

SAFETY DATA SHEET

Parathane Flash Component B

Version: 2

Review date: 10/01/2007

91/155/EC (2001/58/EC) - ISO 11014-1

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

Product name: Parathane Flash Component B

Uses or/and applications: Catalyst for two-component PUR resin.

Supplier: Icopal SAS
12 Rue de la Renaissance
FR-92184 Antony Cedex
France
Phone: +33 1 40 96 35 00
Fax: +33 1 46 66 24 85
E-mail: contact_fr@icopal.com

Emergency phone number (to be used by the practising doctor): UK - National Poisons Information Service Phone: 44 / 191 22 5131
B - Centre Antipoisons Tél: +32 (0) 70 245 245

2. COMPOSITION / INFORMATION ON INGREDIENTS

Preparation name: Parathane Flash Component B

Description of the preparation: 4,4' diisocyanatodiphenylmethane

Component(s) contributing to the hazard: • 4,4#-methylenediphenyl diisocyanate [1]; diphenylmethane-4,4#-diisocyanate [1]; 2,2#-methylenediphenyl diisocyanate [2]; diphenylmethane-2,2#-diisocyanate [2]; o-(p-isocyanatobenzyl)phenyl isocyanate [3]; diphenylmethane-2,4#-diisocyanate [3]; methylene - Id
No: 615-005-00-9 - CAS no: 101-68-8
Conc. wt.(%): 90 < C <= 100 - Classification: •Xn; R20•Xi; R36/37/38•R42/43•

3. HAZARDS IDENTIFICATION

Most important hazards: Harmful: danger of serious damage to health by prolonged exposure through inhalation and in contact with skin.
Irritating to eyes, respiratory system and skin.
The preparation is a sensitizing of the skin and the breathing apparatus. It is also irritating for the skin and a prolonged contact can increase this effect.

Specific hazards: Contains isocyanates. May cause allergic reactions.

4. FIRST AID MEASURES

General advice: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation: Remove to fresh air, keep the patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Give nothing by mouth.
If unconscious, place in the recovery position and seek medical advice.
Place under medical control until minimum 48 hours.

Skin contact: Wash skin with plenty of water and soap. Take off contaminated clothes. Do NOT use solvents or thinners.
If skin irritation persists, take medical advice.

Eye contact: Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart, and seek medical advice.
If eye irritation persists, take medical advice.

Ingestion: Rinse mouth, do not drink anything, keep quiet, and go immediately to hospital or to a doctor. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: alcohol-resistant foam, carbon dioxide (CO₂), powder, water spray (in sufficient quantity).

Extinguishing media which must NOT be used for safety reasons: Do not use a solid water stream as it may scatter and spread fire.

Specific method(s): Cool closed containers exposed to fire with water spray.
Do not allow run-off from fire fighting to enter drains or water courses.

Specific fire hazard(s): Fire will produce dense black smoke. The exposure to the products of decomposition involves risks proven for health.
The wearing of self-rescuers is mandatory.

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Special protective equipment for fire-fighters: Use a self-contained breathing apparatus and also a protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precaution(s): Exclude sources of ignition and ventilate the area. Exclude non-essential personnel. Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8.

Environmental precaution(s): Do not allow to enter drains or water courses. If the product enters drains or sewers the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the National Rivers Authority.

Method(s) for cleaning up: Contain and collect spillages with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth
Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).
Clean preferably with a detergent - Avoid the use of solvents.

7. HANDLING AND STORAGE

Handling

- Precaution(s): Avoid any direct contact with the material.
Smoking, eating and drinking is prohibited in areas of storage and use.
For personal protection, see Section 8.
The Manual Handling Operations Regulations may apply to the handling of containers of this product. Refer to the guide weight indicated on the container when carrying out assessments. People with respiration and over sensibility problems are not allowed to work or be exposed to product.

- Technical condition(s): Do NOT use compressed air for filling, discharging, or handling.

- Safe handling advice(s): Handle and open container with care.
Pour this component B into corresponding component A but thoroughly avoiding any contact and any projection.
All the contents must be used in this mixture. This compound should not be used for anything else.

Storage

- Precaution(s): Observe the label precautions.

- Technical condition(s): Not flammable and waterproof underground retention basin.

- Storage condition(s): Store at temperatures between 15°C and 25°C
Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.
Keep container dry.

- Separation of incompatible product(s): Store separately from oxidising agents and strongly alkaline and strongly acidic materials.
Avoid the proximity of alcohols, amines, water.
The only use of this product is to be mixed into the component that has been defined by the manufacturer.

- Packaging / tank material: made of the same material as the supply container.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measure(s): The product is used normally and preferably in naturally ventilated places.
to prevent spray mist escaping into the work area outside the spray booth. Respiratory protective equipment should be worn by spray booth operatives (see - Personal protection - below)
Mask with cartridge (organic vapors) or, according to the case, self-rescuer.

