Section 1. Identification

GHS product identifier : Metalcare Galvanised Iron Cleaner (GIC 2)

Other means of identification : A non-abrasive acidic type cleaner for galvanised steel surfaces.

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Removes temporary protective coating from new galvanised steel.
Removes surface oxidation from old weathered galvanised steel.
Improves adhesion of the primer to galvanised steel.

Supplier’s details : Kansai Plascon (Pty) Ltd
P.O. Box 4010
Luipaardsvlei
1743

Emergency phone : (011) 951 4500 (within hours of operation)
Facsimile : (011) 955 2841
National Contact Person : Mr B. Bhugwandin

Section 2. Hazards identification

Classification of the substance or mixture : SKIN CORROSION/IRRITATION - Category 1
SERIOUS EYE DAMAGE/IRRITATION - Category 2

Label elements according to : SANS 10234: 2008

Hazard pictograms : 

Signal word : Danger

Hazard statements : H314 - Causes severe skin burns and eye damage.
H319 - Causes serious eye irritation.

Precautionary statements

General : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.

Prevention : P202 - Do not handle until all safety precautions have been read and understood.
P233 - Keep container tightly closed.
P260 - Do not breathe vapor.
P262 - Do not get in eyes, on skin, or on clothing.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves, protective clothing, eye protection or face protection.
P283 - Wear fire/flame resistant/retardant clothing.
Metalcare Galvanised Iron Cleaner (GIC 1)

**Response**
- P310 - Immediately call a POISON CENTER or physician if you feel unwell.
- P314 - Get medical advice or attention if you feel unwell.
- P363 - Wash contaminated clothing before reuse.
- P301+330+331 - IF SWALLOWED - Rinse mouth. Do NOT induce vomiting.
- P303+361+353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
- P333+313 - If skin irritation or a rash occurs: Get medical advice/attention.
- P337+313 - If eye irritation persists get medical advice/attention.
- P370+380 - In case of fire: Evacuate area.

**Storage**
- P410 - Protect from sunlight.
- P402+404 - Store in a dry place. Store in a closed container.

**Disposal**
- P501 - Dispose of contents/containers in accordance with local regulation.

**Other hazards which do not Result in classification**: None identified.

### Section 3. Composition/information on ingredients

**Substance/mixture**: Mixture

**Other means of identification**: A non-abrasive acidic type cleaner for galvanised steel surfaces.

**CAS number/other identifiers**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>%</th>
<th>SANS 10234 Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) ethanol</td>
<td>112-34-5</td>
<td>5.0-10.0</td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td>Phosphoric acid</td>
<td>7664-38-2</td>
<td>5.0-10.0</td>
<td>Skin Irrit. 1 H314</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.

### Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact**: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

**Skin contact**: Flush contaminated skin with plenty of water. Remove contaminated clothing.
Metalcare Galvanised Iron Cleaner (GIC 1)

and shoes. Get medical attention if symptoms occurs. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/ effects, acute and delayed

Potential acute health effects
Eye contact: Causes serious eye irritation.
Inhalation: No known significant effects or critical hazards.
Skin contact: Causes severe skin burns.
Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms
Eye contact: Adverse symptoms may include pain or irritation, watering or redness.
Inhalation: No data available. Adverse symptoms may include nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo.
Skin contact: Adverse symptoms may include irritation or redness.
Ingestion: No data available. Adverse symptoms may include nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments: No specific treatment.
Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire such as dry powder, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical
In a fire or if heated, a pressure increase will occur and the container may burst, Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products
Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
Metalcare Galvanised Iron Cleaner (GIC 1)

metal oxide/oxides

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment.
Metalcare Galvanised Iron Cleaner (GIC 1)

before entering eating areas. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest.

Conditions for safe storage, Including any Incompatibilities
: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) ethanol</td>
<td>EU IOELV: TWA 10 ppm: 67.5 mg/m³</td>
</tr>
<tr>
<td></td>
<td>STEL 15 ppm: 101.2 mg/m³</td>
</tr>
<tr>
<td>Phosphoric acid</td>
<td>ACGIH (USA):</td>
</tr>
<tr>
<td></td>
<td>PEL: Long-term value: 1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>REL: Short-term value: 3 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 1 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TLV: Short-term value: 3 mg/m³</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 1 mg/m³</td>
</tr>
</tbody>
</table>

Recommended monitoring Procedures
: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls
: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhausts ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Environmental exposure controls
: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures
: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Metalcare Galvanised Iron Cleaner (GIC 1)

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicated this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this necessary.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Thin Green</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>&lt; 2</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>Non-flammable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower and upper explosive (flammable) limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.02 kg/l (typical)</td>
</tr>
</tbody>
</table>
Metalcare Galvanised Iron Cleaner (GIC 1)

Solubility: Soluble in water

Partition coefficient, n-octanol/water: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity (Ford 4 cup): 10 sec.

Section 10. Stability and reactivity

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No available data.

Incompatible materials Hazardous decomposition products: No available data.

