

# SAFETY DATA SHEET

ARALDITE2028-1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Identification of the substance or preparation

**Product name** : ARALDITE2028-1  
**Product type** : Liquid.  
**Product description** : Working pack (preparation)  
**Use of the substance/preparation** : Polyurethane adhesive system

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For further Product EHS related questions concerning this document or its contents, please contact:

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## 2. HAZARDS IDENTIFICATION

Refer to SDS for individual components of the pack.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/preparation** : Working pack (preparation)

Refer to SDS for individual components of the pack.

## 4. FIRST AID MEASURES

Refer to SDS for individual components of the pack.

## 5. FIRE-FIGHTING MEASURES

Refer to SDS for individual components of the pack.

## 6. ACCIDENTAL RELEASE MEASURES

Refer to SDS for individual components of the pack.

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## 7. HANDLING AND STORAGE

- Handling** : Put on appropriate personal protective equipment (see section 8). 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. Persons with a history of skin sensitisation problems or asthma, allergies or chronic or recurrent respiratory disease 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 ingest. Avoid breathing vapour or mist. 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.
- Storage** : Store between the following temperatures: 2 to 18°C (35.6 to 64.4°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. 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** : Storage class 12, Liquids, not dangerous  
**Huntsman Advanced Materials**
- Packaging materials**  
**Recommended** : Use original container.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Ingredient name

hexamethylene-di-isocyanate

### Occupational exposure limits

**SUVA (Switzerland, 1/2007). Skin sensitizer.**

TWA: 0.005 ppm 8 hour(s).

TWA: 0.02 mg/m<sup>3</sup> 8 hour(s).

STEL: 0.005 ppm 15 minute(s).

STEL: 0.02 mg/m<sup>3</sup> 15 minute(s).

Refer to SDS for individual components of the pack.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General information

#### Appearance

**Physical state** : Liquid.

### Important health, safety and environmental information

**Flash point** : Closed cup: >100°C (>212°F) [DIN 51758 EN 22719 (Pensky-Martens Closed Cup)]**Density** : 1.13 g/cm<sup>3</sup> [20°C (68°F)]**Water solubility** : Insoluble

## 10. STABILITY AND REACTIVITY

Refer to SDS for individual components of the pack.

## 11. TOXICOLOGICAL INFORMATION

Refer to SDS for individual components of the pack.

## 12. ECOLOGICAL INFORMATION

Refer to SDS for individual components of the pack.

## 13. DISPOSAL CONSIDERATIONS

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- European waste catalogue (EWC)** : The relevant EU Directives and local, regional and national regulations must be complied with. It is among the tasks of the end user to assign the waste to waste codes specific to industrial sectors and processes according to the European Waste catalogue. It is recommended that the details be agreed with the waste disposer responsible.  
070208  
07 02 08\* other still bottoms and reaction residues
- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

## 14. TRANSPORT INFORMATION

### International transport regulations

Regulatory information	UN number	Classes	Packing group	Label	Additional information
<b>Land - road/railway ADR/RID Class</b>	Not regulated.	-	-		-
<b>Sea IMDG Class</b>	Not regulated.	-	-		<b><u>Emergency schedules (EmS)</u></b>
<b>Air IATA Class</b>	Not regulated.	-	-		-

## 15. REGULATORY INFORMATION

### EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**Hazard symbol or symbols** :



X<sub>n</sub> Harmful

**Risk phrases** : R20- Harmful by inhalation.  
R42/43- May cause sensitisation by inhalation and skin contact.

**Safety phrases** : S24- Avoid contact with skin.  
S37- Wear suitable gloves.  
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Contains** : hexamethylene-diisocyanate, homopolymere  
hexamethylene-di-isocyanate

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## 15. REGULATORY INFORMATION

- Exceptional labelling of special preparations** : Contains isocyanates - See information supplied by the manufacturers. This information is supplied in the current Safety Data Sheet.
- National regulations**
- International regulations**
- International lists** :
- Australia inventory (AICS):** All components are listed or exempted.
  - China inventory (IECSC):** All components are listed or exempted.
  - Japan inventory:** All components are listed or exempted.
  - Korea inventory:** All components are listed or exempted.
  - New Zealand Inventory of Chemicals (NZIoC):** Not determined.
  - Philippines inventory (PICCS):** All components are listed or exempted.
  - United States inventory (TSCA 8b):** All components are listed or exempted.
  - Europe inventory:** All components are listed or exempted.
  - Canada inventory:** All components are listed or exempted.

## 16. OTHER INFORMATION

- Full text of R-phrases referred to in sections 2 and 3 - Switzerland** :
- R23- Toxic by inhalation.
  - R20- Harmful by inhalation.
  - R36- Irritating to eyes.
  - R36/37/38- Irritating to eyes, respiratory system and skin.
  - R43- May cause sensitisation by skin contact.
  - R42/43- May cause sensitisation by inhalation and skin contact.

- Full text of classifications referred to in sections 2 and 3 - Switzerland** :
- T - Toxic
  - Xn - Harmful
  - Xi - Irritant

### References

Epoxy Resins and Curing Agents; Toxicology, Health, Safety and Environmental Aspects (Plastics Europe, May 2006)

### History

- Date of printing** : 4/15/2010.
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✔ Indicates information that has changed from previously issued version.

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**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.**

**Enquiries should be addressed to your nearest Huntsman sales office or to:**

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## 16. OTHER INFORMATION

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