**Data Sheet: Anti Carbonation Paint**

**Description**
Anti-Carb has been formulated to confer long term protective and decorative properties to concrete and masonry surfaces. The micro-porous structure of the coating acts as a barrier to the ingress of Chlorides and Carbon Dioxide and other acid gases, but allows the passage of water vapour from the substrate. The elastomeric nature of Anti-Carb ensures good crack bridging properties, in case of structural movement.

**Typical Uses**
Where new and existing concrete and masonry structures require protection from Water, Carbon Dioxide, Sulphur Dioxide, Oxides of Nitrogen, Chlorides, Sulphates and UV radiation. Examples: car parks, commercial and industrial buildings, bridges, subways, high rise flats, roofing.

**Advantages**
- Easy to clean
- Excellent UV and weathering resistance
- Single pack and easy to apply
- Protects substrates from carbonation
- Highly resistant to freeze/thaw cycling
- Elastic nature with crack bridging properties
- Allows structure to ‘breathe’
- Water based and non-toxic
- Range of colours available (to BS4800 or RAL standards)

**Typical Properties**
- Colours: White or Light Grey (BS4800 or RAL colours are available on request)
- Finish: Eggshell
- Application rate: 3.5 - 5.5m² / litre / coat (2 coats recommended)
- Volume Solids: 56%
- Wet film thickness: 180 microns per coat
  Equivalent dry film thickness: 100 microns per coat
- Touch dry: 1 to 3 hours (dependant on ventilation)

**Procedure**

**Surface Preparation**
Substrates shall be clean, sound and free from contaminants such as oil, grease, moss, algae, dust and any existing loose or flaking paintwork.
Concrete surfaces shall be fully cured and free from laitance, mould release oils and curing compounds.
Mould or algae shall be removed with a proprietary fungicidal wash.
High pressure water jetting may be deemed necessary for heavily contaminated surfaces.
Blow holes or pitting on the surface shall be filled using Surfacer.

**Priming**
Priming is recommended on porous substrates. Dilute Anti-Carb with up to 20% by volume of clean water and apply by brush, roller or airless spray at a nominal rate of 6-8m²/litre and allow to dry.

**Application**
Apply Anti-Carb coating by brush, roller or airless spray at a nominal rate of 5m²/litre and allow to dry.
A second coat may be subsequently applied at the same rate.

**Note:** This should achieve the 200 microns dry film thickness necessary for anti-carbonation properties. In applications where crack bridging properties are particularly important, a minimum d.f.t. of over 300 microns is recommended.

**Equipment Cleaning**
Clean equipment with water or a mixture of water and Toolclean prior to drying of the coating.
**Curing**
Anti-Carb will be touch dry following 1 - 3 hours, and through dry after 2-16 hours (dependent on ventilation).

Through dry: 2-16 hours

Over coating interval: 16 hours minimum

Tensile strength: 3.7 MPa @ 20°C

Carbon Dioxide Diffusion Coefficient: 965,000
Equivalent air thickness, R: >200m @ 300 microns dft.

Water vapour transmission rate: 12g/m²/day

Service temperatures: -30°C to + 80°C

Elongation at break: 350% @ 20°C

**Packaging**
Anti-Carb is supplied in 10L packs

**Coverage**
Anti-Carb may be applied at a nominal rate of 5m²/litre/coat.
The recommended two coat treatment will provide an overall d.f.t of 200 microns, which is the minimum for long term anti-carbonation properties.

**Storage and Shelf Life**
Store in dry conditions, out of direct sunlight, at temperatures between 10°C and 25°C.

Protect from frost.

Anti-Carb has a minimum shelf life of 12 months when stored in original, unopened containers in accordance with manufacturer’s instructions.

