Safety Data sheet (SDS)

Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Name: Antkote® 2035
Additional Name: Hydroxyfunctional polyacrylic dispersion
Company Name: Wanhua Chemical Group Co., LTD
Address: No.17, Tianshan Rd, YEDA, Yantai, 264006, China
Telephone: 0086-535-3388160  Fax: 0086-535-6875138

Emergencies Telephone:
WANHUA +86 535-8203123
China  +86 532-83889090
EU  +31 20 20 65132/65130、+44 780 183 7343
NA  800-424-9300、+1-703-527-3887

Recommended uses:
It can be used for waterborne two-component coatings in combination with polyisocyanates or other crosslinkers, or waterborne one component baking coatings in combination with amino resins or blocked polyisocyanates.

Section 2 - HAZARDS IDENTIFICATION

GHS Classification of the substance or mixture
Skin Corrosion/Irritation, Category 2,
Eye irritation, Category 2A,

Label elements:
Pictogram:

Signal Word: WARNING
Hazard statements:
H315 May cause an allergic skin irritation.
H319 May causes serious eye irritation.

Precautionary statements:
Prevention:
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P332+P313 IF skin irritation occurs: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Revision Date: 2018/07/09  Version: 3
Name: Antkote® 2035

Physical and Chemical Hazard:
Liquid. Mixes with water.

Health Hazards:

Inhaled: The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

Ingestion: The material has not been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g. liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

Skin Contact: The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

Eye: Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

Chronic: Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

Environmental Hazards: See Section 12.
Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

**Substance/mixture:** Mixture

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyacrylate containing hydroxylgroups</td>
<td>42-44%</td>
<td>N/A</td>
</tr>
<tr>
<td>1-Butoxy-2-propanol</td>
<td>7.5%</td>
<td>5131-66-8</td>
</tr>
<tr>
<td>water</td>
<td>48.5-50.5%</td>
<td>7732-18-5</td>
</tr>
</tbody>
</table>

The following substance is precautionary mentioned.
Neutralizing agent, N,N-dimethyl ethanolamine, bound as a salt.

Section 4 - FIRST AID MEASURES

**Description of first aid measures:**

**Eye Contact:**
Wash out immediately with water.
If irritation continues, seek medical attention.
Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

**Skin Contact:**
Immediately remove all contaminated clothing, including footwear.
Flush skin and hair with running water (and soap if available).
Seek medical attention in event of irritation.

**Inhalation:**
If fumes, aerosols or combustion products are inhaled remove from contaminated area.
Other measures are usually unnecessary.

**Ingestion:**
Immediately give a glass of water.
First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

**Indication of any immediate medical attention and special treatment needed:**
Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

**Extinguishing media:**
Water spray or fog. Foam.
Dry chemical powder.
BCF (where regulations permit).
Carbon dioxide.
Advice for firefighters:

Fire Fighting:
Alert Fire Brigade and tell them location and nature of hazard.
Wear full body protective clothing with breathing apparatus.
Prevent, by any means available, spillage from entering drains or water course.
Use water delivered as a fine spray to control fire and cool adjacent area.
Avoid spraying water onto liquid pools.
Do not approach containers suspected to be hot.
Cool fire exposed containers with water spray from a protected location.
If safe to do so, remove containers from path of fire.

Fire/Explosion Hazard:
Combustible.
Slight fire hazard when exposed to heat or flame.
Heating may cause expansion or decomposition leading to violent rupture of containers.
On combustion, may emit irritating/toxic fumes.
May emit acrid smoke.
Mists containing combustible materials may be explosive.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
See section 8
Measures for Preventing Secondary Contamination:
Refer to section above
Environmental precautions:
See section 12
Methods and material for containment and cleaning up:
Minor Spills:
Remove all ignition sources.
Clean up all spills immediately.
Avoid breathing vapours and contact with skin and eyes.
Control personal contact with the substance, by using protective equipment.
Contain and absorb spill with sand, earth, inert material or vermiculite.
Wipe up.
Place in a suitable, labelled container for waste disposal.

