

Material Safety Data Sheet

ECB295 INTERGARD 740 ENSIGN RED PART A Revision Date 10/13/06

1. Product and company identification

| Product Name | INTERGARD 740 ENSIGN RED PART A | | |
|---------------------------------|------------------------------------|--|--|
| Product Code | ECB295 | | |
| Intended use | Refer Technical Data Sheet. | | |
| Application Method | Refer Technical Data Sheet. | | |
| Company Name | International Paint Pte Ltd. | | |
| | E-Town Bldg, 364 Cong Hoa, Ward 13 | | |
| | Dist. Tan Binh, Ho Chi Minh City | | |
| | SR Viet Nam | | |
| Telephone No. | 08-8120499 | | |
| Fax No. | 08-8120498 | | |
| 24 hour Emergency Telephone No. | 08-8120499 | | |
| | | | |

2. Hazard Identification

May cause cancer.

Highly flammable. Harmful by inhalation and in contact with skin.

Harmful: May cause lung damage if swallowed.

Further information is given in section 11.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.

Material Safety Data Sheet

ECB295

INTERGARD 740 ENSIGN RED PART A

Revision Date 10/13/06

3. Composition / information on ingredients

This product contains the following hazardous substances.

| Ingredient | CAS Number | Concentration Range% | Symbol(s) | Risk phrases (*) |
|---|-------------|-------------------------|-----------|------------------|
| 2-butoxyethanol | 000111-76-2 | <1 | Xn | R20/21/22, R37 |
| 2-Methoxy-1-propanol | 001589-47-5 | <1 | | |
| 4,6-Dimethyl-2-heptanone | 019549-80-5 | <1 | | |
| Barium Sulphate | 007727-43-7 | 10-25 | | |
| Epoxy Resin liquid | 025036-25-3 | 10-25 | | |
| Ethyl Benzene | 000100-41-4 | 2.5-10 | Xn | R20 |
| Propylene glycol monomethyl ether | 000107-98-2 | 2.5-10 | | |
| Silica gel | 001343-98-2 | <1 | | |
| Solvent naphtha (petroleum), light aromatic | 064742-95-6 | 10-25 | Xn | R65 |
| Titanium dioxide | 013463-67-7 | 1-2.5 | | |
| Xylene | 001330-20-7 | 10-25 | Xn | R20/21, R38 |
| Zirconium oxide | 001314-23-4 | <1 | | |

Total may not equal 100%. The rest of the ingredients in this product are classified as non hazardous.

* The full text of the above phrases are shown in section 16.

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, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eye Contact

Irrigate copiously with clean fresh water for at least 10 minutes, holding the eyelids apart and seek medical attention.

Skin Contact

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion

If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.

Material Safety Data Sheet

ECB295

INTERGARD 740 ENSIGN RED PART A

Revision Date 10/13/06

5. Fire-fighting measures

Recommended extinguishing media; alcohol resistant foam, CO2, powder, water spray.

Do not use - water jet.

Note; Fire will produce dense black smoke. Decomposition products may be hazardous to health. Avoid exposure and use breathing apparatus as appropriate.

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water courses.

6. Accidental release measures

Remove sources of ignition, do not turn lights or unprotected electrical equipment on or off. In case of a major spill or spillage in a confined space evacuate the area and check that solvent vapour levels are below the Lower Explosive Limit before reentering.

Ventilate the area and avoid breathing vapours. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to relevant State and Federal regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the relevant Environment Protection Agency.

Empty containers may contain product residues, including flammable or explosive vapours. Do not cut, puncture or weld on or near containers. All label warnings must be observed until the containers have been cleaned or reconditioned.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.

Material Safety Data Sheet

ECB295

INTERGARD 740 ENSIGN RED PART A

Revision Date 10/13/06

7. Handling and storage

Handling

This coating contains solvents. Solvent vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Areas of storage, preparation and application should be ventilated to prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentrations higher than the occupational exposure limits.

In Storage

Handle containers carefully to prevent damage and spillage.

Naked flames and smoking should not be permitted in storage areas. It is recommended that fork lift trucks and electrical equipment are protected to the appropriate standard.

In Use

Avoid skin and eye contact. Avoid inhalation of vapours and spray mists. Observe label precautions. Use personal protection as shown in section 8.

Smoking, eating and drinking should be prohibited in all preparation and application areas.

Never use pressure to empty a container; containers are not pressure vessels.

All sources of ignition (hot surfaces, sparks, open flames etc) should be excluded from areas of preparation and application. All electrical equipment (including torches) should be protected (Ex) to the appropriate standard.

The product may charge electrostatically. Always use earthing leads when pouring solvents and transferring product. Operators should wear clothing which does not generate static (at least 60% natural fibre) and antistatic footwear; floors should be of conducting type.

Storage

Store in a well ventilated, dry place away from sources of heat and direct sunlight.

Store on concrete or other impervious floor, preferably with bunding to contain any spillage. Do not stack more than 3 pallets high.

Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in the original container or one of the same material.

Prevent unauthorised access.

This is a highly flammable liquid. Refer to the requirements of any local regulations for the storage and handling regulations pertaining to this material.



All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are AKZO NOBEL believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.





