

**Ident-No: ARALDITE 2052 HARDENER**

Version 2  
Revision Date 22.03.2009

Print Date 11.05.2009

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

### Product information

Trade name : ARALDITE 2052 HARDENER

Use : Acrylate for adhesive systems

Company : Huntsman Advanced Materials (Europe)BVBA  
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## 2. HAZARDS IDENTIFICATION

May cause fire.  
Irritating to eyes.  
May cause sensitization by skin contact.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature

Peroxyde based paste  
preparation

### Hazardous components

Chemical Name	CAS-No.	Symbol(s):	R-phrase(s)	Concentration [%]
dibenzoyl peroxide EC-No.: 202-327-6	94-36-0	E, Xi	R2 R36 R43	22.00 - 28.00
diisobutyl phthalate EC-No.: 201-553-2	84-69-5			15.00 - 27.00

## 4. FIRST AID MEASURES

Inhalation : Move to fresh air.  
If symptoms persist, call a physician.

Eye contact : Rinse immediately with plenty of water for at least 15 minutes.  
If eye irritation persists, consult a specialist.

Skin contact : Wash off with soap and plenty of water.  
If skin irritation persists, call a physician.

Ingestion : Immediately give plenty of water (if possible charcoal slurry).

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Call a physician immediately.  
Do not induce vomiting.

## 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>).  
Foam.  
Dry powder.
- Extinguishing media which must not be used for safety reasons : Water spray.  
halons
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus and protective suit.
- Further information : Burning produces obnoxious and toxic fumes.  
Carbon oxides.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Use personal protective equipment.  
Do not breathe vapours/dust.
- Environmental precautions : Prevent product from entering drains.  
Do not contaminate surface water.  
Avoid subsoil penetration.
- Methods for cleaning up : Take up mechanically and collect in suitable container for disposal.

## 7. HANDLING AND STORAGE

### Handling

- Advice on safe handling : Handle and open container with care.
- Advice on protection against fire and explosion : Take precautionary measures against static discharges.  
Keep away from sources of ignition - No smoking.
- Storage hazard class : Storage class 5, Oxidizing substances  
Huntsman Advanced Materials

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Control parameters	Update	Basis
dibenzoyl peroxide	94-36-0	5 mg/m <sup>3</sup> 5 mg/m <sup>3</sup>		CH-MAK 8H CH-MAK 15M
diisobutyl phthalate	84-69-5			

### Personal protective equipment

- Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.  
Filter type AX-P2 (organic vapours, particles)
- Eye protection : Tightly fitting safety goggles.
- Hand protection : Material of gloves for long term application (BTT>480 min):  
Butyl rubber  
Ethyl Vinyl Alcohol Laminate (EVAL)  
Material of gloves for short term/splash application (10 min<BTT<480 min):  
Nitrile rubber  
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](http://www.gisbau.de)
- Hygiene measures : Take off immediately all contaminated clothing.  
Keep working clothes separately.
- Protective measures : Avoid contact with skin, eyes and clothing.  
Do not breathe vapours/dust.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : paste
- Colour : red
- Odour : slight
- Melting point : -10 °C
- Thermal decomposition : 50 °C  
Method: measured

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Flash point : Note: not applicable

Ignition temperature : > 380 °C

Density : 1.155 g/cm<sup>3</sup>  
at 20 °C

Water solubility : at 20 °C  
Note: insoluble

Miscibility with water : immiscible  
at 20 °C

Viscosity, dynamic : Note: thixotropic

**10. STABILITY AND REACTIVITY**

Conditions to avoid : Note: Thermal decomposition can take place above +45°C.

Materials to avoid : Reacts violently in contact with acids, amines, driers, polymerization accelerators and easily oxidized materials.

Hazardous decomposition products : Burning produces obnoxious and toxic fumes.

**11. TOXICOLOGICAL INFORMATION**

Acute oral toxicity : LD50 rat  
Dose: > 2,000 mg/kg

Acute inhalation toxicity : LC50 rat  
Dose: > 24 mg/l

Eye irritation : irritating  
rabbit

Skin irritation : No skin irritation  
rabbit  
dermal

Sensitization : Causes sensitization.  
guinea pig  
dermal

**12. ECOLOGICAL INFORMATION**

**Elimination information (persistence and degradability)**

Biodegradability : Result: Readily biodegradable, according to appropriate OECD test.