Major Spills:
Clear area of personnel and move upwind.
Alert Fire Brigade and tell them location and nature of hazard.
Wear full body protective clothing with breathing apparatus.
Prevent, by all means available, spillage from entering drains or water courses.
Consider evacuation (or protect in place).
No smoking, naked lights or ignition sources.
Increase ventilation.
Stop leak if safe to do so.
Water spray or fog may be used to disperse / absorb vapour.
Contain or absorb spill with sand, earth or vermiculite.
Collect recoverable product into labelled containers for recycling.
Collect solid residues and seal in labelled drums for disposal
Wash area and prevent runoff into drains.
After clean up operations, decontaminate and launder all protective clothing and equipment before storing and re-using.
If contamination of drains or waterways occurs, advise emergency services.

**Personal Protective Equipment advice is contained in Section 8 of the SDS.**

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### Section 7 - HANDLING AND STORAGE

**Precautions for safe handling:**

**Safe handling:**
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- Do not enter confined spaces until atmosphere has been checked.
- Do not allow material to contact humans, exposed food or food utensils.
- Avoid contact with incompatible materials.
- When handling, Do not eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately. Launder contaminated clothing before re-use.
- Use good occupational work practice.
- Observe manufacturer's storage and handling recommendations contained within this SDS.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

**Other information:**
- Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storage and handling recommendations contained within this SDS.
Storage:
The product will keep stable for six months when stored in its sealed original packaging at temperatures between 5°C and 35°C. Storage at temperatures below 5°C will make the product frozen and cause irreversible damage. The product should therefore be protected from freezing during storage. Temperatures higher than 35°C should be avoided in order to prevent the evaporation of water, which will result in the formation of a non-redisperseable polymer film.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection:
Respiratory equipment required in insufficiently ventilated working areas and during spraying.

Hand protection:
Suitable materials for safety gloves, EN 374:
Butyl rubber-IIR: thickness >=0.5mm; breakthrough time >=480min. Recommendation contaminated gloves should be disposed of. Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber-NBR (>=0.35mm); Breakthrough time not tested; dispose of immediately after contamination.

Eye protection:
Wear eye/face protection.

Body protection:
Wear suitable protective clothing.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Milky white</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Miscible</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight inherent odour</td>
</tr>
<tr>
<td>Flammability</td>
<td>No</td>
</tr>
<tr>
<td>Vapour pressure (kPa)</td>
<td>Not established</td>
</tr>
<tr>
<td>pH</td>
<td>7.0-9.0</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>Not established</td>
</tr>
<tr>
<td>n-octanol / water (logkow)</td>
<td>Not established</td>
</tr>
<tr>
<td>Flashpoint (°C)</td>
<td>&gt;93°C</td>
</tr>
<tr>
<td>Density (g/cm³)</td>
<td>ca. 1.05g/cm³ at 20 °C</td>
</tr>
<tr>
<td>Upper Explosive Limit(%)</td>
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<tr>
<td>Lower Explosive Limit(%)</td>
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</tr>
<tr>
<td>Boiling point(°C)</td>
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<tr>
<td>Explosive properties</td>
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</tr>
<tr>
<td>Auto-ignition temperature(°C)</td>
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</tbody>
</table>
Name: Antkote®2035

<table>
<thead>
<tr>
<th>Decomposition temperature</th>
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<tbody>
<tr>
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<tr>
<td>Molecular weight (g/mol)</td>
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<tr>
<td>Relative density (Air = 1)</td>
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</tr>
<tr>
<td>Relative density (Water = 1)</td>
<td>1.05</td>
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<tr>
<td>Viscosity (cst)</td>
<td>100-5000 mPa.s at 25 ℃</td>
</tr>
<tr>
<td>VOC (g/l)</td>
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</tr>
</tbody>
</table>

**Other information:**
The indicated values do not necessarily correspond to the product specification. Please refer to the technical information sheet for specification data.

