Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Identification

Product name: GUAR 13S
INCI name: Guar Hydroxypropyltrimonium Chloride
CAS No.: 65497-29-2

1.2 Relevant recommended use of the substance or mixture and restrictions on use

Recommended use: Cosmetics additive, Antistatic/film forming.
Restrictions on use: No uses advised against.

1.3 Details of the supplier of the SDS

Manufacturer: Guangzhou Tinci Materials Technology Co., Ltd
Address: 8th Kangda Road, Yunpu Industrial Zone, Huangpu District, Guangzhou, China
E-mail: sales@tinci.com
Telephone: + 86 20 82251159
Fax: + 86 20 82058669

1.4 Emergency phone number

In China: + 86 20 82251159 (Monday - Friday, 8:30a.m. -17:30p.m. Beijing Time)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

This product does not meet the criteria for classification in any hazard class according to paragraph (d) of OSHA HCS 29 CFR 1910.1200.

2.2 Other hazards

No information available.

Section 3: Composition/information on ingredients

3.1 Substance information

INCI name: Guar Hydroxypropyltrimonium Chloride
Substance name: Guar Hydroxypropyltrimonium Chloride
CAS No.: 65497-29-2
Synonyms: Guar, 2-hydroxy-3-trimethylammoniopropyl ether, chloride
Guar gum, 2-hydroxy-3-(trimethylammonio)propyl ether, chloride
Guar gum, ether with 3-chloro-2-hydroxypropyltrimethylammonium chloride
Purity: ≥85%

Section 4: First-aid measures
4.1 Description of first aid measures

General notes: In all cases of doubt, or when symptoms persist, seek medical attention.

Following inhalation:
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms persist, seek medical advice.

Following skin contact:
Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical advice if irritation persists.

Following eye contact:
Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical advice if irritation persists.

Following ingestion:
Rinse mouth. Get medical attention. DO NOT attempt to give anything by mouth to an unconscious person.

Notes for the doctor:
Treat symptomatically and supportively.
Treatment may vary with condition of victim and specifics of incident.

4.2 Most important symptoms and effects, both acute and delayed
No information available.

4.3 Indication of immediate medical attention and special treatment needed
No information available.

Section 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media:
Powder, alcohol-resistant foam, water spray, carbon dioxide.

Unsuitable extinguishing media:
For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture
Carbon oxides.

5.3 Special protective equipment and precautions for fire-fighters
Do not stay in dangerous zone without self-contained breathing apparatus.
In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.
Prevent fire-fighting water from entering surface water or groundwater.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid breathing vapors, mist. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

6.2 Methods and material for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.3 Reference to other sections
See Section 7 for information on safe handling.
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

Section 7: Handling and storage

7.1 Precautions for safe handling
This product may present a dust explosion hazard. It is recommended that all dust control equipment and material transport system involved in handling of this product contain explosion relief vents or explosion suppression system or an oxygen deficient environment. In electrically bonded and grounded. Keep away from heat/sparks/open flames/hot surfaces. No smoking. No sparking tools should be used. Dispose of rinse water in accordance with local and national regulations.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Section 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust</td>
<td>TWA (Time Weighted Average)</td>
<td>4 mg/m³</td>
</tr>
</tbody>
</table>

OSHA permissible exposure limit (PEL):
No PEL values available.

American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV):
No TLA values available.

8.2 Exposure controls

Appropriate engineering controls:
Provide appropriate exhaust ventilation at places where dust is formed.

Personal protective equipment:
Eye and face protection: Wear safety glasses with side shields. Protect against dust and particulates.
Skin protection: Protective suit. Choose body protection according to the amount and concentration of the dangerous substance at the workplace.

Hand protection: The use of chemically resistant gloves is recommended.

Respiratory protection: Use NIOSH/MSHA approved respirator with a High Efficiency Particulate Air (HEPA) filter if the recommended exposure limit is exceeded. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material.

