1. IDENTIFICATION OF PREPARATION AND OF COMPANY

Full name: Oasis 8876 Coal Tar Epoxy
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: A hard wearing, abrasion resistant coating with excellent resistance to immersion in salt and fresh water and crude oil for spray or brush application to ship's bottoms and cargo tanks under tropical conditions. Based on a two pack coal tar epoxy resin system with inorganic pigments and containing xylene solvent. Designed for brush application.

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>Classification</th>
<th>Risk Phrases*</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Base:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pitch, Coal Tar, High Temperature</td>
<td>10-25%</td>
<td>Carc. Cat. 2</td>
<td>R45</td>
<td>065996-93-2</td>
</tr>
<tr>
<td>Xylene (mixture of isomers)</td>
<td>10-25%</td>
<td>Xi</td>
<td>R38</td>
<td>1330-20-7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xn</td>
<td>R20/21</td>
<td></td>
</tr>
<tr>
<td><strong>Additive:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epoxy resin (Numbers Average Mol Wt ≤ 700)</td>
<td>10-25%</td>
<td>Xi</td>
<td>R36/38,R43</td>
<td>25068-38-6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xn</td>
<td>R20/21</td>
<td></td>
</tr>
<tr>
<td>Creosote Oil, Acenaphthene Fraction</td>
<td>2.5-10%</td>
<td>Carc. Cat. 2</td>
<td>R45</td>
<td>090640-84-9</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Xn</td>
<td>R22</td>
<td></td>
</tr>
<tr>
<td>Distillates, Coal Tar, Heavy Oils</td>
<td>2.5-10%</td>
<td>Carc. Cat. 2</td>
<td>R45</td>
<td>090640-86-1</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 R20/21 Harmful by inhalation and in contact with skin.
- Xi R38 Irritating to skin
Xi R43 May cause sensitization by skin contact.
Carc. Cat. 2 R45 May cause cancer.
Xn R20/21 Harmful by inhalation and in contact with skin.

Additive:-

R10 Flammable
Xn R20/22 Harmful by inhalation and in contact with skin.
Xi R36 Irritating to eyes
Xi R43 May cause sensitization by skin contact.

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

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

Skin contact should be avoided, preferably by use of a closed system. Where this is not practicable, protective clothing, gloves and face shields should be used to protect bare skin.

The HSE guidance leaflet "Skin cancer caused by pitch and tar" should be issued to all employees.
High standards of skin care and personal hygiene should be exercised at all times. Medical advice should be sought without delay if warts appear.

Skin exposure combined with exposure to sunlight or UV radiation may also result in redness, swelling and burning effects. This is a sensitisation reaction (photo-toxic erythema) and can result in the effects recurring simply by exposure of the sensitised area to sunlight.

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.

Required air quantity to ventilate to 10% of the LEL. 72 m³/lt

The above figure is given as a guide only. Ventilation and extraction must be arranged so that all parts of the workplace are properly ventilated i.e. there are no recesses or pockets where high vapour concentrations are allowed to build up.

If there is any doubt about the adequacy of the ventilation/extraction of solvent vapour, regular monitoring of confined workplaces should be carried out.

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 materials will minimise the risks of spontaneous combustion and other fire hazards.

<table>
<thead>
<tr>
<th></th>
<th>Base</th>
<th>Additive</th>
<th>Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 litre unit</td>
<td>23.0 kg</td>
<td>4.2 kg</td>
<td>27.20 kg</td>
</tr>
<tr>
<td>5 litre unit</td>
<td>5.76 kg</td>
<td>1.10 kg</td>
<td>6.86 kg</td>
</tr>
</tbody>
</table>

**Storage**

Although the storage of this product is not subject to specific statutory requirements, the principles contained in the HSE guidance note Storage of Flammable Liquids in Containers, should be observed.

Observe the label precautions. Store between 5°C and 35°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 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>Xylene (mixture of isomers)</td>
<td>100ppm(OES)</td>
<td>150ppm(OES)</td>
<td>Skin</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

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.

When operators, whether spraying or not, have to work inside the spray booth, they should wear an air-fed respirator during the spraying process and until such time as the spray mist has cleared. However, persons entering the spray booths or enclosures for short periods (less than 15 minutes) when spraying is taking place may be protected from inhaling the spray mist by wearing suitable respirators with charcoal canisters. Care should be taken to ensure that filters are changed in accordance with the supplier's instructions. The use of a canister respirator is considered very much a second choice to air-fed respiratory protective equipment.

