SAFETY DATA SHEET

STARKOTE AQ-20-2

SECTION 1. IDENTIFICATION

Product name : STARKOTE AQ-20-2
Product Use Description : AQUEOUS SATIN PRIMER FOIL STAMPABLE & UV COATABLE

Manufacturer or supplier's details
Company : ACTEGA Kelstar
1050 Taylors Lane
Cinnaminson, NJ 08077
Telephone : (800) 255-0021
Telefax : (856) 786-2860
Visit our web site : www.actega.com
Emergency telephone number : Chemtrec Phone: 1-800-424-9300 / +1 703-527-3887

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Not a hazardous substance or mixture.

GHS Label element
Not a hazardous substance or mixture.

Other hazards
The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 4 %

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wax</td>
<td></td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Silicon dioxide</td>
<td>7631-86-9</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice
Get medical attention immediately if symptoms occur.
Treat symptomatically.

If inhaled
If inhaled, remove to fresh air.
If breathing is difficult, give oxygen.
If not breathing, give artificial respiration.

In case of skin contact
Remove contaminated clothing. Wash thoroughly with soap and
In case of eye contact:
If easy to do, remove contact lens, if worn.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical advice.

If swallowed:
Do NOT induce vomiting.
Gently wipe or rinse the inside of the mouth with water.
Obtain medical attention.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards during firefighting:
Do not use a solid water stream as it may scatter and spread fire.

Further information:
Use water spray to cool unopened containers.

Special protective equipment for firefighters:
In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Ensure adequate ventilation.
Use personal protective equipment.

Environmental precautions:
Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.

Methods and materials for containment and cleaning up:
Soak up with inert absorbent material.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling:
Use only in accordance with our recommendations.

Conditions for safe storage:
Keep container tightly closed in a dry and well-ventilated place.

Materials to avoid:
Keep away from oxidising agents and strongly acid or alkaline materials.
## SECTION 8. EXPOSURE CONTROLS/PERSOHAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proprietary Defoamer</td>
<td>-</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td>Proprietary Defoamer</td>
<td>-</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>10 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td>Wax</td>
<td></td>
<td>TWA (Fumes)</td>
<td>2 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Fumes)</td>
<td>2 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Fumes)</td>
<td>2 mg/m³</td>
<td>OSHA P0</td>
</tr>
<tr>
<td>Silicon dioxide</td>
<td>7631-86-9</td>
<td>TWA (Dust)</td>
<td>20 Million particles per cubic foot (Silica)</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Dust)</td>
<td>80 mg/m³ / %SiO₂ (Silica)</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>6 mg/m³ (Silica)</td>
<td>NIOSH REL</td>
</tr>
</tbody>
</table>

**Engineering measures**: Handle only in a place equipped with local exhaust (or other appropriate exhaust).

**Personal protective equipment**

- **Hand protection**
  - Material: Impervious gloves

- **Eye protection**
  - Safety glasses with side-shields
  - Safety goggles

- **Skin and body protection**
  - Long sleeved clothing
  - Chemical resistant apron
  - Lightweight protective clothing

- **Protective measures**
  - Ensure that eye flushing systems and safety showers are
Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking, or smoking.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Aqueous solution</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>Odour</td>
<td>ammoniacal</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>8 - 9.4</td>
</tr>
<tr>
<td>Initial boiling point</td>
<td>&gt; 200.1 °F (&gt; 93.4 °C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 200.1 °F (&gt; 93.4 °C)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density/Specific Gravity</td>
<td>1.044 (68 °F (20 °C))</td>
</tr>
<tr>
<td>Density</td>
<td>8.70 lb/gal</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
</tbody>
</table>
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Auto-ignition temperature : No data available

Thermal decomposition : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Nitrogen oxides (NOx)

Viscosity
  Viscosity, kinematic : > 21 mm²/s (104 °F (40 °C))

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions : Acids and bases

Conditions to avoid : Keep away from open flames, hot surfaces and sources of ignition.

Hazardous decomposition products : Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
  Eyes
  Skin contact
  Inhalation
  Acute toxicity

Components:
  - Wax:
    Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg

Skin corrosion/irritation

Product:
  Remarks: No data available

Serious eye damage/eye irritation

Product:
  Remarks: No data available

Respiratory or skin sensitisation

Product:
Remarks: No data available

Carcinogenicity

IARC  No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH  No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA  No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP  No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Repeated dose toxicity

Product:  No data available

Further information

Product:  No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:
Toxicity to fish  :  Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates  :  Remarks: No data available

Persistence and degradability

Product:
Biodegradability  :  Remarks: No data available

Bioaccumulative potential

Product:
Bioaccumulation : Remarks: No data available

Mobility in soil
No data available

Other adverse effects
No data available

Product:
Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations.
              The hazard and precautionary statements displayed on the label also apply to any residues left in the container.
Contaminated packaging : Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulation

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

49 CFR
Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

WHMIS Classification : D2B: Toxic Material Causing Other Toxic Effects
EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a SARA 302 RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 :

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 :

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC’s (40 CFR 60.489):

Polypropylene glycol 25322-69-4 1.8 %

VOC :

0.08 lb/gal
1.00 %

Non-volatile information is not a specification.

Massachusetts Right To Know

Wax -
Silicon dioxide 7631-86-9

Pennsylvania Right To Know

Hydroxypropyl acrylate, acrylic acid polymer, ammonium salt 7732-18-5
Water
Acrylic Resin Not Assigned
SURFACTANT Not Assigned
Wax -
Silicon dioxide 7631-86-9
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Sodium hydroxide 1310-73-2
Ammonia hydroxide 1336-21-6
sodium sulphate 7757-82-6

New Jersey Right To Know
Hydroxypropyl acrylate, acrylic acid polymer, ammonium salt
Water 7732-18-5
Acrylic Resin Not Assigned
SURFACTANT Not Assigned
Wax -
Silicon dioxide 7631-86-9

California Prop 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:
LISTED : Listed

SECTION 16. OTHER INFORMATION

Further information

NFPA:  
Flammability
1 2
Health 2
Special hazard.

HMIS III:

HEALTH 2
FLAMMABILITY 1
PHYSICAL HAZARD 0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

Revision Date : 05/21/2015

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