Control parameter(s):

- Exposure limit(s): • 4,4#-methylenediphenyl diisocyanate [1]; diphenylmethane-4,4#-diisocyanate [1]; 2,2#-methylenediphenyl diisocyanate [2]; diphenylmethane-2,2#-diisocyanate [2]; o-(p-isocyanatobenzyl)phenyl isocyanate [3]; diphenylmethane-2,4#-diisocyanate [3]; methylene:VME ppm = 0,005 - VME mg/m³ = 0,051
Values according to: ACGIH TLV/TWA = 0.051 mg/m³ (0.005 ppm)

Personal protection equipment:

- Respiratory protection: Air-fed respiratory protective equipment should be worn when this product is sprayed if the exposure of the sprayer or other people nearby cannot be controlled to below the occupational exposure limit

- Hand protection: Polypropylene or polyethylene gloves with lining in textile are necessary.
Other option: nitrile rubber gloves, Polyvinyl alcohol or nitrile-butyl rubber gloves

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- Skin and body protection: Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner.
- Eye protection: Eye protection designed to protect against liquid splashes should be worn.
Other option: face shield.
- Hygiene measure(s): PREVENT GENERATION OF MISTS!
Wash hands immediately after handling the product.
Do not eat, drink, or smoke during work.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information

- Physical state / form: liquid viscous
- Colour: dark brown
- Odour: aromatic stinging

Important health, safety and environmental information

- PH: Not applicable.
- Boiling point/range: Not applicable.
- Melting point/range: 5°C form crystals below 10°C
- Flash point: 200°C
- Decomposition temperature: > 250 °C
- Explosion limits: Not determined.
- Relative density (water = 1): 1,24 @ 20°C
- Viscosity: 80* 10e-6 m²/s @ 40°C
200 cps @ 25°C
- Water solubility: hydrolyses
- Fat solubility: Soluble while not mixed - Insoluble after mixture with B and reticulation
- Solvent solubility: soluble in most organic solvents
Reacts with alcohols and generates CO₂
- Partition coefficient n-octanol/water: Not determined.

10. STABILITY AND REACTIVITY

- Stability: In its native bucket, the material can be used after 12 months storage.
Hygroscopic product.
- Hazardous decomposition products: When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, NxOy.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

- Inhalation: Inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract. High vapour concentration may cause shortness of breath (lung oedema).
LC50/inhalation/4h/rat = 0,49 mg/l
- Skin contact: Intensive skin contact, may cause skin problems (contact dermatitis).
LD50/dermal/rat = > 5000 mg/kg
- Eyes contact: Splashes in the eyes may cause irritation and reversible local damage.
- Ingestion: Ingestion may lead to severe respiratory difficulties, stimulation of the central nervous system and in extreme cases unconsciousness.
LD50/oral/rat = 5000 mg/kg.
- Sensitisation: Cases of allergic skin reaction have been observed.
- Toxicity of repeated or prolonged exposure: Lungs may be affected by inhalation of high concentrations. Repeated or prolonged inhalation exposure may cause asthma. Repeated or prolonged exposure may cause irritation of eyes and skin.

12. ECOLOGICAL INFORMATION

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General information(s): The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters.

Environmental toxicity: Ecological problems are not known or expected under normal use.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste / unused products: Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

Contaminated packaging: Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Further Information(s):

14. TRANSPORT INFORMATION

General information(s): Not classified as dangerous in the meaning of transport regulations.

UN N°: Not applicable.

15. REGULATORY INFORMATION

Labelling: According to European directives on classification, packaging and labelling of dangerous substances 1999/45/CE

EC number: Not applicable.

Symbol(s): Xn - Harmful



R-phrase(s): 20 Harmful by inhalation.
36/37/38 Irritating to eyes, respiratory system and skin.
42/43 May cause sensitization by inhalation and skin contact.

S-phrase(s): 2 Keep out of the reach of children.
13 Keep away from food, drink and animal feedingstuffs.
22 Do not breathe dust.
23 Do not breathe gas / fumes / vapour / spray.
24 Avoid contact with skin.
25 Avoid contact with eyes.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37 Wear suitable gloves.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
46 If swallowed, seek medical advice immediately and show this container or label.

Further information(s): Contains isocyanates. See information supplied by the manufacturer. Contains 4,4#-methylenediphenyl diisocyanate [1]; diphenylmethane-4,4#-diisocyanate [1]; 2,2#-methylenediphenyl diisocyanate [2]; diphenylmethane-2,2#-diisocyanate [2]; o-(p-isocyanatobenzyl)phenyl isocyanate [3]; diphenylmethane-2,4#-diisocyanate [3]; methylene. May produce an allergic reaction.

16. OTHER INFORMATION

Item nr 2 : R-phrase(s) R20 Harmful by inhalation.
R36/37/38 Irritating to eyes, respiratory system and skin.
R42/43 May cause sensitization by inhalation and skin contact.

Important remarks: As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The user is always responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet is based on the present state of knowledge and current national legislation it provides guidance on health safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

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Uses or/and applications: Catalyst for two-component PUR resin.

Restrictions: The product should not be used for purposes other than those shown in Section 16 without first referring to the supplier and obtaining written handling instructions.

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Written by: TDD / FDS 46