

MATERIAL SAFETY DATA SHEET

The Robex Group
Knowl Piece
Wilbury Way
HITCHIN
Hertfordshire
United Kingdom
SG4 0TY

SECTION 1. IDENTIFICATION OF SUBSTANCE/ PREPARATION AND COMPANY

CERA GUARD 3000 BASE

Tel: +44 (0) 1462 422 260
Fax: +44 (0) 1462 422 262
Emergency Tel: (9.00am—5.00pm)
+ 44 (0) 1462 422 260

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances presenting a health hazard within the meaning of the Chemicals (Hazardous Information and Packaging) Regulations 1994.

| Name | Concentration | Symbol Letter | R Phrases (*) |
|--|---------------|---------------|------------------|
| Polyoxypropylenediamine | 6-7% | C | R21/22, R34, R43 |
| 3-[(6-aminotrimethylhexy)amino]propiontrile | 1-1.5% | C | R22, R34, R43 |
| Isophorone diamine | 2.5-3.5% | C | R21/22, R34, R43 |

(*) for full text see Section 16.

SECTION 3. HAZARDS IDENTIFICATION

C Causes burns
May cause sensitisation by skin contact.

SECTION 4. FIRST AID MEASURES

General: 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 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.

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.

Skin contact: Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleaner. Do NOT use solvents or thinners.

Ingestion: If accidentally swallowed drink water in sips to dilute; drink citrus fruit juice to neutralize. Obtain immediate medical attention. Keep patient at rest. Do NOT induce vomiting.

SECTION 5. FIRE FIGHTING MEASURES

The preparation is not flammable, but after evaporation of water in a fire might produce dense black smoke containing hazardous products of combustion (see Section 10). Decomposition products may be hazardous to health. Appropriate self-contained breathing apparatus may be required. Do not allow run-off from the fire fighting to enter drains or water courses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Ventilate the area. Exclude non-essential personnel. Avoid breathing fumes. Refer to protective measures listed in Section 7 and 8. Contain and collect spillage's with absorbent materials e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with the waste regulations (See Section 13). Do not allow to enter drains or water courses. Clean preferably with a detergent; avoid the use of solvents.

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 or local regulatory body.

SECTION 7. HANDLING AND STORAGE

Handling: Persons with a history of skin sensitisation problems should be employed in processes in which this product is used only under medical supervision. Avoid skin and eye contact. Avoid inhalation of solvent vapour and spray mist. Smoking, eating and drinking should be prohibited in areas of storage and use. For personal protection see Section 8. Never use pressure to empty: the container is not a pressure vessel. Always keep in containers made of the same material as the supply container.

Storage: Avoid freezing. Seal containers after use. Observe the label precautions. Store between 5°C/41°F and 25°C/77°F in a dry, well ventilated place, away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorised access.

Containers which are opened should be properly resealed and kept upright to prevent leakage. The principles contained in the UK HSE's guidance note Storage of Packaged Dangerous Substances should be observed when storing this product. Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures: Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and/or solvent vapours below the relevant occupational exposure limits, suitable respiratory protective equipment should be worn. (see 'Personal Protection' below)

Occupational Exposure Limits

8 hr TWA (1) 15 min STEL (2)
ppm(4) mg/m⁻³ ppm(4) mg/m⁻³ Notations(3)

Substance
Contains no materials listed in EH40

Personal Protection

All personal protection equipment, including respiratory protection equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH Regulations.

Respiratory protection: Respiratory protective equipment should be worn when this product is sprayed.

Hand protection: Gloves should be worn when using this product. Advice should be sought from glove suppliers on appropriate types.

Eye protection: Eye protection designed to protect against liquid splashes should be worn.

Skin protection: Cotton or cotton/synthetic overalls or coveralls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: High viscosity liquid
 Flash point: NA method:
 Viscosity: 17.6-22.4 poise method: Brookfield Viscometer Spindle 5, Speed 5.
 Specific Gravity: 1.5-1.7* method: S.G. Cup
 Vapour Density: NA
 Lower Explosion limit N/A
 Solubility in water: Miscible.
 * Depends on colour.

SECTION 10. STABILITY AND REACTIVITY

Stable under the recommended storage and handling conditions. (See Section 7). In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced. Keep away from oxidising agents and strongly alkaline and strongly acidic materials to prevent the possibility of exothermic reaction.

