| SAFETY DATA SHEET<br>IGL COATINGS™ ECOCLEAN IRON   |  |   |                             |   |  |
|--|--|---|-----------------------------|---|--|
| Specification<br>Version   | 154290<br>1.15   | Revision date<br>Page                               | <b>16.02.2021</b><br>1 of 7 |   |  |
| 1. IDENTIFICATI<br>PRODUCT NAI<br>FUNCTION<br>COMPANY<br>ADDRESS<br>PHONE<br>EMAIL ADDRE | ME : IGL<br>: Rust<br>: Omi<br>: No.7<br>Sela<br>: +60 | Coatings™ ecoclean iro<br>t remover<br>ment Sdn Bhd | n<br>, Hicom-Glenmarie Ir   | <b>OMPANY/UNDERTAKING</b><br>ndustrial Park, Seksyen U1, 40150 Shah Alam, |  |

# 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

| Regulation (EC) No. 1272/2008 |            |  |  |  |
|-------------------------------|------------|--|--|--|
| Physical hazards              |            |  |  |  |
| Corrosive to metal            | Category 1 |  |  |  |
| Health hazards                |            |  |  |  |
| Acute Toxicity (Oral)         | Category 4 |  |  |  |
| Serious Eye Damage            | Category 1 |  |  |  |
| Skin Irritation               | Category 2 |  |  |  |
| Skin Sensitization            | Category 1 |  |  |  |

# 2.2 Label Elements

Regulation (EC) No. 1272/2008



# Signal word

Danger

# Hazard statements

| H290 | May be corrosive to metals          |
|------|-------------------------------------|
| H302 | Harmful if swallowed                |
| H315 | Causes skin irritation              |
| H317 | May cause an allergic skin reactior |
| H318 | Causes serious eye damage           |
|      |                                     |

# **Precautionary statements**

| P234           | Keep only in original packaging.   |
|----------------|--|
| P261           | Avoid breathing dust/fume/gas/mist/vapours/spray.  |
| P264           | Wash exposed skin 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+P312      | IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.                                  |
| P302+P352      | IF ON SKIN: Wash with plenty of water.   |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present |
|                | and easy to do. Continue rinsing.  |
| P310           | Immediately call a POISON CENTRE/doctor.   |
| P330           | Rinse mouth.   |
| P332+P313      | If skin irritation occurs: Get medical advice/attention.                                       |
| P337+P313      | If eye irritation persists: Get medical advice/attention.                                      |
| P362+P364      | Take off contaminated clothing and wash it before reuse.                                       |
| P390           | Absorb spillage to prevent material damage.  |
| P406           | Store in a corrosion resistant container with a resistant inner liner.                         |
| P501           | Dispose of contents/container to comply with local, state and federal regulations.             |

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| CAS No.     | Chemical Name                                      | Chemical Name             |                                   |         |  |  |
|-------------|--|---------------------------|-----------------------------------|---------|--|--|
|             | EC No.   | Index No.                 | REACH No.                         |         |  |  |
|             | Classification acco                                | ording to Regulation (EC  | ) No. 1272/2008 (CLP)             |         |  |  |
| 7732-18-5   | Water  |                           |                                   | 80-100% |  |  |
|             | 231-791-2  | Not applicable            | Not applicable                    |         |  |  |
|             | Not applicable                                     |                           |                                   |         |  |  |
| 367-51-1    | Sodium mercapto                                    | acetate                   |                                   | 5–10%   |  |  |
|             | 206-696-4  | Not applicable            | 01-2119968564-24-0000             |         |  |  |
|             | Met. Corr.1: H290;                                 | Acute Tox.3: H301; Acu    | te Tox.4: H312; Skin Sens.1: H317 |         |  |  |
| 68891-38-3  | Sodium laureth sulphate                            |                           |                                   | 1-5%    |  |  |
|             | 500-234-8  | Not applicable            | 01-2119488639-16-0000             |         |  |  |
|             | Skin Irr. 2: H315; E                               | ye Dam. 1: H318; Aquat    | ic Chronic 3: H412                |         |  |  |
| 110615-47-9 | Glucopyranose, oligomeric, C10-16-alkyl glucosides |                           |                                   |         |  |  |
|             | 600-975-8  | Not applicable            | 01-2119489418-23-0000             |         |  |  |
|             | Skin Irr. 2: H315; Eye Dam. 1: H318                |                           |                                   |         |  |  |
| 164462-16-2 | Trisodium dicarboxymethyl alanite                  |                           |                                   | 1–5%    |  |  |
|             | 605-362-9  | Not applicable            | Not applicable                    |         |  |  |
|             | Not applicable                                     |                           |                                   |         |  |  |
| 6419-19-8   | Amino trimethyler                                  | ne Phosphonic Acid (ATI   | MP)                               | 0.1-1%  |  |  |
|             | 229-146-5  | Not applicable            | 01-2119487988-08-0001             |         |  |  |
|             | Met. Corr.1: H290,                                 | Eye Irr.2: H319           |                                   |         |  |  |
| 1336-21-6   | Ammonia, aqueou                                    | is solution               |                                   | 0.1-1%  |  |  |
|             | 215-647-6  | 007-001-01-2              | 01-2119982985-14-0000             |         |  |  |
|             | Aquatic Acute 1: H                                 | 1400; Skin Corr. 1B: H314 | 4                                 |         |  |  |

