1. IDENTIFICATION OF PREPARATION AND OF COMPANY

Full name: Oasis Zinc Silicate-85

Manufacturer: Al Gurg Paints LLC
PO Box 22334
Sharjah
United Arab Emirates
Telephone: +971 (0)65 343 919
Fax: +971 (0)65 343 983

Description: Zinc silicate coating for the protection of blast cleaned steel surfaces. Application by spray or brush under tropical conditions. Based on a three pack inorganic silicate resin system with metallic zinc pigment and containing propanol-2-ol, ethanol and 1-methoxypropan-2-ol solvents.

2. COMPOSITION/INFORMATION ON INGREDIENTS

The following ingredients have recognised health effects or exposure limits, and are present in concentrations above the limits laid down in the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 (CHIP 2).

<table>
<thead>
<tr>
<th>Substance</th>
<th>Weight in Paint</th>
<th>Risk Phrases*</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base:</td>
<td></td>
<td>Classification</td>
<td></td>
</tr>
<tr>
<td>Zinc dust</td>
<td>&gt;50%</td>
<td>F</td>
<td>R10,R15</td>
</tr>
<tr>
<td>Ethyl silicate</td>
<td>2.5-10%</td>
<td>Xn</td>
<td>R20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xi</td>
<td>R36/37</td>
</tr>
</tbody>
</table>

The following ingredients have not been assigned hazard symbols or risk phrases, but have recognised exposure limits (see Section 8 for details of the limits).

<table>
<thead>
<tr>
<th>Substance</th>
<th>Weight in Paint</th>
<th>Risk Phrases*</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-methoxypropan-2-ol</td>
<td>2.5-10%</td>
<td>-</td>
<td>107-98-2</td>
</tr>
<tr>
<td>Ethanol</td>
<td>2.5-10%</td>
<td>-</td>
<td>64-17-5</td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>2.5-10%</td>
<td>-</td>
<td>67-63-0</td>
</tr>
</tbody>
</table>

*For full details of R-phrases, see Section 16.

3. HAZARDS IDENTIFICATION

This material has been assessed under the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994 and has been classified as follows:

BASE:
F R10 Flammable.
F R15 Contact with water liberates highly flammable gases.

ADDITIVE F R11 Highly flammable.

CATALYST F R11 Highly flammable.
4. FIRST-AID MEASURES

In all cases of doubt, or where symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

**Inhalation**
Remove to fresh air, keep patient warm and at rest. If breathing has stopped, administer artificial respiration. Give nothing by mouth. If unconscious, place in the recovery position and seek medical advice.

**Eye contact**
Contact lenses should be removed. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart and seek medical advice.

**Skin contact**
Remove contaminated clothing. Wash skin thoroughly with soap and water, or use a proprietary skin cleanser. Do NOT use solvents or thinners.

**Ingestion**
If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

5. FIRE-FIGHTING MEASURES

**Extinguishing Media**
Use alcohol resistant foam, carbon dioxide, dry powder or water spray/mist. Do NOT use water jet.

**Recommendations**
Fire will produce dense black smoke containing hazardous products of combustion (see Section 10). Exposure to decomposition products may be a hazard to health. Appropriate self-contained breathing apparatus may be required. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire-fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Exclude sources of ignition and ventilate the area. Exclude non-essential personnel. Avoid breathing vapours. Refer to protective measures listed in sections 7 and 8. Contain and collect spillages with non-combustible absorbent materials e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal in accordance with the waste regulations (see Section 13). Do not allow to enter drains or water courses. Clean preferably with a detergent; avoid the use of solvents. If the product enters drains or sewers, the local water company should be contacted immediately; in the case of contamination of streams, rivers or lakes, the National Rivers Authority.

7. HANDLING AND STORAGE

**Handling**
Keep container tightly closed. Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking should be prohibited in areas of storage and use.

For personal protection, see Section 8.

Never use pressure to empty; the container is not a pressure vessel.

The Manual Handling Operations Regulations may apply to the handling of containers/packages of this product. The following guide weight indicators are given to enable users to carry out assessments. This information is also shown on the container label.