**Ecotoxicity effects**

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Toxicity to daphnia : EC50  
Species: Daphnia magna Straus 1820  
Dose: > 3 mg/l  
Exposure time: 48 h

**Further information on ecology**

Additional ecological information : Avoid subsoil penetration.  
Prevent product from entering drains.  
Do not contaminate surface water.

**13. DISPOSAL CONSIDERATIONS**

Product : Must be incinerated, when in compliance with local regulations.  
Container : Empty containers can be landfilled after cleaning, when in compliance with the Environmental Protection (Duty of Care) Regulations 1991.  
Contaminated packaging : Waste Key Number: 305055

**14. TRANSPORT INFORMATION**

**Land transport**

*ADR:*

UN-No: 3108  
Class: 5.2  
Classification code: P1  
Packaging group:  
Risk No.:  
ADR/RID-Labels: 5.2  
Proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID  
contains: DIBENZOYL PEROXIDE

*RID:*

UN-No: 3108  
Class: 5.2  
Packaging group:  
Risk No.:  
ADR/RID-Labels: 5.2  
Proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID  
contains: DIBENZOYL PEROXIDE

**Sea transport**

*IMDG:*

UN-No: 3108  
Class: 5.2  
Packaging group:

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ADR/RID-Labels: 5.2  
MFAG:  
EmS: F-J S-R  
Proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID  
contains: (DIBENZOYL PEROXIDE)

**Air transport**

**IATA-DGR:**

UN/ID No.: UN 3108  
Class: 5.2  
Packaging group:  
Packing instruction (cargo aircraft): 513  
Max. Qty/Pack.: 25.00 KG  
(999.00 = No limit)  
Packing instruction (passenger aircraft): 510  
Max. Qty/Pack.: 10.00 KG  
(999.00 = No limit)  
ADR/RID-Labels: 5.2  
Proper shipping name: ORGANIC PEROXIDE TYPE E, SOLID  
contains: (DIBENZOYL PEROXIDE)

**15. REGULATORY INFORMATION**

**Labelling according to EEC Directive**

Labelling required

Symbol(s): : O Oxidizing  
Xi Irritant

R-phrase(s) : R 7 May cause fire.  
R36 Irritating to eyes.  
R43 May cause sensitization by skin contact.

S-phrase(s) : S3/7 Keep container tightly closed in a cool  
place.  
S14 Keep away from easily oxidizable materials.  
S26 In case of contact with eyes, rinse  
immediately with plenty of water and seek  
medical advice.  
S36/37/39 Wear suitable protective clothing, gloves  
and eye/face protection.  
S50 Do not mix with peroxide-accelerators or  
reducing agents.

Hazardous components : dibenzoyl peroxide  
which must be listed on the EC-No.: 202-327-6  
label

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**National legislation**

Water contaminating class : 1 slightly water endangering  
Classified according to annex 4 of the German VwVwS for preparations.

**Notification status**

- : EINECS yes  
INVENTORY status confirmed by supplier (secret CAS-No)
  
- : TSCA yes  
INVENTORY status confirmed by supplier (secret CAS-No)
  
- : DSL yes  
INVENTORY status confirmed by supplier (secret CAS-No)
  
- : AICS yes  
INVENTORY status confirmed by supplier (secret CAS-No)
  
- : KECI (KR) yes  
INVENTORY status confirmed by supplier (secret CAS-No)
  
- : ENCS (JP) yes  
INVENTORY status confirmed by supplier (secret CAS-No)
  
- : INV (CN) yes
  
- : PICCS (PH) no

**16. OTHER INFORMATION**

**List of R-phrases (Section 3)**

R2 Risk of explosion by shock, friction, fire or other sources of ignition.  
R36 Irritating to eyes.  
R43 May cause sensitization by skin contact.

All information is based on results gained from experience and tests and is believed to be accurate but is given without acceptance of liability for loss or damage attributable to reliance thereon as conditions of use lie outside our control. Users should always carry out sufficient tests to establish

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