 22719 (Pensky-Martens Closed Cup)] Flash point

Not available. **Evaporation rate** Flammability (solid, gas) : Not available. **Burning time** Not applicable. : Not applicable. **Burning rate Upper/lower flammability or** : Not available.

explosive limits

: 0.004 kPa [20°C] Vapour pressure Not available. Vapour density Not available. Relative density

Solubility(ies)

Water solubility

20 deg C practically insoluble

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available. **Decomposition temperature** : >200°C

Viscosity : Dynamic: 20000 to 35000 mPa-s 25 deg C

Explosive properties Not available. : Not available. Oxidising properties

Date of issue / Date of revision : 14 November 2011 7/13

HARDENER HV 957 8/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 Version : 1.01

SECTION 9: Physical and chemical properties

9.2 Other information

Density : 0.95 g/cm³ [25°C (77°F)]

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : No specific data.

10.5 Incompatible materials : Reactive or incompatible with the following materials:

strong acids, strong bases, strong oxidising agents

10.6 Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Endpoint	Species	Result	Exposure
HARDENER HV 957	LD50 Oral		>5000 mg/kg	-
N(3-dimethylaminopropyl)- 1,3-propylenediamine	LD50 Dermal	Rabbit	1310 mg/kg	-
	LD50 Oral	Rat	1670 mg/kg	-

Acute toxicity estimates

Not available.

Irritation/Corrosion

Conclusion/Summary: Not available.

Sensitiser

Conclusion/Summary

: Not available.

Mutagenicity

Conclusion/Summary: Not available.

Carcinogenicity

Reproductive toxicity

Teratogenicity

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Date of issue / Date of revision : 14 November 2011 8/13

HARDENER HV 957 9/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 Version : 1.01

SECTION 11: Toxicological information

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Inhalation : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory

system. Exposure to decomposition products may cause a health hazard. Serious

effects may be delayed following exposure.

Ingestion : May cause burns to mouth, throat and stomach.

Skin contact: Causes severe burns. May cause an allergic skin reaction.

Eye contact : Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.

Ingestion: Adverse symptoms may include the following:

stomach pains

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

Eye contact: Adverse symptoms may include the following:

pain watering redness

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

effects

Not available.

Potential delayed effects: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects: Not available.

Potential chronic health effects

Conclusion/Summary: Not available.

General : Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

12.2 Persistence and degradability

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Date of issue / Date of revision : 14 November 2011 9/13

HARDENER HV 957 10/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 Version : 1.01

SECTION 12: Ecological information

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

12.7 Other ecological information

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
07 02 04*	other organic solvents, washing liquids and mother liquors

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

14.1 UN number 14.2 UN proper shipping name

ADR/RID UN2735 Polyamines, liquid, corrosive, n.o.s. N-(3-DIMETHYLAMINOPROPYL)-1,3-

PROPYLENEDIAMINE

ADN/ADNRNot available. Not available.

IMDG UN2735 Polyamines, liquid, corrosive, n.o.s. (N-(3-DIMETHYLAMINOPROPYL)-1,3-

PROPYLENEDIAMINE)

IATA UN2735 Polyamines, liquid, corrosive, n.o.s. (N-(3-DIMETHYLAMINOPROPYL)-1,3-

PROPYLENEDIAMINE)

Date of issue / Date of revision : 14 November 2011 10/13

11/13 **HARDENER HV 957**

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 **Version** 1.01

SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.3 Transport hazard class(es)	8		8	8
14.4 Packing group	III		III	III
14.5 Environmental hazards	No.		No.	No.
14.6 Special precautions for user	Not available.		Not available.	Not available.
Additional information	Hazard identification number 80 Special provisions 274 Tunnel code E		Emergency schedules (EmS) F-A, S-B	Passenger and Cargo Aircraft Quantity limitation: 5 L Packaging instructions: 852 Cargo Aircraft Only Quantity limitation: 60 L Packaging instructions: 856

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

: Not applicable.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions: Not applicable.

on the manufacture, placing on the market and

use of certain dangerous substances, mixtures and

articles

Other EU regulations

Europe inventory : All components are listed or exempted.

: Not listed **Black List Chemicals** : Not listed **Priority List Chemicals** Integrated pollution : Not listed

prevention and control

list (IPPC) - Air

Date of issue / Date of revision : 14 November 2011 11/13

HARDENER HV 957 12/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 Version 1.01

SECTION 15: Regulatory information

Integrated pollution prevention and control list (IPPC) - Water

: Not listed

National regulations

: The provision of Safety Data Sheets comes under Regulation 6 of CHIP (CHIP is the References

> recognised abbreviation for the Chemicals Hazard Information and Packaging Regulations). This is an addition to the Health and Safety at Work Act 1974.

International regulations

Chemical Weapons

Convention List Schedule I

Chemicals

: Not listed

Chemical Weapons Convention List Schedule II

Chemicals

: Not listed

Chemical Weapons Convention List Schedule III

Chemicals

: Not listed

15.2 Chemical Safety **Assessment**

This product contains substances for which Chemical Safety Assessments are still

required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. acronyms

1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
· ·	Expert judgment Expert judgment Expert judgment

Full text of abbreviated H

statements

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

Full text of classifications

[CLP/GHS]

ACUTE TOXICITY: ORAL - Category 4 : Acute Tox. 4, H302 ACUTE TOXICITY: SKIN - Category 4 Acute Tox. 4, H312

Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

SKIN CORROSION/IRRITATION - Category 1B Skin Corr. 1B, H314 Skin Corr. 1C, H314 SKIN CORROSION/IRRITATION - Category 1C

Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1

Full text of abbreviated R

phrases

: R21/22- Harmful in contact with skin and if swallowed.

R34- Causes burns.

R43- May cause sensitisation by skin contact.

Full text of classifications

[DSD/DPD] MSDS no.

C - Corrosive Xn - Harmful 00058430

14 November 2011 **Date of printing**

Date of issue / Date of revision : 14 November 2011 12/13

HARDENER HV 957 13/13

Date of printing : 14 November 2011 MSDS no. : 00058430

Date of issue : 14 November 2011 Version : 1.01

SECTION 16: Other information

Date of issue/ Date of :

: 14 November 2011

revision

Date of previous issue : 9/14/2011.

Version : 1.01

Notice to reader

While the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.

IN ALL CASES, IT IS THE RESPONSIBILITY OF THE USER TO DETERMINE THE APPLICABILITY OF SUCH INFORMATION AND RECOMMENDATIONS AND THE SUITABILITY OF ANY PRODUCT FOR ITS OWN PARTICULAR PURPOSE.

THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.

NO PERSON OR ORGANIZATION EXCEPT A DULY AUTHORIZED HUNTSMAN EMPLOYEE IS AUTHORIZED TO PROVIDE OR MAKE AVAILABLE DATA SHEETS FOR HUNTSMAN PRODUCTS. DATA SHEETS FROM UNAUTHORIZED SOURCES MAY CONTAIN INFORMATION THAT IS NO LONGER CURRENT OR ACCURATE. NO PART OF THIS DATA SHEET MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM, OR BY ANY MEANS, WITHOUT PERMISSION IN WRITING FROM HUNTSMAN. ALL REQUESTS FOR PERMISSION TO REPRODUCE MATERIAL FROM THIS DATA SHEET SHOULD BE DIRECTED TO HUNTSMAN, MANAGER, PRODUCT SAFETY AT THE ABOVE ADDRESS.

Date of issue / Date of revision : 14 November 2011