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# Additional information:

The exact percentage of some ingredients used in this product are considered to be proprietary and are withheld as confidential business information.

# 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

# **General Information**

Under shower. Take off contaminated clothing immediately.

# After Inhalation

Move to fresh air. Oxygen or artificial respiration if needed.

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

# After skin contact

Wash off immediately with soap and plenty of water. In case of skin irritation, seek medical treatment.

# After contact with eyes

Wash open eyes immediately, abundantly and thoroughly for at least 15 minutes.

Remove contact lenses, if present and easy to do. Consult an ophthalmologist immediately.

# After ingestion

Do not induce vomiting. Rinse mouth and lips with plenty of water.

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

# 4.2 Most important symptoms and effects, both acute and delayed

Lungs : Cough. Possible resorption by mucous membrane.

Eye : Conjunctivitis

Skin : Irritation, sensitization

Ingestion : Headaches, dizziness, tiredness, stomach and intestinal symptoms.

# 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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# 5.1 Suitable extinguishing media

Foam, dry powder, carbon dioxide.

# 5.2 Unsuitable extinguishing media

High pressure water jet

# 5.3 Special hazards arising from substance or mixture

Exposure to decomposition products may be a hazard to health.

Thermal decomposition giving flammable and toxic products (Hydrogen sulphide, methylmercaptan, ethylmercaptan, nitrogen oxides, carbon monoxide and sulphur oxides) formed under fire conditions.

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# 5.4 Advice for firefighters

Wear self-contained breathing apparatus and acid resistant clothing.

Containers/tanks should be cooled with water spray. In case of fire, remove exposed containers.

# 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). Avoid contact with the skin and eyes.

Ensure adequate ventilation.

# **6.2 Environmental precautions**

Do not release into the environment. Do not let product enter drains.

# 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, saw-dust). Treat the recovered material as prescribed in the section on waste disposal.

Clean contaminated articles and floor according to the environmental legislation.

# 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).

Advice on protection against fire and explosion

To avoid thermal decomposition, do not overheat.

# 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.

Store away from moisture and heat to maintain the technical properties of the product.

# Advice on storage compatibility

Do not store together with food, drink and feeding stuffs.

# Further information on storage conditions

Keep the packing dry and well-sealed to prevent contamination.

Recommended storage temperature: 20-25 °C.

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

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# 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.

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

# 8.2 Exposure Control

# 8.2.1 General protective and hygienic measures:

General industrial hygiene practice.

Do not eat, drink or smoke when using this product.

Ensure adequate ventilation, especially in confined area.

# 8.2.2 Personal protective equipment:

# **Respiratory protection:**

In case of insufficient ventilation, wear self-contained breathing apparatus.

# Protection of hands:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

# **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Suitable material of gloves includes neoprene or butyl rubber with thickness 0.75mm.

# Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Safety goggles/eye protection recommended during refilling.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

| Boiling Point       | : 100 °C            |
|---------------------|---------------------|
| Specific Gravity    | : 1.068             |
| Density             | : 1.07              |
| Volatile Organic %  | : 0.0 %             |
| pH                  | :7                  |
| Evaporation Rate    | : 0.977 (water = 1) |
| Solubility in Water | : Soluble           |
| Appearance (color)  | : Slightly pink     |
| Appearance (form)   | : Liquid            |
| Odour               | : Sulfidic          |
| Metal corrosivity   | : <6.25 mm/year     |
|                     |                     |

# **10. STABILITY AND REACTIVITY**

**10.1 Reactivity**: Stable under normal condition of handling and storage.

**10.2 Chemical stability**: Stable under normal condition.

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

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: Avoid extreme temperatures (above 40 °C) and direct sunlight.

10.5 Incompatible materials: Strong oxidizing agents hydrogen peroxide, hypochlorite and strong acid.

**10.6 Hazardous decomposition products**: Carbon monoxide, carbon oxide, methylmercaptan, ethylmercaptan, nitrogen dioxide, sulphur oxides, hydrogen sulphide.