**Limitations**
Do not apply at temperatures of 3°C or less or if there is a risk of frost.

Compatibility testing of Anti-Carb with existing paint coatings must be carried out prior to over coating.
SDS: Anti Carbonation Paint

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY
   - **Product**: Anti-Carb Coating Single Pack
   - **Company Name**: Urban Hygiene Ltd
     - Sky Business Park
     - Robin Hood Airport
     - Doncaster, UK
     - DN9 3GN
     - Tel: +44 (0) 1302 623193
     - Fax: +44 (0) 1302 623167
     - [www.urbanhygiene.com](http://www.urbanhygiene.com)

2. COMPOSITION/INFORMATION ON INGREDIENTS
   - **Hazardous Ingredients**: Acrylic Polymer Emulsion, Pigmented
     - Name | EC No | CAS –No | Content | Symbol | R Phrase
     - Acrylic Polymer | Non Hazardous | 20-30% | None | None

3. HAZARDS INDENTIFICATION
   - **Main Hazards**: Slightly irritating by inhalation and skin or eye contact.

4. FIRST AID MEASURES
   - **Skin contact**: Wash thoroughly with soap and water.
   - **Eye contact**: Flush eyes with a large amount of water for at least 15 minutes. Consult a physician if irritation persists.
   - **Ingestion**: Give two glasses of water to drink. Consult a physician.
   - **Inhalation**: Move subject to fresh air

5. FIRE-FIGHTING MEASURES
   - **Extinguishing media**: Those suitable for surrounding fire.
   - **Exposure hazards**: Carbon Dioxide, Carbon Monoxide in fire.
   - **Protection of fire-fighters**: Wear self contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES
   - **Personal precautions**: Wear appropriate protective clothing and goggles.
   - **Environmental precautions**: Do not allow to run into drains or sewers.
   - **Clean-up procedures**: Absorb into sawdust, sand or earth, and dispose.

7. HANDLING AND STORAGE
   - **Handling requirements**: Wear appropriate protective clothing. Ensure good ventilation during use.
   - **Storage conditions**: Avoid exposure to frost. Store between 10C-25C. Keep containers closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION
   - **Engineering measures**: Ensure there is sufficient ventilation of the area.
   - **Hand protection**: Wear gloves e.g. neoprene or P.V.C
   - **Eye protection**: Use goggles or safety spectacles
   - **Skin protection**: Wear appropriate clothing
   - **Exposure Control Limits**: N/A
## 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Thixotropic Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Coloured as indicated on label</td>
</tr>
<tr>
<td>Odour</td>
<td>Slightly ammoniacal</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Miscible</td>
</tr>
<tr>
<td>Density</td>
<td>1.3-1.4 kg/ltr</td>
</tr>
<tr>
<td>Flash point °C</td>
<td>N/A</td>
</tr>
</tbody>
</table>

## 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Stability</th>
<th>Decomposes above 17°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions to avoid</td>
<td>Frost</td>
</tr>
<tr>
<td>Materials to avoid</td>
<td>Inorganic Salts</td>
</tr>
<tr>
<td>Haz. Decomposition</td>
<td>Thermal decomposition or burning may release Carbon Dioxide, Carbon Monoxide and Acrylic Monomers.</td>
</tr>
<tr>
<td>Products</td>
<td>Monoxide and Acrylic Monomers.</td>
</tr>
</tbody>
</table>

## 11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Ingestion</th>
<th>LD50 Acute oral toxicity in rats : &gt;5000mg/kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Contact</td>
<td>Eye irritation tested in rabbits : Inconsequential irritation</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Skin irritation tested in rabbits : &gt;5000mg/kg</td>
</tr>
</tbody>
</table>

## 12. ECOLOGICAL INFORMATION

| Mobility                       | Readily absorbed into soil. Prevent contamination of soil, drains or surface water. |

## 13. DISPOSABLE CONSIDERATIONS

Coagulate the emulsion by adding ferric chloride and lime. Incinerate liquid and contaminated solids in accordance with local and national regulations.

## 14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>ADR/RID</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMDG/IMO</td>
<td>Not regulated</td>
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<tr>
<td>IATA/ICAO</td>
<td>Not regulated</td>
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</tbody>
</table>

## 15. REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>Hazard Symbol</th>
<th>Non hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Phrases</td>
<td>R43 May cause sensitization by skin contact</td>
</tr>
<tr>
<td>Safety Phrases</td>
<td>S26 In case of contact with eyes rinse immediately with plenty of water and seek medical advice</td>
</tr>
</tbody>
</table>

## 16. OTHER INFORMATION

| Other information              | Date of issue 03.04.2013 |

**Legal disclaimer:** The information of this SDS is based on the present state of our knowledge and on current EU and national laws. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. If data is more than 12 months old then data should only be used after checking with Urban Hygiene office. The information in this SDS is meant as a description of the safety requirements of our product: it is not to be considered as a guarantee of the products properties.