

SAFETY DATA SHEET

IGL COATINGS™ ECOCLEAR AEGIS AE2



Material no.

Specification

154331

Revision date

11.01.2022

Version

1.3

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

PRODUCT NAME : IGL Coatings™ Ecoclear Aegis AE2
FUNCTION : Hardener
COMPANY : Ominent Sdn Bhd
ADDRESS : No.7, Jalan Majistret U1/26, Hicom-Glenmarie Industrial Park, Seksyen U1, 40150 Shah Alam, Selangor.
PHONE : +60355690980
EMAIL ADDRESS : regulations@iglcoatings.com

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Physical hazards

Flammable liquid Category 4

Health hazards

Acute Toxicity (Oral) Category 4

Skin Corrosion Category 1B

Serious Eye Damage/Eye Irritation Category 1

Skin sensitizer Category 1

2.2 Label Elements

Regulation (EC) No. 1272/2008



GHS05

Signal word

Danger

Hazard statements

H227 Combustible liquid
H302 Harmful if swallowed
H314 Causes severe skin burns and eye irritation
H317 May cause an allergic skin reaction

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P260 Do not breathe mist/vapours/spray.
P264 Wash hand thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317 IF SWALLOWED: Get medical help.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P302+P361+P354 IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P354+P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P316 Get emergency medical help immediately.
P321 Specific treatment (see Section 4).

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P333+P317	If skin irritation or rash occurs: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use water spray, alcohol-resistant foam, dry powder or carbon dioxide to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool
P405	Store locked up.
P501	Dispose of contents/container to comply with local, state and federal regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No.	Chemical Name			Quantity
	EC No.	Index No.	REACH No.	
	Classification according to Regulation (EC) No. 1272/2008 (CLP)			
919-30-2	Aminosilane			90-100%
	213-048-4	Not applicable	01-2119480479-24-0000	
	Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317; Eye Dam. 1: H318			
68299-15-0	Diocetylindicarboxylate			3-5%
	269-595-4	Not applicable	01-2120770890-48-0000	
	STOT SE 2: H371			

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Information

Take off contaminated clothing immediately.

After Inhalation

If aerosol or mists are formed: Possible discomfort: Severe irritation of mucous lining (nose, throat, eyes), cough, sneezing, flow of tears.

Move victims into fresh air. If breathing difficulties occur: Keep patient half sitting with upper body raised. Call a physician immediately.

After skin contact

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

With eye held open, rinse thoroughly with water for at least 15 minutes. Continue rinsing with eye rinsing solution. Protect unharmed eye. Remove contact lenses, if presence and easy to do. Call ambulance. (Cue: caustic burn of the eyes). Immediate further treatment in ophthalmologist.

After ingestion

Do NOT induce vomiting. Wash out mouth with water provided the person is conscious. Never give anything by mouth to an unconscious person. Have patient drink plenty of water in small sips.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

Therapy as for chemical burn. If substance has been swallowed: Early endoscopy in order to access mucosa lesions in the oesophagus and stomach which may appear. If necessary, suck away leftover substance. Allergic reactions cannot be excluded. Treatment of allergic reaction if necessary.

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

Water spray, alcohol-resistant foam, dry powder or carbon dioxide.

5.2 Unsuitable extinguishing media

Do NOT use water jet.

5.3 Special hazards arising from the substance or mixture

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Hazardous fumes in fires, specific to product: nitrogen oxides

5.4 Special fire-fighting procedures

Water used to extinguish fire should not enter drainage systems, soil or stretches of water. Ensure there are sufficient retaining facilities for water used to extinguish fire. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

5.5 Special protective equipment for fire-fighters

In case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment (Refer to section 8).

Keep out unprotected persons. Ensure adequate ventilation.

6.2 Environmental precautions

Do not allow entrance in sewage water, soil stretches of water, groundwater, drainage systems.

6.3 Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Fill into marked, sealable containers.

To be disposed of in compliance with existing regulations.

6.4 Reference to other sections

Safe handling: Refer to section 7

Personal protection equipment: Refer to section 8

Disposal: Refer to section 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling

Wear personal protection equipment (Refer to section 8).

Avoid contact with eyes and skin.

Use with adequate ventilation.

Do not breathe vapours or spray mist.

No smoking.

Advice on protection against fire and explosion

Keep container closed when not in use.

Keep away from heat, sparks and flame.

Further information on handling

General protection and hygiene measures: Refer to section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Protect against moisture.

Advice on storage compatibility

Do not store together with food and feeding stuffs.

Further information on storage conditions

Recommended storage temperature: 20-25°C.

7.3 Specific end use(s): Refer to section 1.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits:

Observe national threshold limit values.

Biological Limit Values

No biological exposure limit noted for ingredient(s).

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8.2 Exposure Control

8.2.1 General protective and hygienic measures:

Wash hands before breaks and at the end of work. Ensure adequate ventilation. No smoking.