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

<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>Black or brown</td>
</tr>
<tr>
<td>Density</td>
<td>1.3 g/cm³</td>
</tr>
<tr>
<td>Viscosity Base</td>
<td>27-33 poise Rotothinner at 25°C</td>
</tr>
<tr>
<td>Viscosity Additive</td>
<td>27-35 seconds B3 cup at 25°C</td>
</tr>
<tr>
<td>Flash Point base</td>
<td>24°C</td>
</tr>
<tr>
<td>Flash Point Additive</td>
<td>24°C</td>
</tr>
<tr>
<td>Volatile Organic Content</td>
<td>312 g/ltr</td>
</tr>
<tr>
<td>Explosion Limit - lower</td>
<td>1.0%</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.

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.

Prolonged or repeated contact with the skin can lead to the development of warts. These can take various forms, a few of which are potentially cancerous. Medical advice should be sought without delay if warts or photo-toxic erythema effects occur.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar preparations, this preparation may be a skin sensitizer and an irritant. It contains low molecular epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitization, possibly with cross-sensitization to other epoxies. Skin contact with the preparation and exposure to spray mist and vapour should be avoided.

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
15. REGULATORY INFORMATION

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

**Base:**

Symbol

Named Substances: Creosote Oil, Acenaphthene Fraction
Distillates, Coal Tar, Heavy Oils
Epoxy resin (Numbers Average Mol Wt ≤ 700)
Pitch, Coal Tar, High Temperature
Xylene (mixture of isomers)

Warning label phrases: Contains epoxy constituents. See information supplied by the manufacturer.
Restricted to professional users.
Flammable.
Harmful by inhalation and in contact with skin.
May cause sensitisation by skin contact.
May cause cancer.
Do not breathe vapour/spray.
Wear suitable protective clothing and gloves
During spraying wear air-fed respiratory protective equipment.
Avoid exposure - obtain special instruction before use.

**Additive:**

Symbol

Named Substances: Epoxy resin (Numbers Average Mol Wt ≤ 700)
Xylene (mixture of isomers)
Warning label phrases: Contains epoxy constituents. See information supplied by the manufacturer.
Flammable.
Harmful by inhalation and in contact with skin.
Irritating to eyes and skin
May cause sensitisation by skin contact.
Do not breathe vapour/spray.
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.

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:-

<table>
<thead>
<tr>
<th>R10</th>
<th>Flammable</th>
</tr>
</thead>
<tbody>
<tr>
<td>R20/21</td>
<td>Harmful by inhalation and in contact with skin</td>
</tr>
<tr>
<td>R36/38</td>
<td>Irritating to eyes and skin</td>
</tr>
<tr>
<td>R43</td>
<td>May cause sensitisation by skin contact.</td>
</tr>
<tr>
<td>R51/53</td>
<td>Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment</td>
</tr>
<tr>
<td>R65</td>
<td>Harmful: may cause lung damage if swallowed</td>
</tr>
<tr>
<td>R66</td>
<td>Repeated exposure may cause skin dryness or cracking</td>
</tr>
<tr>
<td>N</td>
<td>Dangerous for the environment</td>
</tr>
<tr>
<td>Xn</td>
<td>Harmful</td>
</tr>
<tr>
<td>Xi</td>
<td>Irritant</td>
</tr>
</tbody>
</table>

Text for S phrases

<table>
<thead>
<tr>
<th>S2</th>
<th>Keep out of reach of children</th>
</tr>
</thead>
<tbody>
<tr>
<td>S16</td>
<td>Keep away from sources of ignition – No smoking</td>
</tr>
<tr>
<td>S24/25</td>
<td>Avoid contact with skin and eyes</td>
</tr>
<tr>
<td>S26</td>
<td>In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</td>
</tr>
<tr>
<td>S28</td>
<td>After contact with skin, wash immediately with plenty of soap and water or a recognized skin cleaner.</td>
</tr>
<tr>
<td>S29</td>
<td>Do not empty into drains</td>
</tr>
<tr>
<td>S38</td>
<td>In case of insufficient ventilation, wear suitable respirator equipment</td>
</tr>
<tr>
<td>S51</td>
<td>Use only in well ventilated areas</td>
</tr>
</tbody>
</table>

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:

The Chemical (Hazard Information and Packaging for Supply) Regulations 1994
Control of Substances Hazardous to Health 1994
Manual Handling Operations Regulations 1992
Environmental Protection (Duty of Care) Regulations 1992
Occupational Exposure Limits, EH40
The Storage of Flammable Liquids in Containers, HS(G)51
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, L76
The Approved Code of Practice: Safety Data Sheets for Substances and Preparations Dangerous for Supply, L62