SAFETY DATA SHEET
according to GB/T 16483 and GB/T 17519

HYDROSHINE WS 6001

Version 1.1  Revision Date: 2019/01/20  SDS Number: 102000023686  Print Date: 2019/01/28
Date of first issue: 2017/11/24

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: HYDROSHINE WS 6001
Product code: 021905AN0
Chemical nature: Aluminium pigment paste

Manufacturer or supplier’s details
Company: 爱卡特殊效果颜料（珠海）有限公司
Eckart GmbH
Address: 珠海市金湾区南水镇浪屿路3号
Guentersthal 4
91235 Hartenstein
Germany
Telephone: +8607567228600
+4991527770
Emergency telephone number: National Emergency Response Hotline for Chemical Incident (China): 0532-83889090
国家化学事故应急咨询电话（中国）： 0532-83889090
GBK Gefahrpot Büro GmbH, Ingelheim, Germany:
From outside US: (001) 352-323-3500
(First call in English, response in your language is possible)
US & Canada (toll free): 1-800-5355-053
E-mail address: Riko.Huang@altana.com
msds.eckart@altana.com
Telefax: +8607567228601
+499152777008

2. HAZARDS IDENTIFICATION

Emergency Overview
Appearance: liquid
Colour: silver
Odour: characteristic

Highly flammable liquid and vapour. May be harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

GHS Classification
Flammable liquids: Category 2
Acute toxicity (Oral): Category 5
Skin corrosion/irritation: Category 2
Serious eye damage/eye irritation: Category 2A
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Specific target organ toxicity - single exposure : Category 3 (Narcotic effects)

GHS label elements
Hazard pictograms :

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour. H303 May be harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

Precautionary statements :

Response: P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P312 Call a POISON CENTER/doctor if you feel unwell. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Physical and chemical hazards
Highly flammable liquid and vapour.

Health hazards
May be harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

Environmental hazards
Not classified based on available information.

Other hazards which do not result in classification
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Substance name :
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### Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol</td>
<td>67-63-0</td>
<td>&gt;= 50 - &lt;= 100</td>
</tr>
<tr>
<td>Ethanol, 2-butoxy-</td>
<td>111-76-2</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>Aluminium powder</td>
<td>7429-90-5</td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
<tr>
<td>Diphenyl dimethoxyl silane</td>
<td>6843-66-9</td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**General advice**
Move the victim to fresh air.
Do not leave the victim unattended.
Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

If inhaled:
Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.

In case of skin contact:
Wash off immediately with soap and plenty of water.
If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

In case of eye contact:
Immediately flush eye(s) with plenty of water.
Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed:
Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

Most important symptoms and effects, both acute and delayed:
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.

### 5. FIREFIGHTING MEASURES

**Suitable extinguishing media**
Dry sand
ABC powder
Foam
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Evacuate personnel to safe areas.
- Use personal protective equipment.
- Ensure adequate ventilation.
- Remove all sources of ignition.
- Evacuate personnel to safe areas.
- Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions:
- Prevent product from entering drains.
- Prevent further leakage or spillage if safe to do so.
- If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
- Use mechanical handling equipment.
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
- Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
- Do not flush with water.

7. HANDLING AND STORAGE

Handling:
- Do not spray on a naked flame or any incandescent material.
- Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).
Use only explosion-proof equipment.
Keep away from open flames, hot surfaces and sources of ignition.

Advice on safe handling:
- Avoid formation of aerosol.
- Do not breathe vapours/dust.
- Avoid exposure - obtain special instructions before use.
- Avoid contact with skin and eyes.
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.
- Take precautionary measures against static discharges.
- Provide sufficient air exchange and/or exhaust in work rooms.
- Open drum carefully as content may be under pressure.
- Dispose of rinse water in accordance with local and national regulations.

Avoidance of contact:
- Acids
- Bases
- Oxidizing agents

Storage:
Conditions for safe storage:
- Earthing of containers and apparatuses is essential.
- Reaction with water liberates extremely flammable gas (hydrogen)
- Take measures to prevent the build up of electrostatic charge.
- Use explosion-proof equipment.
- Store in original container.
- Keep containers tightly closed in a cool, well-ventilated place.
- Keep away from sources of ignition - No smoking.
- Keep container closed when not in use.
- No smoking.
- Keep container tightly closed in a dry and well-ventilated place.
- Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Electrical installations / working materials must comply with the technological safety standards.

Technical measures/Precautions:
- Protect from humidity and water.

Materials to avoid:
- Do not store near acids.
- Do not store together with oxidizing and self-igniting products.
- Never allow product to get in contact with water during storage.
- Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Further information on storage stability:
- No decomposition if stored and applied as directed.
8. EXPOSURE CONTROLS/PERSO NAL 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>Isopropanol</td>
<td>67-63-0</td>
<td>PC-TWA</td>
<td>350 mg/m³</td>
<td>GBZ 2.1-2007</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PC-STEL</td>
<td>700 mg/m³</td>
<td>GBZ 2.1-2007</td>
</tr>
<tr>
<td>Aluminium powder</td>
<td>7429-90-5</td>
<td>PC-TWA (Total dust)</td>
<td>3 mg/m³ (Aluminium)</td>
<td>GBZ 2.1-2007</td>
</tr>
</tbody>
</table>

Personal protective equipment

Respiratory protection: Use suitable breathing protection if workplace concentration requires.

