

# MATERIAL SAFETY DATA SHEET

Date : January 11, 2018

## SECTION 1 – CHEMICAL PRODUCT

**MSDS Identification:**

**Name:** Sucralose

**Synonyms:** TGS; Trichlorogalactosucrose

## SECTION 2 – COMPOSITION, INFORMATION ON INGREDIENTS

**CAS #** 56038-13-2

**Chemical Name:**

1,6-Dichloro-1,6-dideoxy-β-D-fructofuranosyl-4-chloro-4-deoxy-α-D-galactopyranoside

**Chemical family:** Chlorinated Carbohydrate

**Hazard Symbols:** None Listed.

**Risk Phrases:** None Listed.

## SECTION 3 – HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**Appearance:** White crystalline powder.

**Potential Health Effects:** No effects expected

**Primary Route(s) of Entry:** Inhalation/ Ingestion

**Eyes:** No effects expected

**Skin:** Sustained exposure in a dusty manufacturing environment may result in mechanical irritation in the creases of the skin, particularly at the fingers

**Ingestion:** Material is an intensely sweet, crystalline solid.

**Inhalation:** Exposure to high airborne concentration may cause mild respiratory irritation.

**Chronic:** No information found.

## SECTION 4 – FIRST AID MEASURES

No special treatment under ordinary circumstances. Use good personal hygiene – wash thoroughly after handling.

If redness or irritation develops, contact a physician.

**Eyes:** No special treatment under normal circumstances. Flush skin with plenty of water.

**Skin:** No special treatment under normal circumstances. Flush skin with plenty of water.

**Ingestion:** No special treatment under normal circumstances.

**Inhalation:** No special treatment under normal circumstances. Remove from exposure and move to fresh air immediately.

**Notes to Physician:** Sucralose is safe for human consumption based on extensive toxicological studies. Material is an intensely sweet, crystalline powder. Exposure to high airborne concentration may cause mild respiratory irritation.

## SECTION 5 – FIRE FIGHTING MEASURES

**Fire fighting measures:** Stable under normal conditions. Dust Hazard Classification (NFPA-68) Is St-2, the formation of flammable/explosive air/dust mixtures is possible. Appropriate measures should be employed to minimize the potential for dust concentrations in the flammable range. It is recommended that all dust control equipment and material transport systems involved are engineered to prevent conditions contributing to dust explosions.

**Flammable Properties:** Stable under normal conditions. Sucralose, when heated at elevated temperatures, may break down with the release of carbon dioxide, carbon monoxide and minor amounts of hydrogen chloride. Heavy concentrations of sucralose dust may create conditions contributing to dust explosions.

**Fire and Explosion Hazards:** Minimum spark ignition energy 0.04Joules  
Minimum ignition temperature 390 °C

Minimum explosion concentration for dust 16.5g/M (similar to a dense fog)

**Extinguishing Media:** Use any media which is suitable for the surrounding fire

**Fire Fighting Instructions:** Wear self-contained breathing apparatus and full protective gear.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

No special clean-up procedure is necessary. Avoid creating conditions that will contribute to high concentrations of sucralose dust. Carefully sweep or vacuum up into waste container.

## SECTION 7 – HANDLING AND STORAGE

**Handling:** Avoid creating dusty conditions. While no special respiratory protection is required, a dust mask, gloves and other good industrial hygiene practices to minimize worker exposure will result in a more comfortable work environment.

**Storage:** Store in a cool dry area in manufacturer's supplied packaging.

## SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

**Engineering Controls:** It is recommended that all dust control equipment and material transport systems involved are engineered to prevent conditions contributing to dust explosions.

### **PERSONAL PROTECTIVE EQUIPMENT**

**Eye/Face Protection:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin Protection:** Wear appropriate protective gloves to prevent skin exposure.

**Respiratory Protection:** While no special respiratory protection is required, a dust mask, gloves and other good industrial hygiene practices to minimize worker exposure will result in a more comfortable work environment.

**Other/General Protection:** Use good industrial hygiene practices.

## SECTION 9 – PHYSICAL AND CHEMICAL PORPERTIES

**Appearance:** White to off-white, fine powder

**Odor:** Practically odourless

**Odor Threshold:** Not available

**pH:** Neutral in aqueous solution

**Vapor Pressure:** < 1 mmHg

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Melting Point:** 130°C with Decomposition

**Solubility in water:** Complete 30% w/v at 25°C

**Molecular Formula:** C<sub>12</sub>H<sub>19</sub>CL<sub>3</sub>O<sub>8</sub>

**Molecular Weight:** 397.64

## SECTION 10 – STABILITY AND REACTIVITY

**Chemical Stability:** Stable under normal temperatures and pressures. Sucralose, when heated at elevated temperatures, may break down with the release of carbon dioxide, carbon monoxide and minor amounts of hydrogen chloride.

**Conditions to Avoid:** Avoid prolonged storage at elevated temperatures (> 38 °C).

**Incompatible Materials:** None

**Hazardous Decomposition Products:** Carbon dioxide, carbon monoxide and minor amounts of hydrogen chloride.

**Conditions to Avoid (Polymerization):** None

**Hazardous Polymerization:** None

## SECTION 11 – TOXICOLOGICAL INFORMATION

**Acute Studies:** Material is a non-toxic food additive. Oral rat LD<sub>50</sub>>10g/kg; Oral mouse LD<sub>50</sub>>16g/kg

No mortality at the highest tested doses.

## SECTION 12 – ECOLOGICAL INFORMATION

Sucralose is biodegradable and poses no risk to the environment. Sucralose and its breakdown products are non-toxic to plant and animal life, are not fat-soluble, and do not accumulate in plant or animal tissue.

## SECTION 13 – DISPOSAL CONSIDERATIONS

No special disposal considerations

Dispose in accordance with federal, state and local regulations.

## SECTION 14 – TRANSPORT INFORMATION

**Transport Information:** No Special considerations

**Proper Shipping Name & Information:**

Hazard Class: Non-hazardous

Subsidiary Hazard Class: Non-hazardous

DOT Identification Number: Non-hazardous

DOT Shipping Label: Non-hazardous

Packaging Exemptions: Non-hazardous

Packaging Requirements: Non-hazardous

Freight Classification: Non-hazardous

## SECTION 15 – REGULATORY INFORMATION

**OSHA:** No components are listed as hazardous material and/or are present in quantities as defined in

OSHA 29CFR 1910.1200

## SECTION 16 – ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us.

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Quality Manager: Luo Tao

JK Sucralose Inc.

Address: No. 118 Renmin East Road,  
Sheyang County, Jiangsu 224300 China

Tel: +86-515 8217 9290

Fax: +86-515 8217 9288

Email: [jk@jksucralose.com](mailto:jk@jksucralose.com)

*For and on behalf of*

JK Sucralose Inc.

  
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*Authorized Signature(s)*