Industrial hygiene: Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Wash hands before breaks and at the end of workday.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- **Appearance:** Powder
- **Colour:** White or Light yellow
- **Odour:** Negligible
- **pH:** 5.0-7.0
- **Melting point:** No data available.
- **Freezing point:** No data available.
- **Boiling point:** No data available.
- **Density:** No data available.
- **Vapour pressure:** No data available.
- **Partition coefficient (n-octanol/water):** No data available.
- **Solubility(ies):** Soluble in water.
- **Flash point:** No data available.
- **Auto-ignition temperature:** 199 °C
- **Flammability:** Not applicable.
- **Explosive properties:** No data available.
- **Oxidising properties:** No data available.
- **Evaporation rate:** No data available.
- **Specific gravity:** No data available.

The above information is not intended for use in preparing product specifications. Contact Tinci before writing specifications.

9.2 Other information

No data available.

Section 10: Stability and reactivity

10.1 Reactivity
Stable under normal temperatures and handling conditions (see section 7, handling and storage).

10.2 Chemical stability
Stable under normal temperature and pressure.

10.3 Possibility of hazardous reactions
No information available.

10.4 Conditions to avoid
Keep away from heat, flame, sparks and other ignition sources. Avoid exposure to sunlight, UV light.

10.5 Incompatible materials
Strong oxidizing agents.

10.6 Hazardous decomposition products
Carbon oxides.

Section 11: Toxicological information

11.1 Toxicokinetics, metabolism and distribution
No relevant information available.

11.2 Information on toxicological effects
Acute toxicity:
Acute Oral toxicity: \( LD_{50} = 12500 \) mg/kg (rat)

Skin corrosion/irritation:
No data available.

Serious eye damage/irritation:
No data available.

Respiratory or skin sensitization:
No data available.

National Toxicology Program (NTP) Report on Carcinogens or International Agency for Research on Cancer (IARC) Monographs:
Not listed.

STOT-single exposure and repeated exposure:
No data available.

Additional information:
No relevant information available.

Section 12: Ecological information

12.1 Ecotoxicity
The results for cationic polyelectrolytes were generally less than 10 mg/L, and less than < 1 mg/L for some
species, and only guar hydroxypropyltrimonium chloride, which has a non-synthetic backbone (guar gum) had relatively low toxicity, with TL$_{50}$ > 100 mg/L.

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Other adverse effects
No relevant information available.

Section 13: Disposal considerations

13.1 Waste treatment methods
Product Disposal: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container.

Packaging Disposal: Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.

Section 14: Transport information

14.1 Land transport (ADR/GGVSE)
This product is not regulated as a hazardous material or dangerous goods for transportation.

14.2 Sea transport (IMDG-Code/GGVSee)
This product is not regulated as a hazardous material or dangerous goods for transportation.

14.3 Air transport (ICAO-TI/IATA-DGR)
This product is not regulated as a hazardous material or dangerous goods for transportation.

14.4 Additional information
No relevant information available.

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

California Prop 65: The product meets requirements of California Prop 65 for safety use.

DSD (67/548/EEC): CAS# 65497-29-2 is not listed in the inventory.
Section 16: Other information

16.1 Revision Information:
Date of the previous revision: Not applicable. Date of this revision: 27/05/2015
Revision summary: The first new SDS

16.2 Abbreviations and acronyms
- **CAS**: Chemical Abstracts Service (division of the American Chemical Society).
- **EINECS**: European Inventory of Existing Commercial Chemical Substances.
- **IATA**: International Air Transport Association.
- **OSHA**: The United States Occupational Safety and Health Administration.
- **TSCA**: Toxic Substances Control Act, The American chemical inventory.
- **IECSC**: Inventory of existing chemical substances in China.
- **DSL**: Domestic Substances List, The Canadian chemical inventory.
- **AICS**: The Australian Inventory of Chemical Substances.
- **NZIoC**: New Zealand Inventory of Chemicals.
- **ENCS**: Japanese Existing and New Chemical Substances.

16.3 Training advice
Provide adequate information, instruction and training for operators.

16.4 Declare to reader
The information in this Safety Data Sheet (SDS) was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

------------------------------- End of the SDS ------------------------------