

SAFETY DATA SHEET



HARDENER HY 4076

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

1.1 Product identifier

Product name : HARDENER HY 4076
Registration number : Not available.
Product code : 00049150
Product description : Not available.
Other means of identification : Not available.

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

E-mail address to request full REACH registration number upon EU member State Authority request :
 REACH_Registration_Nr_AM@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
 India: +91 22 4050 6333
 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]

Acute Tox. 4, H332
 Skin Corr. 1B, H314
 Eye Dam. 1, H318

Ingredients of unknown toxicity : Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 44.8%

Ingredients of unknown ecotoxicity : Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 44.8%

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

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

Classification : Xn; R20
 C; R34

Human health hazards : Harmful by inhalation. Causes burns.

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

HARDENER HY 4076

2/13

Date of printing : 7 January 2013 **(M)SDS no.** : 00049150
Date of issue : 7 January 2013 **Version** : 1

SECTION 2: Hazards identification

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

2.2 Label elements

Hazard pictograms : 

Signal word : Danger
Hazard statements : Harmful if inhaled.
 Causes severe skin burns and eye damage.

Precautionary statements

General : Not applicable.
Prevention : Wear protective gloves: >8 hours (breakthrough time): Ethyl Vinyl Alcohol Laminate (EVAL), butyl rubber. Wear eye or face protection. Wear protective clothing.
Response : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable 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.

Storage : Store locked up.

Disposal : Not applicable.

Hazardous ingredients : 3,3'-[Butane-1,4-diylbis(oxy)]bispropanamine

Supplemental label elements : Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Classification | | Type |
|--|---------------------------------|-------|--|---|------|
| | | | 67/548/EEC | Regulation (EC) No. 1272/2008 [CLP] | |
| 3,3'-[Butane-1,4-diylbis(oxy)]bispropanamine | CAS: 7300-34-7 EC: 230-745-9 | 30-60 | Xn; R20 C; R34 See Section 16 for the full text of the R-phrases declared above. | Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 See Section 16 for the full text of the H-statements declared above. | [1] |

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

HARDENER HY 4076

3/13

| | | | |
|------------------|------------------|------------|------------|
| Date of printing | : 7 January 2013 | (M)SDS no. | : 00049150 |
| Date of issue | : 7 January 2013 | Version | : 1 |

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. Flush contaminated skin with plenty of 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. 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** : Harmful if inhaled. 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.
- Ingestion** : May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 pain
 watering
 redness

HARDENER HY 4076

4/13

| | | | |
|------------------|------------------|------------|------------|
| Date of printing | : 7 January 2013 | (M)SDS no. | : 00049150 |
| Date of issue | : 7 January 2013 | Version | : 1 |

SECTION 4: First aid measures

- 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.

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
nitrogen oxides

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

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 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-emergency personnel".

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

HARDENER HY 4076

5/13

| | | | |
|------------------|------------------|------------|------------|
| Date of printing | : 7 January 2013 | (M)SDS no. | : 00049150 |
| Date of issue | : 7 January 2013 | Version | : 1 |

SECTION 6: Accidental release measures

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). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. 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

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

| | | | |
|-------------------------|------------------|-------------------|------------|
| Date of printing | : 7 January 2013 | (M)SDS no. | : 00049150 |
| Date of issue | : 7 January 2013 | Version | : 1 |

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.

Recommended monitoring procedures : 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 : Use only with adequate ventilation. 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. 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): : Ethyl Vinyl Alcohol Laminate (EVAL), butyl rubber

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

(BTT = Break Through Time)

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.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

HARDENER HY 4076

7/13

| | | | |
|------------------|------------------|------------|------------|
| Date of printing | : 7 January 2013 | (M)SDS no. | : 00049150 |
| Date of issue | : 7 January 2013 | Version | : 1 |

SECTION 8: Exposure controls/personal protection

- Respiratory protection** : In case of inadequate ventilation wear respiratory protection. Respirator selection 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** : Amine-like.
- Odour threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : 150°C
- Flash point** : Closed cup: >100°C
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Upper/lower flammability or explosive limits** : Not available.
- Vapour pressure** : Not available.
- Vapour density** : Not available.
- Relative density** : Not available.
- Solubility(ies)**
- Water solubility** : Partly miscible
- 20 deg C
- Partition coefficient: n-octanol/water (LogK_{ow})** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic (25°C): 1000 - 2000 mPa·s
Kinematic: Not available.
Kinematic (40°C): Not available.
- Explosive properties** : Not available.
- Oxidising properties** : Not available.

9.2 Other information

- Density** : 0.97 g/cm³ [25°C (77°F)]

HARDENER HY 4076**8/13**

Date of printing : 7 January 2013 **(M)SDS no.** : 00049150
Date of issue : 7 January 2013 **Version** : 1

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 : 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.

Decomposition products may include the following materials:Carbon oxides

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity**

Conclusion/Summary : No additional information.

