IGL COATINGS™ MARINE SOLUTIONS GLASS GUARD M1

Material no.

Version

Specification 154361 Revision date 20.02.2023

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

PRODUCT NAME : IGL Coatings™ Marine Solutions Glass Guard M1

FUNCTION : Hydro- & oleophobic and easy clean agent surface modifier for glass and glazed ceramic

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 liquids Category 2

Health hazards

Specific Target Organ Toxicity- Repeated Exposure Category 2

2.2 Label Elements

Regulation (EC) No. 1272/2008



GHS02

GH

CHSUS

Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour

H373 May cause damage to organs through prolonged or repeated exposure

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking	P210	Keep away from	heat/sparks/open	flames/hot surfaces.	No smoking.
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P233 Keep container tightly closed.

P235 Keep cool.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P260 Do not breathe mist or vapours.

P280 Wear protective gloves, protective clothing, eye protection and face mask.

P314 Get medical advice/attention if you feel unwell.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P370+P378 In case of fire: Use fire extinguisher to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance

with applicable laws and regulations, and product characteristics at time of disposal.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COM OSTITON, IN ORDINATION ON INCREDIENTS					
CAS No.	Chemical Name	Chemical Name			
	EC No.	Index No.	REACH No.		
	Classification acco	Classification according to Regulation (EC) No. 1272/2008 (CLP)			
64-17-5	Ethanol	Ethanol			
	200-578-6	603-002-00-5	01-2119457610-43-0000		
	Flam. Liq. 2: H225				
998-30-1	Triethoxysilane			10-20%	

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213-650-7	Not applicable	Not applicable	
STOT RE 3: H373			

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Information

Remove contaminated or saturated clothing.

After Inhalation

Following the inhalation of aerosols or mist: Move victims to fresh air.

If symptoms persist, consult a physician for treatment.

After skin contact

Wash off immediately with plenty of water. Consult a doctor in the event of permanent skin irritation.

After contact with eyes

Keeping eyelid open, immediately rinse thoroughly for at least 15 minutes using plenty of water or if necessary, eye rinsing solution. Remove contact lenses, if presence and easy to do

In case of persistent discomfort: Consult an ophthalmologist.

After ingestion

Have the mouth rinse with water. Have patient drink plenty of water in small sips. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

If required, therapy of irritative effect.

After absorbing large amounts of substance: administration of activated charcoal.

Acceleration of gastrointestinal passage

5. FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing media

Water spray, fog, alcohol resistant foam, CO₂ or dry chemical.

5.2 Unsuitable extinguishing media

No data available.

5.3 Special hazards arising from the substance or mixture

Possible formation of fluorine-containing fumes.

In case of fire cool endangered containers with water.

Closed container may rupture if strongly heated.

5.4 Advise for firefighters

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 on accordance with local regulations.

In case of fire: Wear a self-contained respiratory apparatus.

5.5 Unusual Fire Hazards:

None.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment (Refer to section 8). Ensure adequate ventilation.

6.2 Environmental precautions

Do not allow entrance in sewage water, soil stretches of water, groundwater and 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 regulation.

Suitable absorbents: diatomaceous earth universal absorbent.

6.4 Reference to other sections

Safe handling: Refer to section 7

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Personal protection equipment: Refer to section 8

Disposal: Refer to section 13

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide good ventilation or extraction. Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and amendments (CE certification). If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used. If there is the possibility of skin/eye/body protection should be used. Do not breathe in vapours or aerosols.

7.2. Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion

Take precautionary measures against static charges, keep away from sources of ignition.

Danger of explosion from residual product fumes; avoid spark production through cutting, grinding, or welding work in the area of the container.

Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place. Protect from moisture.

Recommended storage temperature: 20-25°C.

7.3. Specific end use(s):

The product is not supposed to be used in spray applications which are intended for the end consumer. If the substance can be applied to spraying products in the end-consumer market, a separate risk assessment of the finished end-product will have to be performed. If a substance for spray applications is supposed to be applied at the site of the end customer, please ask for technical information.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional Information: The lists valid during the making were used as basis.

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.

