

**Material Safety Data Sheet**

EGF445

**INTERSEAL 670HS ESTUARY GREEN PART A**

Version Number 2 Revision Date 12/18/06

**1. Product and company identification**

<b>Product Name</b>	INTERSEAL 670HS ESTUARY GREEN PART A
<b>Product Code</b>	EGF445
<b>Intended use</b>	Refer Technical Data Sheet. For professional use only.
<b>Application Method</b>	Refer Technical Data Sheet.
<b>Company Name</b>	International Paint Pte Ltd. E-Town Bldg, 364 Cong Hoa, Ward 13 Dist. Tan Binh, Ho Chi Minh City SR Viet Nam
<b>Telephone No.</b>	08-8120499
<b>Fax No.</b>	08-8120498
<b>24 hour Emergency Telephone No.</b>	08-8120499

**2. Hazard Identification**

Flammable.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Irritating to eyes and skin.

May cause sensitisation by skin contact.

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.

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### 3. Composition / information on ingredients

This product contains the following hazardous substances.

Ingredient	CAS Number	Concentration Range%	Symbol(s)	Risk phrases (*)
2-Methoxy-1-propanol	001589-47-5	<1		
Cyclohexanone	000108-94-1	<1	Xn	R20
Epoxy resin (av.mol.wt.<700)	025068-38-6	10-25	Xi	R36/38, R43, R51-R53
Epoxy Resin liquid	025036-25-3	2.5-10		
Ethyl Benzene	000100-41-4	1-2.5	Xn	R20
Propanediol	000057-55-6	<1		
Propylene glycol monomethyl ether	000107-98-2	1-2.5		
Talc	014807-96-6	10-25		
Titanium dioxide	013463-67-7	2.5-10		
Xylene	001330-20-7	2.5-10	Xn	R20/21, R38

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

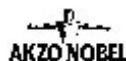
Irrigate copiously with clean fresh water for at least 10 minutes, holding the eyelids apart and seek medical attention.

#### 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.



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**5. Fire-fighting measures**

Recommended extinguishing media; alcohol resistant foam, CO<sub>2</sub>, 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 re-entering.

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.



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**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**

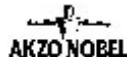
Store in a well ventilated, dry place away from sources of heat and direct sunlight.

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 product is a flammable liquid. Refer to local storage and handling regulations pertaining to this type of material.



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### 8. Exposure controls and 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 any vapour below occupational exposure limits suitable respiratory protection must be worn.

#### Exposure Limits

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

Material	Short term (15 min. ave)		Long term (8hr time weighted average)		
	ppm	mg/M3	ppm	mg/M3	
Cyclohexanone	40	167	25	100	Sk
Ethyl Benzene	125	543	100	434	
Propylene glycol monomethyl ether	150	553	100	369	
Talc			100	2	
Titanium dioxide			100	10	
Xylene	150	651	100	434	

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.



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**9. Physical and chemical properties**

Physical State	Liquid
Colour	Coloured
Flash Point (C)	27
Autoignition temperature (°C)	278
Specific Gravity	1.676
Solvent Weight %	8.32
Vapour Density	Heavier than air.
Lower Explosive Limit %	0.8
Solubility in Water	Immiscible
R.A.Q. to ventilate to 10% of the LEL (M3/l)	38.06
Odour	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.

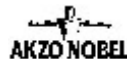
**11. Toxicological information**

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.

Based on the properties of the epoxy constituents and considering toxicological data on similar preparations this preparation may be an irritant and a skin and respiratory sensitiser. Low molecular weight epoxy constituents are irritating to eyes, mucous membranes and skin. Repeated skin contact may lead to irritation and sensitisation, possibly with cross-sensitisation to other epoxies.



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**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.

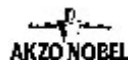
**14. Transport information**

Transport only in accordance with the following regulations:

Road and Rail  
Transport 1263, Paint, 3, III, 3[Y]

IMDG reference :	Class/Div.	3	Subsidiary Class
	Proper Shipping Name	Paint	
	UN No.	1263	MFAG
	Ems	F-E,S-E	
	Packaging Group	III	
	Marine pollutant	No	

ICAO/IATA	Shipping Name	Paint
	Class	3
	UN No.	1263
	Packaging Group	III



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**15. Regulatory information**

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

**Symbol(s)**

Irritant

**Contains;**

Epoxy resin (av.mol.wt.&lt;700)

**R. Phrases;**

Flammable.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Irritating to eyes and skin.

May cause sensitisation by skin contact.

**S. Phrases;**

S24 - Avoid contact with skin.

S28 - After contact with skin, wash immediately with plenty of soap and water.

S37/39 - Wear suitable gloves and eye/face protection.

**P. Phrases;**

Contains epoxy constituents. See information supplied by the manufacturer.



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**INTERSEAL 670HS ESTUARY GREEN PART A****Version Number 2 Revision Date 12/18/06****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.

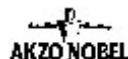
R20/21 Harmful by inhalation and in contact with skin.

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



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