**Component A (Catalyst supplied in a 1ltr polythene bottle)** – 0.93 kg

**Component B**: (supplied in a 5 ltr polythene bottle) – 2.39 kg

**Component C**: (supplied in a Metal Can) – 9.9 kg

**Storage**
Observe the label precautions. Store between 5°C and 25°C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers
which are opened should be properly resealed and kept upright to prevent leakage.

The principles contained in the HSE guidance note Storage of Packaged Dangerous Substances, should be observed when storing this product. Store separately from oxidising agents and strongly alkaline and strongly acidic materials.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Engineering Measures

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and/or solvent vapours below the relevant occupational exposure limits, suitable respiratory protective equipment should be worn (see ‘Personal Protection’ below).

#### Exposure Limits

Occupational Exposure Standards and/or Maximum Exposure Limits have been established by the Health and Safety Commission or recommended by the supplier for certain of the ingredients. OELs are taken from the current version of EH40 except those marked ‘Sup’, which are assigned by the supplier of the substance.

<table>
<thead>
<tr>
<th>Substance</th>
<th>8 hr TWA¹</th>
<th>15 min STEL²</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-methoxypropan-2-ol</td>
<td>100ppm(OES)</td>
<td>300ppm(OES)</td>
<td>Skin</td>
</tr>
<tr>
<td>Ethanol</td>
<td>1000ppm(OES)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethyl silicate</td>
<td>10ppm(OES)</td>
<td>30ppm(OES)</td>
<td></td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>400ppm(OES)</td>
<td>500ppm(OES)</td>
<td></td>
</tr>
<tr>
<td>Zinc dust</td>
<td>10mg/m³(OES)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ Long term exposure limit - 8 hour time weighted average

² Short term exposure limit - 15 minute reference period

³ There is a risk of absorption through unbroken skin

OES Occupational exposure standard

Further guidance on OES/MEL and the assessment of occupational exposure to harmful materials, including mixed exposures, is given in HSE Guidance Note EH40.

#### Personal Protection

All personal protective equipment, including respiratory protective equipment, used to control exposure to hazardous substances must be selected to meet requirements of the COSHH Regulations.

**Respiratory Protection** Air-fed respiratory protective equipment should be worn when this product is sprayed if the exposure of the sprayer or other people nearby cannot be controlled to below the Occupational Exposure limits and engineering controls and methods cannot reasonably be improved.

Dry-sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

**Hand Protection** When skin exposure may occur, advice should be sought from glove suppliers on appropriate types.

Barrier creams may help to protect exposed areas of skin but are not substitutes for full physical protection. They should not be applied once exposure has occurred.

**Eye Protection** Eye protection designed to protect against liquid splashes should be worn.

**Skin Protection** Cotton or cotton/synthetic overalls or coveralls are normally suitable. Grossly contaminated clothing should be removed and the skin washed with soap and water or a proprietary skin cleanser.
9. PHYSICAL PROPERTIES

Physical State: Viscous liquid
Odour: Characteristic odour
Colour: Grey
Density: 2.60 g/cm³
Viscosity Base: 22-28 Sec B4 at 25°C
Viscosity Additive: 22-28 Sec B4 at 25°C
Flash Point base: 55°C
Flash Point Additive: 10°C
Volatile Organic Content: 470 g/ltr
Explosion Limit - lower: 1.7%
Water Solubility: Partially miscible

10. STABILITY AND REACTIVITY

Stable under the recommended storage and handling conditions (see Section 7).

In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide and oxides of nitrogen may be produced.

Keep away from oxidising agents and strongly alkaline and strongly acidic materials to prevent the possibility of exothermic reaction.

11. TOXICOLOGICAL INFORMATION

There is no data available on the product itself.

Exposure to organic solvent vapours may result in adverse health effects such as irritation of the mucous membrane and the respiratory system and adverse effects on the renal and central nervous systems. Symptoms include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of consciousness.

Repeated or prolonged contact with the product may lead to removal of natural fats from the skin resulting in non-allergic contact dermatitis and absorption through the skin. Splashes in the eye may cause irritation and reversible local damage.

Ingestion may result in the following effects: sore throat, abdominal pain, drowsiness, nausea, vomiting and diarrhoea. Other effects may be as described for exposure to vapours.