8.2.2 Personal protective equipment:

Respiratory protection:

Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Protection of hands:

Material: Butyl rubber.

Breakthrough time: ≥ 480 min

Material: Polyvinyl chloride (PVC).

Breakthrough time: ≥ 120 min

Guideline: Source: GESTIS substance database (hazardous substance information system of commercial professional associations)

Additional information: Selection of protective gloves to meet the requirements if specific workplaces. Suitability for specific workplaces should be clarified with protective glove manufacturers. The information is based on our own tests, references from the literature and information from glove manufacturers, or derived by analogy with similar materials. Please observe that the daily duration of usage of a chemical protective glove is in practice far shorter due to the many influencing factors (e.g. temperature, mechanical strain on the glove material) than the permeation time determined acc. EN 374.

Eye protection: Close-fitting protective goggles

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (colour)	: Colourless to yellowish
Appearance (form)	: Liquid
Odour	: Amine-like
Boiling Point	: 220 °C
Vapour Pressure	: 2 Pa (at 20 °C)
Vapor Density	: No data available.
Density	: 0.95 g/cm ³ (at 20 °C)
Melting Point	: Not applicable
Flash Point	: 80 °C
pH	: Not applicable
Evaporation Rate	: No data available.
Solubility in Water	: Not soluble (Decomposition by hydrolysis)
Auto-ignition temperature	: 270 °C
Decomposition temperature	: >217 °C
Self-ignition temperature	: 270 °C

10. STABILITY AND REACTIVITY

10.1 Reactivity: No dangerous reaction known under conditions of normal use.

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions: Exothermic reaction with water, organic acids and inorganic acids.

10.4 Conditions to avoid: Keep away from heat and sources of ignition. Protect from moisture.

10.5 Incompatible materials: Water, acid and strong oxidant.

10.6 Hazardous decomposition products: Ethanol in case of hydrolysis. Alcohol formed by hydrolysis lower the flashpoint of the product.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Exposure route	Endpoint	Value	Species
Oral	LD50	1536 mg/kg	Rat

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Dermal	LD50	>2000 mg/kg	Rat
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Skin corrosion/irritation: May causes skin corrosion.

Serious eye damage/eye irritation: May causes serious damage to eyes.

Respiratory or skin sensitization: May causes sensitization by skin.

Summary of evaluation of the CMR properties: Shall not be classified as a germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Specific target organ toxicity – single exposure: Shall not be classified as specific target organ toxicity – single exposure.

Specific target organ toxicity – repeated exposure: Shall not be classified as specific target organ toxicity – repeated exposure.

Aspiration hazard: Shall not be classified as aspiration hazard.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Specified substances: Aminosilane

Endpoint	Value	Species	Exposure time
LC0	934 mg/L	Fish (Brachydanio rerio)	96 hours
EC50	331 mg/L	Aquatic Invertebrates (Daphnia magna)	48 hours
EC50	1000 mg/L	Green algae	72 hours
NOEC	1.3 mg/L	Green algae	72 hours

12.2 Persistence and degradability

Not readily biodegradable.

12.3 Bioaccumulative potential

No data available.

12.4 Partition Coefficient n-octanol/water (log K_{ow})

No data available

12.5 Mobility in soil

No data available

12.6 Other adverse effects

No data available.

13. DISPOSAL CONSIDERATION

13.1 Waste treatment methods

With respect to local regulations, e.g. dispose of to suitable waste incineration plant.

Contaminated Packaging

Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. If there is product residue in the emptied container, follow directions for handling on the container's label. Incorrect disposal or reuse of this container is illegal and can be dangerous.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

14. TRANSPORT INFORMATION

14.1 IATA-DGR

UN number

: 3267

UN proper shipping name

: Corrosive liquid, basic, organic, n.o.s. (3-aminopropyl-triethoxysilane)

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Transport hazard class(es) : 8
Packing group : II
Environmental hazards : No
Special precautions for user : No data available.
Remarks : -

14.2 IMDG-Code

UN number : 3267
UN proper shipping name : Corrosive liquid, basic, organic, n.o.s. (3-aminopropyl-triethoxysilane)
Transport hazard class(es) : 8
Packing group : II
Environmental hazards : No
Marine pollutant : No
EmS Code : -

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

US Federal Regulations

US. Toxic Substances Control Act (TSCA)

All chemical substances in this material are included on the TSCA Inventory of Chemical Substances.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Hazardous Substance List

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Emergency Planning and Community Right-To-Know Act (EPCRA) Section 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

Emergency Planning and Community Right-To-Know Act (EPCRA) Section 313 Toxics Release Inventory (TRI) Reporting

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

None present or none present in regulated quantities.

US. State Regulation

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

EU Regulation

EU. Directive 2012/18/EU (SEVESO III) on Major Accident Hazards Involving Dangerous Substances, Annex I:

Not applicable.

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

16. OTHER INFORMATION

Further information

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Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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