8.2.2 Personal protective equipment:

Respiratory protection

In case of dusts/vapours/aerosols being formed or if the limit values like TLV are exceeded: use respiratory equipment with suitable filter (filter type ABEK) or wear a self-contained respiratory apparatus. Use only respiratory protection equipment with CE-symbol including four-digit test number. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used. Note time limit for wearing respiratory protective equipment.

Hand protection

Glove material : Butyl-rubber Break through time : >= 480 min

Glove material : Fluorinated rubber (Viton)
Break through time : >= 480 min

Additional information: Selection of protective gloves to meet the requirements of 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

Safety glasses

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Skin and body protection

Suitable protective clothing - Use disposable clothing if appropriate.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point : 78 °C (Tested substance: Ethanol)

Melting Point : No data available.

Flash Point : 7 °C

Evaporation Rate : No data available.

Flammability Limit-Lower : 3.5 % (V) Tested substance: Ethanol : 28 % (V) Tested substance: Ethanol : 60 hPa (20 °C) Tested substance: Ethanol

<0.1 hPa (20 °C) Tested substance: pure substance

Density : 0.8 g/cm³ (20 °C) pH : 7.2 (1000g/l) (20 °C)

Solubility in Water : Miscible
Appearance (colour) : Colourless
Appearance (form) : Liquid
Odour : Alcohol

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.

Thermal decomposition / conditions to avoid: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions: Reacts violently with strong oxidants.

10.4 Conditions to avoid: Keep away from heat, open flames and other ignition sources.

10.5 Incompatible materials: Strong oxidising agents

10.6 Hazardous decomposition products: None known.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Exposure route	Endpoint	Value	Species	Sources
Oral	LD50	6311.8 mg/kg	Rat	ECHA
Inhalation	LC50	124.85 mg/L	Rat	ECHA
Dermal	LD50	2000 mg/kg	Rat	ECHA

Skin corrosion/irritation: No data available.

Specified substances:

Ethanol : OECD Test Guideline 404 (Rabbit): Not irritating
Triethoxysilane : OECD Test Guideline 404 (Rabbit): Not irritating

Eye irritation: No data available.

Specified substances:

Ethanol : (Rabbit) Not irritating

Respiratory or skin sensitization: No data available.

Specified substances:

Ethanol : Local Lymph Node Assay, OECD TG 429 (Mouse): Non sensitizing, Not classified. Triethoxysilane : Buehler Test, OECD Test Guideline 406 (Guinea Pig): Not a skin sensitizer.

Summary of evaluation of the CMR properties: No data available.

Specific target organ toxicity – single exposure: No data available.

Specific target organ toxicity – repeated exposure: No data available.

Aspiration hazard: No data available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Specified substance: Ethanol

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Endpoint	Value	Species	Exposure time	Sources
LC50	11.2 – 14.2 g/L	Freshwater fish	96 hours	ECHA
EC10/LC10 or NOEC	250 mg/L	Freshwater fish	5 days	ECHA
EC50	5.012 g/L	Freshwater invertebrates	48 hours	ECHA
EC10/LC10 or NOEC	9.6 mg/L	Freshwater invertebrates	10 days	ECHA
EC50	275 mg/L	Freshwater algae	96 hours	ECHA

12.2 Process of degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB Assessment

Data are not available.

12.6 Other adverse effects

An expert judgement stated that no classification is necessary based on present knowledge.

13. DISPOSAL CONSIDERATION

13.1 Waste treatment methods

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

Uncleaned packaging

Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities.

Incorrect disposal or reuse of this container is illegal and can be dangerous.

If there is product residue in the emptied container, follow directions for handling on the container's label.

Other countries: observe the national regulations.

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 : 1263

UN proper shipping name : Paint-related materials

Transport hazard class(es) : 3
Packing group : II
Environmental hazards : Special precautions for user : Yes
Remarks : -

14.2 IMDG-Code

UN number : 1263

UN proper shipping name : Paint-related material

Transport hazard class(es) : 3
Packing group : II
Environmental hazards : Marine pollutant : No
EmS Code : -

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Special precaution for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes and variations in regional or country.

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 CRF 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

No chemical safety assessment is required for this product.

16. OTHER INFORMATION

Further information

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material use in combination with any other materials or any process, unless specified in the test.