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OXYPLAST FF165, FF175, FF4, FF6, FF180, FF190 GRADES

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Details

Product Code : FF165, FF175, FF4, FF6, FF180, FF190 Grades

Trade Name : Oxyplast Powder Coating

Chemical Family : Epoxy-Polyester

Use : Powder coating material for professional use

1.2. Company Identification

Manufacturer's Name : Lea Hin Co. (Powder Manufacturers) Pte Ltd Address : 293, Alexandra Road, Singapore 159940

Telephone Number : 65-4756198 Emergency Number : 65-96348098

1.3. Contact Point

Designation : Technical Department

Telephone Number : 65-4756198

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification : Not classified as dangerous

Hazard Pictogram : No danger Pictogram

Signal Word : No signal word

Hazard Statement : No hazard statement



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Precautionary Statements:

Prevention

Wash hands thoroughly after handling. Wear protective gloves/clothing and eye/face protection.

Response

Eyes : Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

If irritation persists, get medical advice/attention.

Skin : Wash with plenty of soup and water. If skin irritation occurs, get medical advice/

attention. Wash contaminated clothing before reuse.

Other Hazards: None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component Name	<u>CAS Number</u>	Percentage by Weight
Diglycidyl ether of bisphenol-A	25036-25-3	25 – 45 %
Pyromellitic acid, mono(phenylimidazoline) salt	54553-90-1	< 4%
Acrylic copolymer resin	Not available	< 3%

SECTION 4: FIRST-AID MEASURES

General Advice

In all cases of doubt, or when symptoms persist, seek medical attention.

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.

Skin Contact

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a proprietary skin cleaner. Do NOT use solvents or thinners. Obtain medical attention.

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.

Ingestion

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



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SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Extinguishing powder, alcohol-resistant foam, water spray, carbon dioxide (CO₂).

Extinguishing Media Which Must NOT Be Used For Safety Reasons

Do not use water jet.

Specific Fire Hazards

Fire will produce dense black smoke.

Decomposition products may be a hazard to health.

Specific Fire Fighting Procedures

Cool closed containers exposed to fire with water spray.

Do not allow run-off from fire fighting to enter drains or watercourses.

Protective Equipment

Appropriate self-contained breathing apparatus may be required.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precaution(s)

Exclude sources of ignition and ventilate the area. Exclude non-essential personnel. Avoid breathing vapours. Refer to Section 8 for appropriate personal protective equipment.

Environmental Precaution(s)

Do not allow to enter drains or watercourses.

Method(s) For Cleaning Up

Remove all sources of ignition. Sweep up, shovel or vacuum. 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.

SECTION 7: HANDLING AND STORAGE

Handling

□ Precaution(s)

Smoking, eating and drinking should be prohibited in areas of storage and use. For personal protection, see Section 8.

■ Technical Condition(s)

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.

Electrical equipment and lighting should be protected to appropriate standards and to prevent dust coming into contact with hot surfaces, sparks or other ignition surfaces.

□ Safe Handling Advice

Keep the container tightly closed. Exclude sources of heat, sparks and open flame. Non-sparking tools should be used. Avoid skin and eye contact. Avoid inhalation of vapour and spray mist.



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Storage

□ Precaution(s)

No smoking. Prevent unauthorised access.

□ Storage Condition(s)

Store in a dry, well-ventilated place away from sources of heat, ignition and direct sunlight. Store at temperatures below 30° C.

Containers which are opened should be properly resealed and kept upright to prevent leakage.

☐ Separation of Incompatible Product(s)

Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

□ Packaging / Tank Material

Made of the same material as the supply container.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

a) Exposure Limit

Preparation	CAS Number	Standard	Reference
Powder coating dust	Not Applicable	5 mg/m^3	ACGIH TLV

One or more of the following substances may be present in the powder:

Substance	CAS No.	PEL (Long Term) *
		mg/m^3
Carbon black	1333-86-4	3.5
Aluminium metal dust	7429-90-5	10
Iron oxide dust	1) 20344-49-4	1) 5 (as Fe)
	2) 1309-37-1	2) 5 (as Fe)
Titanium dioxide	13463-67-7	10
Manganese compound	Not available	5 (as Mn)
Barium sulphate	7727-43-7	10
Amorphous silica dust	1) 112926-00	1) 2
	2) 112945-52-5	2) 2
Aluminium oxide	1344-28-1	10
Chromium (III) compound	1308-38-9	0.5 (as Cr)
Mica dust	Not available	3
Tin oxide	Not available	2 (as Sn)
Diglycidyl ether of bisphenol-A	25036-25-3	Not available
Pyromellitic acid,	54553-90-1	Not available
mono(phenylimidazoline) salt		
Acrylic copolymer resin	Not available	Not available

^{*} Means the permissible exposure level over an 8-hour working day and a 40-hour work week, as defined in the Factories (Permissible Exposure Levels of Toxic Substances) Order, 1997 Edition (Singapore)

b) Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.