12. ECOLOGICAL INFORMATION

There is no data available on the product itself.

The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters.

The Air Pollution Control requirements of regulations made under the Environmental Protection Act may apply to the use of this product.

13. DISPOSAL CONSIDERATIONS

Do not allow to enter drains or water courses, or dispose of where ground or surface waters may be affected.

Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.

Using information provided in this data sheet, advice should be obtained from the Environment Agency whether the special waste regulations apply.
14. TRANSPORT INFORMATION

Transport within the user's premises

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport Classification

Component B (Base):

Transport Details

<table>
<thead>
<tr>
<th>Class</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>:3</td>
<td>Paint</td>
<td>:1263</td>
</tr>
</tbody>
</table>

Sub Hazard : -  
Packing Group : III

Ensure drivers have adequate training.

For International Road/Rail

Chemical Name : Paint
Item Number : 5°(b)
Trem Card : 30G35

For Sea Transport

Marine Pollutant : No
EmS : 3-05
MFAG : 310

Component A (Additive):

Transport Details

<table>
<thead>
<tr>
<th>Class</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>:3</td>
<td>Paint</td>
<td>:1263</td>
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</tbody>
</table>

Sub Hazard : -  
Packing Group : III

Ensure drivers have adequate training.

For International Road/Rail

Chemical Name : Paint
Item Number : 5°(b)
Trem Card : 30G35

For Sea Transport

Marine Pollutant : No
EmS : 3-05
MFAG : 310

Component C (Zinc Dust):

Transport Details

<table>
<thead>
<tr>
<th>Class</th>
<th>Proper Shipping Name</th>
<th>UN Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>:4.3</td>
<td>Zinc Dust</td>
<td>:1436</td>
</tr>
</tbody>
</table>

Sub Hazard : -  
Packing Group : III

Ensure drivers have adequate training.
For International Road/Rail

Chemical Name : Zinc Dust
Item Number : 14°(c)
Trem Card : 43G09

For Sea Transport

Marine Pollutant : No
EmS : 4.3-06
MFAG : None

This information does not apply to carriage by air. Please contact the Export Department of Al Gurg Paints LLC if transport by air is required.

15. REGULATORY INFORMATION

The product has been classified and labelled for supply in accordance with the CHIP 2 regulations as follows:-

Base:

Symbols:

HIGHLY FLAMMABLE

Warning label phrases: Highly flammable.
Keep away from sources of ignition - No smoking.
Do not breathe vapour/spray.
In case of insufficient ventilation, wear suitable respiratory equipment.
Keep container tightly closed and in a well ventilated place.

Additive:

Symbols:

HIGHLY FLAMMABLE

Warning label phrases: Highly flammable.
Keep away from sources of ignition - No smoking.
Do not breathe vapour/spray.
In case of insufficient ventilation, wear suitable respiratory equipment.
Keep container tightly closed and in a well ventilated place.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Component C: (Zinc Dust)

Symbols:

HIGHLY FLAMMABLE

Named Substances: Zinc dust

Warning label phrases:
- Highly flammable.
- Keep away from sources of ignition - No smoking.
- Do not breathe vapour/spray.
- In case of insufficient ventilation, wear suitable respiratory equipment.
- Keep container tightly closed and in a well ventilated place.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

The information contained in this data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation.

The provisions of the Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations apply to the use of this product at work.

16. OTHER INFORMATION

Full details of R-phrases are as follows:-
- R20 Harmful by inhalation.
- R36/37 Irritating to eyes and respiratory system

The information in this data sheet is provided in accordance with the requirements of the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

The information contained in this data sheet is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

Further information and relevant advice can be found in:-

Control of Substances Hazardous to Health Regulations 1988 (SI 1988:1657)
Environmental Protection (Duty of Care) Regulations 1992 (SI 1992:2839)
Occupational Exposure Limits, EH40
Storage of Packaged Dangerous Substances, HS(G)71
The Approved Guide to the Classification and Labelling of Substances and Preparations Dangerous for Supply (Second Edition), L63
The Approved Supply List, L61
The Approved Code of Practice: Safety Data Sheets for Substances and Preparations Dangerous for