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**Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION**

**Reactivity:**
See section 7.

**Chemical stability:**
Unstable in the presence of incompatible materials
Product is considered stable.
Hazardous polymerisation will not occur.

**Possibility of hazardous reactions:**
See section 7.

**Conditions to avoid:**
See section 7.

**Incompatible materials:**
See section 7.

**Hazardous decomposition products:**
See section 5.

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**Section 11 - TOXICOLOGICAL INFORMATION**

**Polyacrylate containing hydroxyl groups:**

**TOXICITY:**
Not available

**IRRITATION:**
Not available

**1-Butoxy-2-propanol:**

**TOXICITY:**
dermal (rat) LD50: >2000 mg/kg[^1]
Inhalation (rat) LC50: >1997.718 mg/l/8h[^2]
Oral (rat) LD50: >2000 mg/kg[^1]

**IRRITATION:**
Eye (rabbit): 15 mg SEVERE
Skin (rabbit): 500 mg OPEN-mild
Section 12 - ECOLOGICAL INFORMATION

Toxicity:

<table>
<thead>
<tr>
<th>ENDPOINT</th>
<th>TEST DURATION (HR)</th>
<th>SPECIES</th>
<th>VALUE</th>
<th>SOURCE</th>
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<tbody>
<tr>
<td>Antkote® 2035</td>
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</table>

Persistence and degradability:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Persistence: Water/Soil</th>
<th>Persistence: Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Butoxy-2-propanol</td>
<td>LOW</td>
<td>LOW</td>
</tr>
</tbody>
</table>

Bioaccumulative potential:

1-Butoxy-2-propanol:
LOW (LogKOW = 0.9842)

Mobility in soil:

1-Butoxy-2-propanol:
HIGH (KOC = 1.289)

Section 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods:

Waste chemicals:
Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:
- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it maybe possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO not allow wash water from cleaning or process equipment to enter drains.
It may be necessary to collect all wash water for treatment before disposal. In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. Where in doubt contact the responsible authority. Recycle wherever possible or consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal. Bury residue in an authorised landfill. Recycle containers if possible, or dispose of in an authorised landfill.

**Contaminated packing materials:**
Refer to section above

**Precautions for Transport:**
Refer to section above

### Section 14 - TRANSPORTATION INFORMATION

**ADR/RID**

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>Not dangerous goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>Not dangerous goods</td>
</tr>
<tr>
<td>14.3 Transport hazard class</td>
<td>Not dangerous goods</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>Not dangerous goods</td>
</tr>
<tr>
<td>14.5 Environment hazards</td>
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</table>

**ADN**

<table>
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<tr>
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</tr>
</tbody>
</table>

This classification data does not apply to transportation by tanker. If required, additional information can be requested from the manufacturer.

**IATA**

<table>
<thead>
<tr>
<th>14.1 UN number</th>
<th>Not dangerous goods</th>
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</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
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</tr>
<tr>
<td>14.3 Transport hazard class</td>
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<tr>
<td>14.4 Packing group</td>
<td>Not dangerous goods</td>
</tr>
</tbody>
</table>
14.5 Environment hazards | Not dangerous goods

**IMDG**

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<tr>
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</tr>
<tr>
<td>14.5 Environment hazards</td>
<td>Not dangerous goods</td>
</tr>
</tbody>
</table>

### 14.6 Special precautions for user

See section 6-8.

Additional information: Not dangerous cargo.

Avoid heat above 35°C or lower than 5°C, stay away from food, acids and bases. According to 57th of IATA DGR 2016, this product is not dangerous.

### Section 15 - REGULATORY INFORMATION

15.1 The product is classified and labeled according to Regulation (EC) No. 1272/2008 (GHS/CLP).

15.2 Safety, health and environmental regulation/legislation specific for the substance or mixture Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances.

- Not applicable
- Water contaminating class (Germany) 1
  - slightly water endangering
  (according to Annex 4 to the Directive on Water-Hazardous Substances)
- Any national regulations for the handling of solvents and hazardous substances must be observed

### Section 16 - OTHER INFORMATION

Disclaimer:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.