SECTION 11. TOXICOLOGICAL INFORMATION

Repeated skin contact may lead to irritation and hyper sensitivity.
 The product should be regarded as corrosive to skin and eyes.

SECTION 12. ECOLOGICAL INFORMATION

There is no data available for the product itself. The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters. The Air Pollution Control requirements of regulations made under the Environmental Protection Act may apply to the use of this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Do not allow to enter into drains or water courses or dispose of where ground or surface waters may be affected. 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. (Using the information provided in this safety data sheet, advice should be obtained from the Waste Regulation Authority whether the special waste regulations apply)

SECTION 14. TRANSPORT INFORMATION

Transport within the user's premises; always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accident or spillage.

Transport details

| | | | |
|--|--------------------------------|----------------------|--------------------------------|
| Class | 8 (Road and Rail) 8 (Sea) | Proper Shipping Name | Amines, Liquid Corrosive (NOS) |
| Hazard | Corrosive | UN No | 2735 |
| Sub Hazard | None | | |
| Packing Group | III | | |
| Ensure drivers have adequate training | | | |
| International road/rail transport | | Sea Transport | |
| Chemical Name | Amines, Liquid Corrosive (NOS) | Marine Pollutant | No |
| Item No. | 53c | EmS | 8-05 |
| | | MFAG | 320 |

SECTION 15. REGULATORY INFORMATION

The product is classified and labelled for supply in accordance with the Chemicals (Hazard Information and Packaging) Regulations (UK) as follows:

MAIN RISK CORROSIVE C

SUB RISK NONE

The following details must be included on the label:-

Contains:- Isophorone diamine;; 3-[(6-aminotrimethylhexyl)amino]propiontrile; Polyoxypropylenediamine

R34 Causes burns

R43 May cause sensitisation by skin contact

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

S38 In case of insufficient ventilation, wear suitable respiratory equipment

S45 In case of accident or if you feel unwell, seek medical advice immediately (and show label where possible)

The information contained within this safety data sheet does not constitute the users own assessment of workplace risks as required by other health and safety legislation. The provisions of the Health and Safety at Work etc. Act (UK) and the Control of Substances Hazardous to Health Regulations (UK) or equivalent apply to the use of this product at work.

SECTION 16. OTHER INFORMATION

Text of R Phrases listed in Section 2

R21/22 Harmful in contact with skin and if swallowed

R34 Causes burns

R43 May cause sensitisation by skin contact

The information contained in this safety data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) Regulations (UK).

The product should not be used for purposes other than shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of the use of the product are outside the suppliers control, the user is 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.



Material safety data sheet produced by: The Robex Group Wilbury Way HITCHIN Hertfordshire UK SG4 0TY

Tel: + 44 (0) 1462 422 260

Fax: +44 (0) 1462 422 262

www.robex.co.uk

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Knowl Piece
Wilbury Way
HITCHIN
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United Kingdom
SG4 0TY

SECTION 1. IDENTIFICATION OF SUBSTANCE/ PREPARATION AND COMPANY

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SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances presenting a health hazard within the meaning of the Chemicals (Hazardous Information and Packaging) Regulations 1994.

| Name | Concentration | Symbol Letter | R Phrases (*) |
|----------------------|---------------|---------------|---------------|
| Epoxy Resin (MW<700) | 76-80% | Xi | R36/38, R43 |

(*) for full text see Section 16.

SECTION 3. HAZARDS IDENTIFICATION

Xi Irritating to eyes and skin
May cause sensitisation by skin contact

SECTION 4. FIRST AID MEASURES

General: 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 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.

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.

Skin contact: Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleaner. Do NOT use solvents or thinners.

Ingestion: If accidentally swallowed drink plenty of water. Obtain immediate medical attention. Keep patient at rest. Do NOT induce vomiting.

SECTION 5. FIRE FIGHTING MEASURES

The preparation is not flammable, but after evaporation of water in a fire might produce dense black smoke containing hazardous products of combustion (see Section 10). Decomposition products may be hazardous to health. Appropriate self-contained breathing apparatus may be required. Do not allow run-off from the fire fighting to enter drains or water courses.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Ventilate the area. Exclude non-essential personnel. Avoid breathing fumes. Refer to protective measures listed in Section 7 and 8. Contain and collect spillage's with absorbent materials e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with the waste regulations (See Section 13). Do not allow to enter drains or water courses. Clean preferably with a detergent; avoid the use of solvents. 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 or local regulatory body.

