

SAFETY DATA SHEET

1. IDENTIFICATION THE SUBSTANCE / PREPARATION OF THE COMPANY / UNDERTAKING

Product Name: **ESTOTECT MMA**
 Application: Solvent based coloured coating
 Company: Denka Construction Solutions Sdn Bhd
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2. HAZARD IDENTIFICATION

A. Hazard Risk Classification

- Health Hazard

Flammable liquid	Category 3
Aspiration hazard	Category 1
Aquatic toxicity (chronic)	Category 3
Aquatic toxicity (acute)	Category 2
Skin Corrosion / Irritation	Category 2
Serious Eye Damage / Eye Irritation Hazard	Category 1
Skin Sensitizer Hazard	Category 1
Carcinogenicity Hazard	Category 2
Target Organ Systemic Toxicant (TOST) - Single Exposure Hazard	Category 3
Aquatic Environment Chronic Hazard	Category 4

B. Label elements including precaution statements.

- Symbol:



- Signal word: Danger
- Hazard Risk Statement

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Cause skin irritation.
H317	May cause an allergic to skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation
H336	May cause drowsiness and dizziness
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

- Precautionary Statement (Prevention)
 - P201 Obtain special instructions before use.
 - P202 Do not handle until all safety precautions have been read and understood.
 - P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 - P233 Keep container tightly closed.
 - P240 Ground/bond container and receiving equipment.
 - P241 Use explosion-proof electrical/ventilating/lighting equipment.
 - P242 Use only non-sparking tools.
 - P243 Take precautionary measures against static discharge.
 - P261 Avoid breathing vapors or spray mist.
 - P264 Wash hands thoroughly after handling.
 - P271 Use only outdoors or in a well-ventilated area
 - P272 Contaminated work clothing should not be allowed out of the workplace.
 - P273 Avoid release to the environment.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
- Response
 - P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P370+P378: In case of fire: Use appropriate media for extinction.
 - P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 - P331: Do NOT induce vomiting.
 - P403+P235: Store in a well-ventilated place. Keep cool.
 - P405: Store locked up.
 - P501: Dispose of contents and container to appropriate waste site or reclaimer in accordance with local and national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Composition	Cas No	%
Acrylic Polymer	28262-63-7	20 – 30
Diluent	64742-63-7	30 – 40
Calcium Carbonate	471-34-1	20 – 30
Titanium Dioxide	13463-67-7	10 – 15
Wetting Agent	577-11-7	1 – 5

4. FIRST AID MEASURES

Inhalation	Remove to fresh air. If rapid recovery does not occur, transport to nearest medical facility for additional treatment.
Skin Contact	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
Eye Contact	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	If swallowed, do not induce vomiting; transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (37° C), shortness of breath, chest congestion or continued coughing or wheezing. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Give nothing by mouth. Do not induce vomiting

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.
Special Exposure Hazards	Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. The vapour is heavier than air, spreads along the ground and distant ignition is possible.
Unsuitable Extinguishing Media	Do not use water in a jet.
Special Protective Equipment	Wear full protective clothing and self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Avoid contact with spilled or released material. Immediately remove all contaminated clothing. For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.
Environmental Precautions:	Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and firefighting water) to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment
Decontamination Procedures:	For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

7. HANDLING AND STORAGE

General Precaution	Avoid breathing vapours or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. On guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
Handling:	Extinguish any naked flames. Do not smoke. Remove ignition sources. Avoid sparks. Avoid contact with skin, eyes, and clothing. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until fill pipe submerged to twice its diameter, then ≤ 7 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

Storage: Must be stored in a diked (bunded) well-ventilated area, away from sunlight, ignition sources and other sources of heat. Bulk storage tanks should be diked (bunded). Keep away from aerosols, flammables, oxidizing agents, corrosives and from other flammable products which are not harmful or toxic to man or to the environment. Storage Temperature: Ambient.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational Exposure Limits:-

Substance	8 Hour TWA	STEL	Source/Other Information
White spirit	550 mgm-3	720 mgm-3	EH40

Engineering Control Measures: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Eye washes and showers for emergency use.

Individual Protection Measures: Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Respiratory Protection: If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapours [boiling point >65 °C (149 °F)] meeting EN14387. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

Hand Protection: Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739, AS/NZS: 2161) made from the following materials may provide suitable chemical protection: Longer term protection: Nitrile rubber gloves. Incidental contact/Splash protection: PVC or neoprene rubber gloves. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

Eye Protection: Monogoggles (EN166).

Chemical splash goggles (chemical monogoggles).