Acute toxicity estimates

| Route | ATE value |
|----------------------|------------------|
| Inhalation (vapours) | 11 mg/l |

Irritation/Corrosion**Conclusion/Summary**

Skin : No additional information.

Eyes : No additional information.

Respiratory : No additional information.

Sensitiser**Conclusion/Summary**

Skin : No additional information.

Respiratory : No additional information.

Mutagenicity

Conclusion/Summary : No additional information.

Carcinogenicity

Conclusion/Summary : No additional information.

Reproductive toxicity

Conclusion/Summary : No additional information.

Teratogenicity

Conclusion/Summary : No additional information.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

HARDENER HY 4076

9/13

Date of printing : 7 January 2013 (M)SDS no. : 00049150
 Date of issue : 7 January 2013 Version : 1

SECTION 11: Toxicological information

Inhalation : Harmful if inhaled. 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.

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 effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : No additional information.

General : No known significant effects or critical hazards.

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.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Conclusion/Summary : No additional information.

12.2 Persistence and degradability

Conclusion/Summary : No additional information.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

HARDENER HY 4076

10/13

Date of printing : 7 January 2013 **(M)SDS no.** : 00049150
Date of issue : 7 January 2013 **Version** : 1

SECTION 12: Ecological information

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. DIOXADODECANE DIAMINE |
| IMDG | UN2735 | Polyamines, liquid, corrosive, n.o.s. (DIOXADODECANE DIAMINE) |
| IATA | UN2735 | Polyamines, liquid, corrosive, n.o.s. (DIOXADODECANE DIAMINE) |



| | 14.3 Transport hazard class(es) | 14.4 Packing group | 14.5 Environmental hazards | 14.6 Special precautions for user | Additional information |
|----------------|--|--------------------|----------------------------|-----------------------------------|--|
| ADR/RID | 8  | II | No. | Not available. | Hazard identification number 80 Special provisions 274 Tunnel code E |

HARDENER HY 4076

11/13

Date of printing : 7 January 2013 (M)SDS no. : 00049150
 Date of issue : 7 January 2013 Version : 1

SECTION 14: Transport information

| | | | | | | |
|-------------|---|---|----|-----|----------------|--|
| IMDG | 8 |  | II | No. | Not available. | Emergency schedules (EmS) F-A, S-B |
| IATA | 8 |  | II | No. | Not available. | Passenger and Cargo Aircraft Quantity limitation: 1 L Packaging instructions: 851 Cargo Aircraft Only Quantity limitation: 30 L Packaging instructions: 855 |

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)**

This product is compliant with the REACH Regulation EC 1907/2006. Huntsman has pre-registered and is registering all of the substances that it manufactures in or imports into the European Economic Area (EEA) that are subject to Title II of the REACH Regulation.

Annex XIV - List of substances subject to authorisation**Substances of very high concern**

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Europe inventory : All components are listed or exempted.

Black List Chemicals : Not listed

Priority List Chemicals : Not listed

Integrated pollution prevention and control list (IPPC) - Air : Not listed

Integrated pollution prevention and control list (IPPC) - Water : Not listed

National regulations

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

Australia inventory (AICS) : At least one component is not listed.

Canada inventory : At least one component is not listed.

China inventory (IECSC) : At least one component is not listed.

HARDENER HY 4076

12/13

Date of printing : 7 January 2013 **(M)SDS no.** : 00049150
Date of issue : 7 January 2013 **Version** : 1

SECTION 15: Regulatory information

Japan inventory : At least one component is not listed.
Korea inventory (KECI) : At least one component is not listed.
New Zealand Inventory of Chemicals (NZIoC) : All components are listed or exempted.
Philippines inventory (PICCS) : At least one component is not listed.
United States inventory (TSCA 8b) : At least one component is not listed.
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 acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 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 |
|---------------------|--------------------|
| Acute Tox. 4, H332 | Calculation method |
| Skin Corr. 1B, H314 | Calculation method |
| Eye Dam. 1, H318 | Calculation method |

Full text of abbreviated H statements : H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H332 Harmful if inhaled.
Full text of classifications [CLP/GHS] : Acute Tox. 4, H332 ACUTE TOXICITY: INHALATION - Category 4
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
 Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B
Full text of abbreviated R phrases : R20- Harmful by inhalation.
 R34- Causes burns.
Full text of classifications [DSD/DPD] : C - Corrosive
 Xn - Harmful
(M)SDS no. : 00049150
Date of printing : 1/7/2013.
Date of issue/ Date of revision : 1/7/2013.
Date of previous issue : No previous validation.
Version : 1

Notice to reader

HARDENER HY 4076

13/13

| | | | |
|------------------|------------------|------------|------------|
| Date of printing | : 7 January 2013 | (M)SDS no. | : 00049150 |
| Date of issue | : 7 January 2013 | Version | : 1 |

SECTION 16: Other information

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.