SECTION 7. HANDLING AND STORAGE

Handling: Persons with a history of skin sensitisation problems should be employed in processes in which this product is used only under medical supervision. Avoid skin and eye contact. Avoid inhalation of solvent vapour and spray mist. Smoking, eating and drinking should be prohibited in areas of storage and use. For personal protection see Section 8. Never use pressure to empty: the container is not a pressure vessel. Always keep in containers made of the same material as the supply container.

Storage: Avoid freezing. Seal containers after use.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures: Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and/or solvent vapours below the relevant occupational exposure limits, suitable respiratory protective equipment should be worn. (see 'Personal Protection' below)

Occupational Exposure Limits

| Substance | 8 hr TWA (1) | 15 min STEL (2) | ppm(4) | mg/m ⁻³ | ppm(4) | mg/m ⁻³ | Notations(3) |
|--------------------------------------|--------------|-----------------|--------|--------------------|--------|--------------------|--------------|
| Contains no materials listed in EH40 | | | | | | | |

Personal Protection

All personal protection equipment, including respiratory protection equipment, used to control exposure to hazardous substances must be selected to meet the requirements of the COSHH Regulations.

Respiratory protection: Respiratory protective equipment should be worn when this product is sprayed.

Hand protection: When skin exposure may occur, advice should be sought from glove suppliers on appropriate types. Barrier creams may help to protect exposed areas of the skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred.

Eye protection: Eye protection designed to protect against liquid splashes should be worn.

Skin protection: Cotton or cotton/synthetic overalls or coveralls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleaner.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|-----------------------|-------------------------|---------|----------|
| Physical state: | Medium viscosity liquid | | |
| Flash point: | NA | method: | |
| Specific Gravity: | 1.03 +/- .02 | method: | S.G. Cup |
| Lower Explosion limit | None | | |
| Solubility in water: | Miscible. | | |

SECTION 10. STABILITY AND REACTIVITY

Stable under the recommended storage and handling conditions. (See Section 7). In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced.

SECTION 11. TOXICOLOGICAL INFORMATION

Based on the properties of the epoxy constituents and considering toxicological data for similar preparations this product may be a skin sensitiser and a severe irritant. It contains low molecular weight epoxy resin which is irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and hyper sensitivity, possibly with cross sensitization to other epoxies.

SECTION 12. ECOLOGICAL INFORMATION

There is no data available for the product itself. The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters.

SECTION 13. DISPOSAL CONSIDERATIONS

Do not allow to enter into drains or water courses or dispose of where ground or surface waters may be affected. 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. (Using the information provided in this safety data sheet, advice should be obtained from the Waste Regulation Authority whether the special waste regulations apply)

SECTION 14. TRANSPORT INFORMATION

This product is not classified as dangerous for transport.

SECTION 15. REGULATORY INFORMATION

The product is classified and labelled for supply in accordance with the Chemicals (Hazard Information and Packaging) Regulations (UK) as follows:

MAIN RISK IRRITANT
SUB RISK NONE

The following details must be included on the label:-

R36/38 Irritating to eyes and skin
R43 May cause sensitisation by skin contact
S24/25 Avoid contact with skin and eyes
S28 After contact with skin wash immediately with plenty of soap and water
S37 Wear suitable gloves
S51 Use only in well ventilated areas

The information contained within this safety data sheet does not constitute the users own assessment of workplace risks as required by other health and safety legislation. The provisions of the Health and Safety at Work etc. Act (UK) and the Control of Substances Hazardous to Health Regulations (UK) or equivalent apply to the use of this product at work.

SECTION 16. OTHER INFORMATION

Text of R Phrases listed in Section 2

R36/38 Irritating to eyes and skin
R43 May cause sensitisation by skin contact

The information contained in this safety data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging) Regulations (UK). The product should not be used for purposes other than shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of the use of the product are outside the suppliers control, the user is 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.

Further information and relevant advice can be found in:

The Control of Substances Hazardous to Health Regulations 1988 (SI 1988: 1657) United Kingdom
The Manual Handling Operations Regulations 1992 (SI 1992:2793) United Kingdom

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