Body protection: Use protective clothing which is chemical resistant to this material. Safety shoes and boots should also be chemical resistant.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Colour	Pigmented
Odour	Sweet Aromatic
pH (concentration)	Not applicable (non-aqueous)
Boiling Point / Range (°C)	166 – 180
Melting point / Range (°C)	Not applicable
Flash Point (closed °C)	43
Auto flammability (°C)	Auto ignition temperature: 500
Explosive Properties (%)	Lower explosive limit (LEL): 1.0% Upper explosive limit (UEL): 7.5%
Oxidising Properties	Not determined
Vapour Pressure (kPa at 20 °C)	0.26
Relative Density (at 20 °C)	1.2
Water Solubility	Insoluble
Other data	Evaporation rate (n-butyl acetate = 1): 0.25

10. STABILITY AND REACTIVITY

Stability:	Contains volatile solvent
Condition to avoid:	Any source of ignition.
Material to avoid:	Strong acids and alkalis. Strong oxidising agents.
Hazardous Decomposition Product:	Thermal Decomposition: - Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Expected oral LD50, rat>2g/kg.

Health Effects

On eyes:	Irritating but does not injure eye tissue. Vapour may cause irritation.
On skin:	Mildly irritating. May defeat the skin.
By inhalation:	Mist and vapours may cause irritation to nose and respiratory tract. High concentration of vapours can cause narcosis and asphyxiation.
By ingestion:	May cause nausea, vomiting and diarrhoea. Aspiration of liquid during ingestion or from vomiting may cause severe chemical pneumonitis.
Chronic:	Repeated and prolonged skin contact may lead to skin disorders.

12. ECOLOGICAL INFORMATION

Environmental Assessment:	Contains volatile organic compounds. May cause significant ecological damage in aquatic systems and must be used and disposed of in accordance with the recommendation made in this safety data sheet.
Persistence & Degradability:	Not readily biodegradable, but is inherently biodegradable. Volatile organic compounds undergo photochemical degradation in the atmosphere.
Bio-accumulated Potential:	Bioaccumulate, however with short retention period of the order of one week or less.
Ecotoxicity:	Moderately ecotoxic to marine organism.

13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with local and national legislation.

Unused Product: Dispose of through authorised waste contractor to a licensed site.
 Used / Contaminated Product: Dispose of through an authorised waste contractor to a licensed site. May be incinerated. Do not empty into drains, sewers or water courses.
 Packaging: Must be disposed of through an authorised waste contractor. May be steam cleaned and cycled.
 Contains volatile solvent, ventilate before steam cleaning (explosion risk).
 Contains flammable residues, do not crush or incinerate.

14. TRANSPORT INFORMATION

UN/SI Number		1263			
IMO	Class	3.3	Packaging Group	III	Marine Pollutant: Yes
IATA/ICAO	Class	3	Packaging Group	III	
ADR	Class	3	Item	11(c)	

Transport Name: Paint Related Material
 Hazchem Kemler Code: 3[Y] / 30

15. REGULATORY INFORMATION

Hazard Label Data

Name Ingredients: 1263
 Symbols (s): Xn
 Risk Phrases: Flammable. Harmful if swallowed.

Safety Phrases: Do not breathe vapours/spray.
 Wear suitable gloves and eye/face protection.
 Use only in well ventilated areas.

EC Directives: Dangerous Preparation Directive, 88/379/EEC
 Dangerous Substance Directive, 67/548/EEC and adaptations
 Safety Data Sheet Directive, 91/155/EEC

Statutory Instruments: Chemical (Hazard Information and Packaging) Regs. 1996 (SI 1092)
 Control of Substances Hazardous to Health Regs. 1994 (SI 3246)
 Health and Safety at Work, etc Act 1974
 Environmental Protection Act 1990

Codes of Practice: Waste Management. The Duty of Care.

Guidance Notes: Storage of packages dangerous substances [HS(G)71]

16. OTHER INFORMATION

The data and advice given apply when the product is used for the stated application or applications. The product is not sold as suitable for any other application. Use of the product for applications other than as stated in this sheet may give rise to risks not mentioned in this sheet. The product should not be used than for the stated application or applications without seeking advice from Denka Construction Solutions Sdn Bhd.

If this product has been purchased to a third party for use at work, it is the purchaser's duty to take all necessary steps to secure that any person handling or using the product is provided with information in this sheet. It is the responsibility and duty of the employer to inform employees and others who may be affected of any hazards described to this sheet and of any precautions which should be taken. This sheet does not constitute or substitute for the users own assessment of workplace risk, as required by other health and safety legislation.

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