OASIS 840 GLASS FLAKE VINYL ESTER
PRODUCT HEALTH AND SAFETY DATA

Product Reference: Oasis 840 Glass Flake Vinyl Ester
Date of Issue: 23/03/2016

1. IDENTIFICATION OF PREPARATION AND OF COMPANY

Full name: Oasis 840 Glass Flake Vinyl Ester
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: An exterior coating for spray application to vessels and equipment subject to chemical spillage or fumes. Based on a solvent free vinyl ester resin system with glass flake and other inorganic pigments.

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>Styrene</td>
<td>25-50%</td>
<td>Xi R36/38</td>
<td>100-42-5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xn R20</td>
<td></td>
</tr>
<tr>
<td>Additive:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methyl ethyl ketone peroxide</td>
<td>25-50%</td>
<td>C R34</td>
<td>1338-23-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xn R20/22</td>
<td></td>
</tr>
<tr>
<td>Butanone</td>
<td>&lt;2.5%</td>
<td>Xi R36/37</td>
<td>78-93-3</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:
- R10 Flammable
- Xn R20 Harmful by inhalation
- Xi R36/38 Irritating to eyes and skin

Additive:
- Xn R20/21 Harmful by inhalation and if swallowed
- C R34 Causes burns
- Xi R36 Irritating to eyes
- O R7 May cause fire
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. Always seek medical advice.

- **Ingestion**: If accidentally swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. If conscious, rinse mouth, giving plenty of water to drink.

5. FIRE-FIGHTING MEASURES

- **Extinguishing Media**: Use alcohol resistant foam, carbon dioxide, dry powder or water spray/mist. Do NOT use water jet or halones. Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition.

- **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**: Persons with a history of skin sensitization problems should only be employed in processes in which this product is used under appropriate medical supervision.

  The additive should never be weighed out in the storage room. Keep additive and emptied container away from heat and sources of ignition. No sparking tools should be used. Avoid shock and friction. Confinement must be avoided. Do not inhale.

  Vapours are heavier than air and may spread along floors. They may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid concentrations higher than the occupational exposure limits.

  Additionally the product should only be used in areas from which all-naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Keep the container tightly closed. Exclude sources of heat, sparks and open flame. Non-sparking tools should be used.

  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.

Good housekeeping standards and regular safe removal of waste material will minimise the risks of spontaneous combustion and other fire hazards.

The Manual Handling 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.

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Additive</th>
<th>Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 litre unit</td>
<td>29.3 kg</td>
<td>0.6 kg</td>
<td>29.9 kg</td>
</tr>
<tr>
<td>5 litre unit</td>
<td>7.4 kg</td>
<td>0.1 kg</td>
<td>7.50 kg</td>
</tr>
</tbody>
</table>

**Storage**

The storage and use of this product is subject to the requirements of the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations. Up to 50 litres of such highly flammable liquids may be kept in a work room provided they are kept in a fire-proof cupboard or bin. Larger quantities must be kept in a separate storeroom conforming to the structural requirements of the regulations. Further guidance is contained in the HSE guidance note Storage of Flammable Liquids in Containers.

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 unauthorised access. Containers which are open should be properly re-sealed and kept upright to prevent leakage.

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

Store base and additive separately.

**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>Butanone</td>
<td>200ppm(OES)</td>
<td>300ppm(OES)</td>
<td>SK³</td>
</tr>
<tr>
<td>Methyl ethyl ketone peroxide</td>
<td>25ppm(OES)</td>
<td>0.2ppm(OES)</td>
<td></td>
</tr>
<tr>
<td>Styrene</td>
<td>100ppm(MEL)</td>
<td>250ppm(MEL)</td>
<td></td>
</tr>
</tbody>
</table>
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. A face shield is preferred over goggles when handling the additive.

**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

The figures given below, unless otherwise stated, refer to the composite material.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Viscous liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic odour</td>
</tr>
<tr>
<td>Colour</td>
<td>Limited</td>
</tr>
<tr>
<td>Density</td>
<td>1.30 g/cm³</td>
</tr>
<tr>
<td>Viscosity Base</td>
<td>20 - 30 poise BR at 25°C</td>
</tr>
<tr>
<td>Viscosity Additive</td>
<td>60-70 Sec B2 at 25°C</td>
</tr>
<tr>
<td>Flash Point base</td>
<td>32°C</td>
</tr>
<tr>
<td>Flash Point Additive</td>
<td>55°C</td>
</tr>
<tr>
<td>Volatile Organic Content</td>
<td>228 g/ltr</td>
</tr>
<tr>
<td>Explosion Limit - lower</td>
<td>0.8%</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Immiscible</td>
</tr>
</tbody>
</table>

### 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.

A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by direct contact between the additive and incompatible substances or by thermal decomposition at and above 60°C.

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.

Do NOT confine waste.

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

Base:

Transport Details

<table>
<thead>
<tr>
<th>UN Number</th>
<th>1263</th>
<th>Shipping Name</th>
<th>PAINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>3</td>
<td>Sub. Hazard</td>
<td></td>
</tr>
<tr>
<td>Item Number</td>
<td>31°(c)</td>
<td>Trem Card</td>
<td>30G35</td>
</tr>
<tr>
<td>Marine EmS</td>
<td>3-05</td>
<td>MFAG</td>
<td>310</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Additive:

Transport Details

<table>
<thead>
<tr>
<th>UN Number</th>
<th>Class</th>
<th>Shipping Name</th>
<th>Sub. Hazard</th>
<th>Packing Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>:3105</td>
<td>:5.2</td>
<td>ORGANIC PEROXIDE TYPE D, liquid</td>
<td></td>
<td>II</td>
</tr>
<tr>
<td>Item Number</td>
<td>:5°(b)</td>
<td>Trem Card</td>
<td>:52G01</td>
<td>Category</td>
</tr>
<tr>
<td>Marine EmS</td>
<td>:5.2-01</td>
<td>MFAG</td>
<td>:735</td>
<td>Marine Pollutant</td>
</tr>
</tbody>
</table>

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:-

For all colours except those listed in Section 1 as containing lead chromate:-

Base:

Symbols:

- HARMFUL

Named Substances: Styrene

Warning label phrases: Contains Styrene constituents. See information supplied by the manufacturer.

- Flammable.
- Harmful by inhalation.
- Irritating to eyes and skin
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Wear suitable protective clothing and gloves
- In case of insufficient ventilation, wear suitable respiratory equipment

Additive:

Symbols:

- OXIDISING
- CORROSIVE

Named Substances: Methyl ethyl ketone peroxide

Warning label phrases:

- Harmful by inhalation and if swallowed.
- Causes burns.
- Irritating to eyes
May cause fire
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing and gloves
During spraying wear air-fed respiratory protective equipment.

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.
R20/22 Harmful by inhalation and if swallowed.
R34 Causes burns.
R36/37 Irritating to eyes and respiratory system.
R36/38 Irritating to eyes and skin.

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 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:

Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972 (SI 1972:917)
Control of Substances Hazardous to Health 1988 (SI 1988:1657)
Environmental Protection (Duty of Care) Regulations 1992 (SI 1992:2839)
Occupational Exposure Limits, EH40
The Storage of Flammable Liquids in Containers, HS(G)51
Storage of Packaged Dangerous Substances, HS(G)71
Storage and Handling of Organic Peroxides, CS21
The Approved Guide to the Classification and Labelling of Substances and Preparations Dangerous for Supply (Second Edition), L63
The Approved Supply List, L76