

Revision nr. 2

Dated 15/6/2015

Printed on 07/07/2015

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IW EPOXY COAT comp. B

Safety data sheet

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

1.1. Product identifier

Code: IW EPOXYCOAT comp. B

Product name

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

Intended use hardener for epoxy.

1.3 Details of the supplier of the safety data sheet

Company name IDEAL WORK SRL Address Via Kennedy, 52

Place and country 31030 Vallà di Riese Pio X (TV)

Italy

tel. 0423 /4535 fax 0423 /748429

e-mail address for a competent person responsible for the safety data sheet

sicurezza@idealwork.it

1.4 Emergency telephone number

For information in an emergency Poison center:

National Poisons Information Service (Birmingham

Unit) City Hospital Dudley Rd Birmingham Telephone: +44 121 507 4123 Fax: +44 121 507 55 88

Emergency telephone: 844 892 0111

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

 Repr. 2
 H361

 Acute Tox. 4
 H302

 Skin Corr. 1B
 H314

 Skin Sens. 1
 H317

 Aquatic Chronic 3
 H412

2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols:

С

R phrases:

20/21/22-34-43-52/53-Repr. Cat. 62

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.



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Signal words: Danger

H361 Suspected of damaging fertility or the unborn child.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.
 H412 Harmful to aquatic life with long lasting effects.

P201 Obtain special instructions before use.
P273 Avoid release to the environment.

P280 Wear protective gloves / protective clothing / eye protection / face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Contains: 4,4'-Isopropilidenedifenolo

Isophorondiamine

trimetilhexametilendiamina BENZYL ALCOHOL

2.3. Other hazards.

Information not available.

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification. BENZYL ALCOHOL	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
CAS. 100-51-6	40 - 42,5	Xn R20/22	Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319
EC. 202-859-9			11319
INDEX. 603-057-00-5			
Isophorondiamine			
CAS. 2855-13-2	37,5 - 40	R52/53, C R34, Xn R21/22, Xi R43	Acute Tox. 4 H302+H312, Skin Corr. 1B H314, Skin Sens. 1 H317, Aquatic Chronic 3 H412
EC			
INDEX			
trimetilhexametilendiamina			
CAS. 25620-58-0	13,5 - 15	R52/53, C R34, Xn R22, Xi R43	Acute Tox. 4 H302, Skin Corr. 1B H314, Skin Sens. 1B H317, Aquatic Chronic 3 H412
EC. 247-134-8			, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
INDEX			
4,4'-Isopropilidenedifenolo			
CAS. 80-05-7	7 - 8	Xn R62, Xi R37, Xi R41, Xi R43	Repr. 2 H361, Eye Dam. 1 H318, STOT SE 3 H335, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC. 604-030-00-0			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Note: Upper limit is not included into the range.

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The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if present Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

4.2. Most important symptoms and effects, both acute and delayed.

For symptoms and effects caused by the contained substances, see chap. 11.

4.3. Indication of any immediate medical attention and special treatment needed.

Information not available.

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products. The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.



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6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

protezione personale: respiratore con filtro P2 per particelle nocive.

Personal Protective Equipment: wear a NIOSH/MSHA or European Standard EN 149
approved full-facepiece airline respirator in the
positive pressure mode with emergency escape
provisions.

8.1. Control parameters.

Information not available

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration. Personal protection equipment must comply with the rules in force indicated below.

HAND PROTECTION

Protect hands with category III (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in PVA, butyl, fluoroelastomer or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves` limit depends on the duration of exposure.

EYE PROTECTION

Wear protective airtight goggles (ref. standard EN 166).

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

RESPIRATORY PROTECTION

If the threshold value (if available) for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear a mask with an A or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (ref. standard EN 141).

The use of respiratory tract protection equipment, such as masks like that indicated above, is necessary to reduce worker exposure in the absence of technical measures. The protection provided by masks is in any case limited.

If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138)

An emergency eye washing and shower system must be provided.

The product must be used in well-aired environments fitted with strong localised aspiration systems, otherwise to use the personal protection equipment indicated.



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In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance liquid
Colour yellowish
Odour amino
Odour threshold. Not available.
pH. 11

Melting point / freezing point.

Initial boiling point.

Boiling range.

Flash point.

Evaporation Rate

Not available.
Not available.
60 °C.
Not available.

Not available. Flammability of solids and gases Not available. Lower inflammability limit. Not available. Upper inflammability limit. Not available. Lower explosive limit. Not available. Upper explosive limit. Not available. Vapour pressure. Not available. Vapour density Not available. Relative density. 1,000 Kg/l Solubility insoluble in water Partition coefficient: n-octanol/water Not available. Auto-ignition temperature. Not available. Decomposition temperature. Not available. Not available. Viscosity Explosive properties Not available.

9.2. Other information.

Information not available.

Oxidising properties

SECTION 10. Stability and reactivity.

10.1. Reactivity.

The product may react exothermically on contact with strong oxidising or reducing agents, strong acids or bases. BENZYL ALCOHOL: decomposes at temperatures higher than 870 °C with possibility of explosion.

Not available.

10.2. Chemical stability.

Excessively high temperatures can cause thermal decomposition.

10.3. Possibility of hazardous reactions.

See paragraph 10.1.

BENZYL ALCOHOL: may react dangerously with: hydrobromic acid and iron in the presence of heat, oxidising agents and sulphuric acid. Risk of explosion on contact with: phosphorus trichloride.