Material Safety Data Sheet

ECB295

INTERGARD 740 ENSIGN RED PART A

Revision Date 10/13/06

8. Exposure controls and personal protection

Engineering Measures

Exposure Limits

Exposure standards are those provided by the ACGIH (American Conference of Government Industrial Hygenists).

| Material | Short term (15 min. ave) | | Long term (8hr time weighted average) | | |
|-----------------------------------|--------------------------|-------|---------------------------------------|-------|----|
| | ppm | mg/M3 | ppm | mg/M3 | |
| 2-butoxyethanol | - | - | 25 | 121 | Sk |
| Barium Sulphate | - | - | - | 10 | |
| Ethyl Benzene | 125 | 543 | 100 | 434 | |
| Propylene glycol monomethyl ether | 150 | 553 | 100 | 369 | |
| Titanium dioxide | - | - | - | 10 | |
| Xylene | 150 | 651 | 100 | 434 | |
| Key te petification | | | | | |

Key to notification

(P) Peak exposure limit

(R) Suppliers Recommended Limit

(Sk) There is a risk of absorption through unbroken skin

(Sen) Sensitiser

(Cat1) Category 1 - established human carcinogen

(Cat2) Category 2 - probable human carcinogen

(Cat3) Category 3 - substances suspected of having carcinogenic potential

Personal Protection

Respiratory Protection

When concentrations exceed the exposure limits shown above, workers must wear appropriate approved respirators. Provision of other controls such as exhaust ventilation should be considered if practical.

Eye Protection

Wear safety eyewear, e.g. safety spectacles, goggles or visors to protect against the splash of liquids. Eyewear should comply with an approved standard.

Wear a full face shield if mixing or pouring operations pose a risk of splashes.

An eye wash station is suggested as a good work place practice.

Hand Protection

Gloves of an appropriate material should be worn during mixing and application.

Skin Protection

Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. Barrier creams may help to protect areas which are difficult to cover such as the face and neck. They should however not be applied once exposure has occurred. Petroleum jelly based types such as Vaseline should not be used. All parts of the body should be washed after contact.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.

Material Safety Data Sheet

ECB295 INTERGARD 740 ENSIGN RED PART A Revision Date 10/13/06

9. Physical and chemical properties

Liquid

Physical State Colour Flash Point (C) Autoignition temperature (°C) **Specific Gravity** Solvent Weight % Vapour Density Lower Explosive Limit % Solubility in Water R.A.Q. to ventilate to 10% of the LEL (M3/I) Odour

Coloured 225 1.286 36.76 Heavier than air. 08 Immiscible 119.35 Smell of Solvent

10. Stability and reactivity

Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, oxides of nitrogen and smoke.

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid possible exothermic reactions.

11. Toxicological information

There are no data available on the product itself.

Exposure to solvent vapour concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.



All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are AKZO NOBEL believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.

Material Safety Data Sheet

ECB295

INTERGARD 740 ENSIGN RED PART A

Revision Date 10/13/06

12. Ecological information

There are no data available on the product itself.

The product should not be allowed to enter drains or water courses.

13. Disposal considerations

Do not allow into drains or water courses. Wastes and empty containers should be disposed of in accordance with State and Federal regulations.

Using information provided in this data sheet advice should be obtained from the local Waste Regulation Authority as to whether special waste regulations apply.

14. Transport information

Transport only in accordance with the following regulations: Not Defined

| IMDG reference : | Class/Div. Proper Shipping Name | | Subsidiary Class |
|------------------|------------------------------------|-----|------------------|
| | UN No. | | MFAG |
| | Ems | | |
| | Packaging Group | | |
| | Marine pollutant | Yes | |
| ICAO/IATA | Shipping Name | | |
| | Class | | |
| | UN No. | | |
| | Packaging Group | | |

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.



Material Safety Data Sheet

ECB295

INTERGARD 740 ENSIGN RED PART A

Revision Date 10/13/06

15. Regulatory information

The following labelling information is provided in accordance with international guidelines for the labelling of hazardous substances.

Symbol(s)

Toxic Highly flammable

Contains;

Xylene

R. Phrases;

May cause cancer. Harmful by inhalation and in contact with skin. Harmful: May cause lung damage if swallowed.

S. Phrases;

S53 - Attention - Avoid exposure - obtain special instructions before use.

S9 - Keep container in a well-ventilated place.

S16 - Keep away from sources of ignition - No Smoking.

S24/25 - Avoid contact with skin and eyes.

S36/37 - Wear suitable protective clothing and gloves.

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

P. Phrases;

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are **AKZO NOBEL** believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.

Material Safety Data Sheet

ECB295

INTERGARD 740 ENSIGN RED PART A

Revision Date 10/13/06

16. Other information

The information on this MSDS is based upon the present state of our knowledge and on current law. The product should not be used for purposes other than shown in the product data sheet without first obtaining written advice.

It is always the responsibility of the user to take all necessary steps to meet the demands of applicable legislation.

The information in this Material Safety Data Sheet is required according to legislation.

The full text of the R phrases appearing in section 3 is:

R20 Harmful by inhalation.

R20/21 Harmful by inhalation and in contact with skin.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R65 Harmful: May cause lung damage if swallowed.

All information concerning this product and/or suggestions for handling and use contained herein are offered in good faith and are believed to be reliable. Akzo Nobel however makes no warranty as to the accuracy of and/or sufficiency of such information.