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c) Personal Protection

Respiratory Protection : Wear appropriate breathing apparatus if air renewal is not sufficient to

maintain dust/vapour under TLV.

Eye Protection : Eye protection eg. splash-proof goggles designed to protect against powder

splashes should be worn.

Hand Protection : 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.

When skin exposure may occur, advice should be sought from glove

suppliers on appropriate types. Wear impermeable gloves.

Skin And Body Protection : Care should be taken in the selection of protective clothing to ensure that

inflammation and irritation of the skin at the neck and wrists through contact

with the powder is avoided.

d) <u>Hygiene Measure(s)</u>

When using, do not eat, drink or smoke. Wash hands and face with soap before break and at the end of works. Keep away from food and drink. Take a shower at the end of the working day.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Powder

Colour : One of various colours
Odour : None to slightly characteristic

Water Solubility : Insoluble Fat Solubility : Insoluble

Solvent Solubility : Soluble in some specific organic solvents

Boiling Point : Not Applicable

Melting Point ($^{\circ}$ C) : >70 $^{\circ}$ C

Percentage Volatile : Not Applicable
Evaporation Rate : Not Applicable
Vapour Density : Not Applicable
Specific Gravity : 1.2 - 1.9
Elash Point : Not Applicable

 $\begin{array}{lll} Flash \ Point & : & Not \ Applicable \\ Explosion \ limits & : & 40-70 \ g/m^3 \\ pH & : & Not \ Applicable \\ \end{array}$

SECTION 10: STABILITY AND REACTIVITY

Stability : Stable under the recommended storage and handling conditions

(see Section 7).

Incompatibility (Materials To Avoid)

Keep away from oxidising agents and strongly alkaline and strongly acidic materials to prevent the possibility of

exothermic reaction.

Hazardous Decomposition Products : When exposed to high temperatures, may produce hazardous

decomposition products such as carbon monoxide and dioxide,

smoke, N_xO_y .



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SECTION 11: TOXICOLOGICAL INFORMATION

General Information

There is no data available on the product itself.

Acute Toxicity

□ *Inhalation*

Cough, difficult breathing or other symptoms of poisoning may occur within some hours.

□ Skin Contact

Dust may cause irritation in skin folds or by contact in combination with tight clothing.

□ Eyes contact

Splashes in the eyes may cause irritation and reversible local damage.

□ Ingestion

May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Sensitisation

May cause sensitisation of susceptible persons by skin contact.

Toxicity of Repeated or Prolonged Exposure

Repeated or prolonged exposure may cause irritation of eyes and skin.

Carcinogenicity : Not classified
Reproductive Toxicity : Not classified
Specific Target Organ Toxicity : Not classified

(Single Exposure)

Specific Target Organ Toxicity :

Specific Targei Organ Tox (Repeated Exposures) : Not classified

Aspiration Hazard : Not classified

SECTION 12: ECOLOGICAL INFORMATION

General Information

This material is not classified as dangerous for the environment. The ecological assessment for this material is based on the evaluation of its components. There are no data available on the material itself.

Ecotoxicity: : Not available
Persistence and Degradability
Bioaccumulative Potential : Not available
Mobility in Soil : Not available

Environmental Toxicity

Ecological problems are not known or expected under normal use.

Other Adverse Effects

Hazard to the Ozone Layer : Not available



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SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Method

The generation of waste should be avoided or minimised wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product and any by-products should at all times comply with the requirements of an environmental protection and waste disposal legislation and any regional and local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: TRANSPORT INFORMATION

General Information

Not regulated

UN Number: Not regulatedUN Proper Shipping Name: Not applicableTransport Hazard Class(es): Not applicablePacking Group: Not applicableEnvironmental Hazards: None

Transport in bulk according to Annex II

of MARPOL 73/78 and the IBC Code

Special Precautions for User : Always transport in closed packagings

that are upright and secure

IMDG

Not restricted / Not regulated

Air Transport

IATA: Not restricted / Not regulated

This material is not in violation of IATA regulations concerning dangerous goods

: Not applicable

SECTION 15: REGULATORY INFORMATION

Labelling

Not subject to labelling according to OSH (Classification, Packaging and Labelling of Hazardous Chemicals - 1997)

Risk Phrases

None according to OSH (Classification, Packaging and Labelling of Hazardous Chemicals -1997)

Safety Phrases

None according to OSH (Classification, Packaging and Labelling of Hazardous Chemicals -1997)





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SECTION 16: OTHER INFORMATION

Important remarks

- ☐ As the specific conditions of use of the product are outside the supplier's control, the user is always responsible for ensuring that the requirements of relevant legislations 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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