

SAFETY DATA SHEET

1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY UNDERTAKING

Product Name: **ESTOFLEX GP**
 Application: Waterproofing Coating/ Membrane
 Company: **Denka Construction Solutions Malaysia Sdn Bhd**
 Address: No. 18, Jalan Utas 15/7, Seksyen 15, 40200 Shah Alam, Selangor
 Telephone: 03 – 55108810 Fax: 03 – 55100708

2: HAZARDS IDENTIFICATION

A. Hazard Risk Classification

- Health Hazard
 Acute toxicity – Oral: Category 4
 Serious Eye Damage / Eye Irritation: Category 2
 Skin Sensitization: Category 1
- Environmental Hazards
 Aquatic toxicity – acute: Category 2

B. Label elements including precaution statements.

- Symbol:



- Signal word: Warning
- Hazard Risk Statement
 H315 Causes skin irritation
 H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
 H335 May cause respiratory irritation
 H412 Harmful to aquatic life with long lasting effects

- Precautionary Statement

(Prevention)

P201 Obtain special instruction before use
 P202 Do not handle until all safety precautions have been read and understood
 P264 Wash your handling region thoroughly after handling
 P280 Wear protective gloves/protective clothing/eye protection/face protection
 P281 Use personal protective equipment as required

(Response)

P332 + P313	If skin irritation occurs. Get medical advice / attention
P333 + P313	If skin irritation or rash occurs. Get medical advice / attention
P337 + P313	If eye irritation persists: Get medical advice / attention
P391	Collect spillage

(Storage)

P403 + P233	Store in a well - ventilated place. Keep container tightly closed
P405	Store locked up

(Disposal)

P501	Dispose of content/container to an approved waste disposal
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3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No.	Content, %
Asphalt	8052-42-4	40-60
Bentonite	1302-38-9	3-6
Water	7732-18-5	<55
Amine Salt	28701-67-9	<1

All constituents of this product are listed in EINECS (European Inventory of Existing Commercial Chemical Substances) or EILINCS (European List of New Chemical Substances) or are exempt.
Refer to Section 8 for Occupational Exposure Limits.

4: FIRST AID MEASURES

Description of first aid measure,

General Advice:	Move out the dangerous area. Consults a physician. Show this safety data sheet to the doctor in attendance
Eyes:	Irrigate thoroughly with plenty of water for at least 10 minutes Seek medical attention if soreness or redness persists
Skin:	Flush with running water for 10 minutes No attempt should be made to remove firmly adhering bitumen from skin Seek medical attention if soreness or redness persists
Inhalation:	Remove to fresh air If symptoms are severe or persistent, seek medical attention
Indigestion:	Wash out mouth with water. Do NOT induce vomiting. Seek medical attention immediately if any material enters the lungs during swallowing or vomiting

5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media	: Use dry chemical powder, foam, carbon dioxide and water fog
Unusual Fire/Explosion Hazards	: Non known
Protective Equipment for Firefighters	: Self-contained breathing apparatus and full protective clothing in case of fire

6: ACCIDENTAL RELEASE MEASURES

Protective Measure	:	Avoid contact with eyes, skin and inhalation of vapour 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 measures to avoid environment contamination
Environmental Precautions	:	Prevent from spreading or entering drains, ditches or river by using sand/earth or other appropriate barriers Attempt to disperse or direct its flow to safe location
Decontamination Procedures	:	For small spills, transfer by mechanical means to a labelled sealable container for product recovery or safe disposal Appropriate absorbent material and disposal of safety as waste Remove contaminated soil and dispose safely Shovel/scoop into a suitable clearly marked container for disposal or reclamation in accordance with local regulations

7: HANDLING AND STORAGE

Handling:	Emulsion are handled at ambient temperature Avoid contact with eyes and skin
Storage:	Store at ambient temperature Precaution must be taken to prevent the ingress of water/or dirt into the product

8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Component	Exposure limits (OSHA PEL)		
	TWA	STEL	Unit
Asphalt	5 Fume	NE	mg/m3
Bentonite	10 Dust	NE	mg/m3
Amine Salt	10 Dust	NE	mg/m3

Exposure Limits: Not Assigned

Appropriate engineering controls: No specific ventilation requirement noted
Avoid contact with skin and eye

Individual protection measures

Respiratory protection:	Wear respiratory protection tested and approved under appropriate government standards
Hand protection:	Wear approved chemical resistance gloves that may protect hands from direct contact with chemical
Skin Protection:	Operator handling the material should wear overalls and suitable heat-resistance gloves
Eye Protection:	Wear approved chemical safety glasses or goggles

9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Pastry
Appearance	Dark brown when wet, black when dry
Odour	Characteristic Asphalt
pH (concentration)	8.0-11.0
Melting Point	N/A
Boiling Point / Range (°C)	100
Relative Density @ 25°C (g/cm3)	0.99-1.03
Volatile Matter	Refer to product specification
Flash Point (closed °C)	N/A
Auto-flammability (°C)	N/A
Specific Gravity	N/A
Solubility	N/A
Viscosity (25°C, cps)	N/A
Explosive Properties	N/A
Oxidizing Properties	N/A

10: STABILITY AND REACTIVITY

Stability :	Stable
Condition to avoid:	Keep away from extreme heat, strong acids and strong oxidising agents
Material to avoid:	Strong Acids
Hazardous Decomposition Product:	H ₂ S, CO, CO ₂ , CaO
Hazardous Reaction	No dangerous reaction known

11: TOXICOLOGICAL INFORMATION

Acute toxicity:	
LD50 (Oral, rat)	>5000mg/kg
LD50 (Dermal, Rabbit)	>2000mg/kg
LC50 (Inhalation, rat)	>10000mg/kg
On skin:	Unlikely to irritate on brief or occasional exposure.
By Inhalation:	Low volatility makes inhalation unlikely at ambient temperatures.
By Ingestion:	Low order of acute toxicity.
Chronic:	Repeated and prolonged skin contact may lead to skin disorders

12: ECOLOGICAL INFORMATION

Environmental Assessment Effects:	When used and disposal of as intended, no adverse environmental are foreseen
Mobility:	No specific data available Expected to be very low Emulsifiable in water
Persistent & Degradability:	Not readily biodegradable
Bioaccumulative Potential:	Not expected to be bioaccumulative.
Ecotoxicity:	Expected to be ecotoxic to fish / daphnia / algae

13: DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible
Waste in small quantities should not be poured into drains, sewer or watercourse for disposal
The material when mixed properly and cured at proper mix ration may be safely landfilled
Waste disposal method in accordance with all applicable local, national environment laws

14: TRANSPORT INFORMATION

UNRTDG	Not classified as dangerous for transport
IATA-DGR	Not classified as dangerous for transport
IMDG-Code	Not classified as dangerous for transport

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15: REGULATORY INFORMATION

Risk/Safety phrases

Not classified as dangerous under current EC criteria.

R38	Irritating to the skin
R43	May cause sensitization by skin contact
S24/25	Avoid contact with skin and eyes
S27	Remove all contaminated clothing immediately
S28	Wash with detergent upon contact with skin immediately
S37/38/39	Wear suitable protective clothing, gloves, and eye/face protection

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 Malaysia 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.

SDS: Estoflex GP

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Denka Construction Solutions Malaysia Sdn Bhd
(591858-U)

No. 18, Jalan Utas 15/7, Seksyen 15,
40200 Shah Alam, Selangor Darul Ehsan, Malaysia
Tel: +603 5510 8810 Fax: +603 5518 8202

www.denka-cs.com

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