# **11. TOXICOLOGICAL INFORMATION**

Information on toxical origal offects

| information on toxicological effects |          |             |         |        |  |  |
|--------------------------------------|----------|-------------|---------|--------|--|--|
| Exposure route                       | Endpoint | Value       | Species | Source |  |  |
| Oral                                 | LD50     | 1470 mg/kg  | Rat     | ECHA   |  |  |
| Dermal                               | LD50     | 11640 mg/kg | Rat     | ECHA   |  |  |

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Serious eye damage/eye irritation: May causes eye damage or eye irritation.

Respiratory or skin sensitization: May causes skin sensitization.

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

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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: Amino trimethylene phosphonic acid (ATMP)

| Endpoint     | Value    | Species                  | Exposure time | Sources |
|--------------|----------|--------------------------|---------------|---------|
| LC50         | 160 mg/L | Freshwater fish          | 4 days        | ECHA    |
| EC50/LC10 or | 22 mg/l  | Freshwater fish          | 60 days       | ЕСНА    |
| NOEC         | 23 mg/L  | Freshwater fish          | 60 days       | ECHA    |
| EC50/LC50    | 297 mg/L | Freshwater invertebrates | 48 hours      | ECHA    |
| EC50/LC50    | 94 mg/L  | Marine invertebrates     | 48 hours      | ECHA    |
| NOEC         | 25 mg/L  | Aquatic invertebrates    | 28 days       | ECHA    |

# Specified substance: Sodium laureth sulphate

| Endpoint | Value        | Species                       | Exposure time | Sources |
|----------|--------------|-------------------------------|---------------|---------|
| LC50     | 7.1 mg/L     | Fish                          | 4 days        | ECHA    |
| NOEC     | 140-200 μg/L | Fish                          | 28 days       | ECHA    |
| EC50     | 7.2-7.4 mg/L | Freshwater invertebrates      | 48 hours      | ECHA    |
| NOEC     | 270 µg/L     | Aquatic invertebrates         | 21 days       | ECHA    |
| EC50     | 27-27.7 mg/L | Aquatic algae & cyanobacteria | 72 hours      | ECHA    |

# Specified substance: Glucopyranose, oligomeric, C10-16-akyl glucosides

|          | ·             |                               |               |         |
|----------|---------------|-------------------------------|---------------|---------|
| Endpoint | Value         | Species                       | Exposure time | Sources |
| LC50     | 2.95-5.9 mg/L | Fish                          | 4 days        | ECHA    |
| NOEC     | 1-3.2 mg/L    | Fish                          | 28 days       | ECHA    |
| EC50     | 7-14 mg/L     | Aquatic invertebrates         | 48 hours      | ECHA    |
| NOEC     | 1-4 mg/L      | Aquatic invertebrates         | 21 days       | ECHA    |
| EC50     | 5-25 mg/L     | Aquatic algae & cyanobacteria | 72 hours      | ECHA    |

# 12.2 Process of degradability

Readily biodegradable.

# 12.3 Bioaccumulative potential

Phosphonic acid derivative: Bioaccumulation Factor (BCF) is reported as 22 L/kg ww.

# 12.4 Mobility in soil

No data available.

# 12.5 Results of PBT and vPvB Assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# 12.6 Other adverse effects

Data are not available.

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Dispose of contents/container in accordance with local/regional/national/international regulation. **Sewage disposal-related information** 

Do not empty into drains.

# 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.

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#### 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                    | :-                    |
|------------------------------|-----------------------|
| UN proper shipping name      | : Non dangerous goods |
| Transport hazard class(es)   | : -                   |
| Packing group                | :-                    |
| Environmental hazards        | : No                  |
| Special precautions for user | : No data available.  |
| Remarks                      | : -                   |
| 14.2 IMDG-Code               |                       |
| UN number                    | : -                   |
| UN proper shipping name      | : Non dangerous goods |
| Transport hazard class(es)   | : -                   |
| Packing group                | :-                    |
| 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 or exempted from listing on the TSCA Inventory of Chemical Substances.

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

This product contains the following substance subject to the CERCLA Hazardous Substance List

| Component                 | CAS No.   |
|---------------------------|-----------|
| Ammonia, aqueous solution | 1336-21-6 |

# 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

This product contains the following substance subject to the reporting requirements of EPCRA Section 313

| Component                 | CAS No.   |
|---------------------------|-----------|
| Ammonia, aqueous solution | 1336-21-6 |

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# 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

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

# **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.