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Acute Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) ethanol</td>
<td>LD50 Oral</td>
<td>Mouse</td>
<td>2410 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3305 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>2764 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Phosphoric acid</td>
<td>Acute LD50 Oral</td>
<td>Rat</td>
<td>1.25 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 Inhalation</td>
<td>Rat</td>
<td>25.5 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) ethanol</td>
<td>Skin - Irritation</td>
<td>Rabbit</td>
<td>-</td>
<td>1 hour</td>
<td>Mild irritant Irritant</td>
</tr>
<tr>
<td></td>
<td>Eye - Irritation</td>
<td>Rabbit</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Specific target organ toxicity (single exposure)
No data available

Specific target organ toxicity (repeated exposure)
No data available

Aspiration hazard
No data available
Information on the likely routes of exposure: Inhalation, skin and eye contact.

Potential acute health effects:
- **Eye contact**: Causes serious eye irritation.
- **Inhalation**: No known significant effects or critical hazards.
- **Skin contact**: Causes severe skin burns.
- **Ingestion**: No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics:
- **Eye contact**: Adverse symptoms may include pain or irritation, watering or redness.
- **Inhalation**: No data available. Adverse symptoms may include nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo.
- **Skin contact**: Adverse symptoms may include irritation or redness.
- **Ingestion**: No data available. Adverse symptoms may include nausea or vomiting, Headache, drowsiness/fatigue, dizziness/vertigo.

Potential Chronic health effects:
- **General**: Causes severe skin burns and eye damage.
- **Carcinogenicity**: No known significant effects or critical hazards.
- **Mutagenicity**: No known significant effects or critical hazards.
- **Teratogenicity**: No known significant effects or critical hazards.
- **Developmental effects**: No known significant effects or critical hazards.
- **Fertility effects**: No known significant effects or critical hazards.

Acute toxicity estimates:
No data available.

### Section 12. Ecological information

#### Toxicity

<table>
<thead>
<tr>
<th>Product/Ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) ethanol</td>
<td>Acute LC50 1300 mg/l Fish</td>
<td>Bluegill sunfish</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 &gt;100 mg/l Fish</td>
<td>Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute ErC50 &gt;100 mg/l Algae</td>
<td>Green algae</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 255 mg/l Bacteria</td>
<td>Bacteria</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

#### Persistence and degradability

<table>
<thead>
<tr>
<th>Product/Ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) ethanol</td>
<td>-</td>
<td>28 day(s)</td>
<td>Readily</td>
</tr>
</tbody>
</table>

#### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/Ingredient name</th>
<th>LogPow</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) ethanol</td>
<td>&lt;3</td>
<td>&lt;100</td>
<td>Low</td>
</tr>
</tbody>
</table>

#### Mobility in soil

<table>
<thead>
<tr>
<th>Soil/ water partition coefficient</th>
<th>Mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Koc)</td>
<td>No data available.</td>
</tr>
<tr>
<td>Mobility</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

#### PBT/vPvB data

<table>
<thead>
<tr>
<th>PBT/vPvB data</th>
<th>P: No data available. B: No data available. T: No data available.</th>
</tr>
</thead>
</table>

#### Other adverse effects

No known significant effects or critical hazards.
Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Section 14. Transport information

<table>
<thead>
<tr>
<th>UN number</th>
<th>Transportation - road - SANS 10228:2012</th>
<th>Transportation - Maritime - IMO/IMDG</th>
<th>Transportation - Air - IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>3066</td>
<td>3066</td>
<td>3066</td>
<td>3066</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Paint</td>
<td>Paint</td>
<td>Paint</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Additional information</td>
<td>No data available</td>
<td>Emergency schedules (EmS) F-A, S-B</td>
<td>Remarks: (&lt; 5L: ) Limited Quantity - ADR/IMDG 3.4.6</td>
</tr>
<tr>
<td>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product:

- Relevant information regarding restrictions: None known.
- EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC
- Other National regulations: None. Standards used for PPE recommendations in Section 8: NIOSH-National Institute for Occupational Health and Safety (USA) EN 166- European standard
Metalcare Galvanised Iron Cleaner (GIC 1)

which concerns the area of eye protection. EN 374-3 European standards for permeation and penetration. EN 141/EN 143 European standards for gas mixtures to remove specified gases and vapours or combined filters for removing solids, and/or liquid particles and specified gases and vapours.

### Section 16. Other information

#### History

- **Date of printing**: 25/04/2018
- **Date of previous issue**: 25/10/2017
- **Key to abbreviations**
  - ATE = Acute Toxicity Estimate
  - BCP = Bioconcentration Factor
  - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
  - IATA = International Air Transport Association
  - IBC = Intermediate Bulk Container
  - IMDG = International Maritime Dangerous Goods
  - LogP_{ow} = logarithm of the octanol/water partition coefficient
  - OHSA = Occupational Health and Safety Act, 1993 (South Africa)
  - RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
  - UN = United Nations

#### References

: Supplier safety data sheets.

#### Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

#### Notice to readers:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

#### Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be only used as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.