10.4. Conditions to avoid.

Avoid overheating.

BENZYL ALCOHOL: avoid exposure to the air, sources of heat and naked flames.

10.5. Incompatible materials.

Oxidising or reducing agents. Strong acids or bases.

BENZYL ALCOHOL: sulphuric acid, oxidising substances and aluminium.



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10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

This product must be handled carefully because of its possible teratogenic effects, which may reduce human fertility or because of its possible teratogenic effects, which may be toxic and damage the foetus development.

Acute effects: ingestion of this product is harmful. Even small amounts of product may cause serious health problems (stomach pain, nausea, sickness, diarrhoea).

This product is corrosive and causes serious burns and vesicles on the skin, which can arise even after exposure. Burns are very stinging and painful. Upon contact with eyes, it may cause serious harm, such as cornea opacity, iris lesions, irreversible eye coloration. Possible vapours are caustic for the respiratory system and may cause pulmonary edema, whose symptoms sometimes arise only after some hours.

Exposure symptoms may include: sting, cough, asthma, laryngitis, respiratory disorders, headache, nausea and sickness.

If swallowed, it may cause mouth, throat and oesophagus burns, sickness, diarrhoea, edema, larynx swelling and, consequently, asphyxia. Perforation of the gastro-intestinal tract is also possible.

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurvies, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas. Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

BENZYL ALCOHOL

LD50 (Oral). 1230 mg/kg Rat LD50 (Dermal). 2000 mg/kg Rabbit LC50 (Inhalation). > 4,1 mg/l/4h Rat

SECTION 12. Ecological information.

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

Code of waste disposal for uncured material: 070204

Contaminated packaging: Dispose of as unused product.

Do not reuse empty containers

12.1. Toxicity.

trimetilhexametilendiamina EC50 (48h) - for Algae / Aquatic Plants. 31,5 mg/l daphnia

12.2. Persistence and degradability.

Information not available.

12.3. Bioaccumulative potential.

Information not available.

12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. Other adverse effects.

Information not available.



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SECTION 13. Disposal considerations.

13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Avoid littering. Do not contaminate soil, sewers and waterways.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information.

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

UN:

Road and rail transport:

ADR/RID Class: 8
Packing Group: III
Label: 8
Nr. Kemler: 80
Limited Quantity. 5 L

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (amines mixture, contains

(E)

Isophorone diamine)

Carriage by sea (shipping):

Tunnel restriction code.



IMO Class: 8 UN: 2735

Packing Group: III
Label: 8
EMS: F-A, S-B

Marine Pollutant. NO

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (amines mixture, contains

Isophorone diamine)

Transport by air:



IATA: 8 UN: 2735

Packing Group: III Label: 8

Cargo:

Packaging instructions: 856 Maximum quantity: 60 L

Pass.:

Packaging instructions: 852 Maximum quantity: 5 L

Special Instructions: A3, A803

Proper Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S. (amines mixture, contains

Isophorone diamine)

Packaging:

3 KG BUCKET -- APPROVAL 3H1/Y1,4/140 - 14,5 cm x11cm x 24cmH - Weight 0,800 KG



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SECTION 15. Regulatory information.

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.

Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.

Point. 3

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 689/2008:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Repr. 2 Reproductive toxicity, category 2

Acute Tox. 4 Acute toxicity, category 4

Skin Corr. 1B Skin corrosion, category 1B

Eye Dam. 1 Serious eye damage, category 1

Eye Irrit. 2 Eye irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin Sens. 1 Skin sensitization, category 1
Skin Sens. 1B Skin sensitization, category 1B

Aquatic Chronic 2 Hazardous to the aquatic environment, chronic toxicity, category 2

Aquatic Chronic 3 Hazardous to the aquatic environment, chronic toxicity, category 3

H361 Suspected of damaging fertility or the unborn child.

H302 Harmful if swallowed.

H302+H312 Harmful if swallowed or in contact with skin.

H332 Harmful if inhaled.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.



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H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects. H412

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R20/21/22 HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

R20/22 HARMFUL BY INHALATION AND IF SWALLOWED.

R21/22 HARMFUL IN CONTACT WITH SKIN AND IF SWALLOWED.

R22 HARMFUL IF SWALLOWED.

R34 CAUSES BURNS.

R37 IRRITATING TO RESPIRATORY SYSTEM. R41 RISK OF SERIOUS DAMAGE TO EYES.

R43 MAY CAUSE SENSITISATION BY SKIN CONTACT.

R52/53 HARMFUL TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE

> EFFECTS IN THE AQUATIC ENVIRONMENT. POSSIBLE RISK OF IMPAIRED FERTILITY.

LEGEND:

R62

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- **OEL: Occupational Exposure Level**
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation.

GENERAL BIBLIOGRAPHY

- 1. Directive 1999/45/EC and following amendments
- Directive 67/548/EEC and following amendments and adjustments
 Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 6. Regulation (EC) 453/2010 of the European Parliament
- 7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
- 8. The Merck Index. 10th Edition
- 9. Handling Chemical Safety
- 10. Niosh Registry of Toxic Effects of Chemical Substances
- 11. INRS Fiche Toxicologique (toxicological sheet)
- 12. Patty Industrial Hygiene and Toxicology
- 13. N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition



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14. ECHA website

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

Changes to previous review: The following sections were modified: 02 / 03 / 05 / 11 / 12 / 16.