In the case of vapour formation use a respirator with an approved filter.

Eye/face protection: Goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hand protection

Material: Solvent-resistant gloves (butyl-rubber)

Remarks: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The exact break through time can be obtained from the protective glove producer and this has to be observed. Please observe the instructions regarding permeability and break-through time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Recommended preventive skin protection Skin should be washed after contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Hygiene measures: When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Propellant</td>
<td>No data available</td>
</tr>
<tr>
<td>Colour</td>
<td>silver</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>82 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>13 °C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (liquids)</td>
<td>No data available</td>
</tr>
<tr>
<td>Burning rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-flammability</td>
<td>No data available</td>
</tr>
<tr>
<td>Burning number</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit / Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit / Lower flammability 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>
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</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>0.9 g/cm³</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
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<tr>
<td>Water solubility</td>
<td>insoluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Self-Accelerating decomposition temperature (SADT)</td>
<td>No data available</td>
</tr>
<tr>
<td>Temperature of Polymerisation (SAPT)</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
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<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Flow time</td>
<td>No data available</td>
</tr>
<tr>
<td>Solvent separation</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Self-heating substances</td>
<td>No data available</td>
</tr>
<tr>
<td>Heat of combustion</td>
<td>No data available</td>
</tr>
<tr>
<td>Impact sensitivity</td>
<td>No data available</td>
</tr>
<tr>
<td>Surface tension</td>
<td>No data available</td>
</tr>
<tr>
<td>Conductivity</td>
<td>No data available</td>
</tr>
<tr>
<td>Sublimation point</td>
<td>No data available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity: No decomposition if stored and applied as directed.

Chemical stability: No decomposition if stored and applied as directed.

Possibility of hazardous reactions: Contact with acids and alkalis may release hydrogen. Stable under recommended storage conditions. Vapours may form explosive mixture with air.

Conditions to avoid: Do not allow evaporation to dryness. Heat, flames and sparks.

Incompatible materials: Acids, Bases, Oxidizing agents.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Product:

Acute oral toxicity: Acute toxicity estimate: 3,572 mg/kg
Method: Calculation method

Acute inhalation toxicity: Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Components:
Isopropanol:
Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg
Acute dermal toxicity: LD50 (Rabbit): > 2,000 mg/kg

Ethanol, 2-butoxy-:
Acute oral toxicity: Acute toxicity estimate: 500 mg/kg
Method: Converted acute toxicity point estimate

Acute inhalation toxicity: > 3.1 mg/l
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Exposure time: 1 h
Test atmosphere: vapour

Acute dermal toxicity
Acute toxicity estimate: 1,100 mg/kg
Method: Converted acute toxicity point estimate

**Skin corrosion/irritation**
Causes skin irritation.
**Product:**
Remarks: May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation**
Causes serious eye irritation.
**Product:**
Remarks: Eye irritation

**Respiratory or skin sensitisation**
**Skin sensitisation**
Not classified based on available information.
**Respiratory sensitisation**
Not classified based on available information.
**Germ cell mutagenicity**
Not classified based on available information.
**Carcinogenicity**
Not classified based on available information.
**Reproductive toxicity**
Not classified based on available information.

**STOT - single exposure**
May cause drowsiness or dizziness.

**STOT - repeated exposure**
Not classified based on available information.

**Aspiration toxicity**
Not classified based on available information.

**Further information**
**Product:**
Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
Concentrations substantially above the TLV value may cause narcotic effects.
Solvents may degrease the skin.

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**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**
No data available

**Persistence and degradability**
No data available

**Bioaccumulative potential**
No data available
13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. In accordance with local and national regulations.

Contaminated packaging: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum. In accordance with local and national regulations.

14. TRANSPORT INFORMATION

International Regulations

IATA-DGR
UN/ID No.: UN 1263
Proper shipping name: Paint classified according to 3.3.3.1 IATA-DGR
Class: 3
Packing group: III
Labels: Flammable Liquids
Packing instruction (cargo aircraft): 366
Packing instruction (passenger aircraft): 355

IMDG-Code
UN number: UN 1263
Proper shipping name: PAINT CLASSIFIED ACCORDING TO 2.3.2.2 IMDG-CODE
Class: 3
Packing group: III
Labels: 3
EmS Code: F-E, S-E
Marine pollutant: no

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

GB 6944/12268
UN number : UN 1263
Proper shipping name : PAINT
Class : 3
Packing group : III
Labels : 3

15. REGULATORY INFORMATION

National regulatory information
Law on the Prevention and Control of Occupational Diseases: Applicable

Regulations on Safety Management of Hazardous Chemicals
Catalogue of Hazardous Chemicals : Listed

Identification of Major Hazard Installations for Dangerous Chemicals (GB 18218)
Category Threshold quantity
Flammable liquids 1,000 t

16. OTHER INFORMATION

Full text of other abbreviations
AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECS - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECSI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concern-
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Date format : yyyy/mm/dd

GBZ 2.1-2007 / PC-TWA : Permissible concentration - time weighted average

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

CN / EN