Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking
   Product identifier:
   Product name: Sucrose
   Product code(SDS NO): 6950E-1

Details of the supplier of the safety data sheet
Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.
Address: 3-1, Honmachibashi, Chuo-ku, Osaka 540-0029, JAPAN
Division: Safety Management Dept. of Chemicals
Telephone number: +81-6-6946-8061
FAX: +81-6-6946-1607
e-mail address: kagakuhinanzenkanri@kishida.co.jp

2. Hazards identification
   GHS classification and label elements of the product
   Classification of the substance or mixture
   (Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

3. Composition/information on ingredients
   Mixture/Substance selection:
   Substance
   Ingredient name: Sucrose
   Content(%):-
   Chemical formula: C12H22O11
   CAS No.: 57-50-1
   MW: 342.30
   ECNO: 200-334-9

4. First-aid measures
   Descriptions of first-aid measures
   IF INHALED
   Remove person to fresh air and keep comfortable for breathing.
   Call a POISON CENTER or doctor/physician if you feel unwell.
   IF ON SKIN (or hair)
   Take off immediately all contaminated clothing. Rinse skin with water/shower.
   If skin irritation or rash occurs: Get medical advice/attention.
   IF IN EYES
   Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
   If eye irritation persists: Get medical advice/attention.
   IF SWALLOWED
   Rinse mouth.
   Call a POISON CENTER or doctor/physician if you feel unwell.
5. Fire-fighting measures
Extinguishing media
Suitable extinguishing media
Use appropriate extinguishing media suitable for surrounding facilities.
Specific hazards arising from the substance or mixture
Containers may explode when heated.
Fire may produce irritating, corrosive and/or toxic gases.
Advice for firefighters
Specific fire-fighting measures
Evacuate non-essential personnel to safe area.
Special protective equipment and precautions for fire-fighters
Wear fire/flame resistant/retardant clothing.
Wear protective gloves/protective clothing/eye protection/face protection.
Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures
Personnel precautions, protective equipment and emergency procedures
Ventilate area after material pick up is complete.
Wear proper protective equipment.
Methods and materials for containment and cleaning up
Sweep up, place in a bag and hold for waste disposal.
Preventive measures for secondary accident
Collect spillage.

7. Handling and storage
Precautions for safe handling
Preventive measures
(Protective measures against fire and explosion)
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Exhaust/ventilator
Exhaust/ventilator should be available.
Safety treatments
Avoid contact with skin.
Avoid contact with eyes.
Safety Measures/Incompatibility
Wear protective gloves, protective clothing or face protection.
When using do not eat, drink or smoke.
Conditions for safe storage, including any incompatibilities
Recommendation for storage
Keep container tightly closed.
Store in a cool, dry place. Do not store in direct sunlight.

8. Exposure controls/personal protection
Control parameters
Adopted value
Sucrose
ACGIH(1992) TWA: 10mg/m3 (Dental erosion)
OSHA-PEL
Sucrose TWA 5mg/m3
Exposure controls
   Appropriate engineering controls
      Do not use in areas without adequate ventilation.
      Eye wash station should be available.
      Washing facilities should be available.
   Individual protection measures
      Respiratory protection
         Wear respiratory protection.
      Hand protection
         Wear protective gloves.
      Eye protection
         Wear eye/face protection.

9. Physical and Chemical Properties
   Information on basic physical and chemical properties
   Physical properties
      Appearance: Crystals or crystalline powder
      Color: White
      Odor data N.A.
   Phase change temperature
      Initial Boiling Point/Boiling point data N.A.
      Melting point/Freezing point: (decomposes) 186°C
      Decomposition temperature data N.A.
      Flash point data N.A.
      Auto-ignition temperature data N.A.
      Explosive properties data N.A.
   Vapor properties data N.A.
   Vapor pressure data N.A.
   Vapor density data N.A.
   Specific gravity/Density: 1.6g/cm³
   Solubility
      Solubility in water: 200 g/100 ml (25°C)
      n-Octanol /water partition coefficient: log Pow-3.67

10. Stability and Reactivity
   Chemical stability
      Stable under normal storage/handling conditions.
   Possibility of hazardous reactions
      Reacts with strong oxidants. This generates fire hazard. (ICSC 1507)
   Conditions to avoid
      Contact with incompatible materials.
      Contact with fire source.
   Incompatible materials
      Strong oxidizing agents
   Hazardous decomposition products
      Carbon oxides

11. Toxicological Information
   Information on toxicological effects
   No Acute toxicity data available
   No Irritant properties data available
   No Allergic and sensitizing effects data available
No Mutagenic effects data available
Carcinogenicity
   (Sucrose)
   ACGIH-A4(1992) : Not Classifiable as a Human Carcinogen
No Teratogenic effects data available
No reproductive toxicity data available
No STOT—single/repeated exposure data available
No Aspiration hazard data available
Additional data
   May cause lung disorders by massive inhalation of powdered substance.
   —e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung
   function, interstitial lung disease, pneumothorax

12. Ecological Information
Ecotoxicity
No Aquatic toxicity data available
Water solubility
   (Sucrose)
   200 g/100 ml (25°C) (ICSC, 2003)
No Persistence and degradability data available
Bioaccumulative potential
   (Sucrose)
   log Pow=-3.67 (ICSC, 2003)
No Mobility in soil data available
Ozone depleting chemical data not available

13. Disposal considerations
   Waste treatment methods
   Dispose of contents/container in accordance with local/national regulation.

14. Transport Information
   Not applicable to UN NO.

15. Regulatory Information
   Safety, health and environmental regulations/legislation specific for the substance or mixture
   US major regulations
      TSCA
      Sucrose
   Other regulatory information
      Ensure this material in compliance with federal requirements and ensure conformity to local
      regulations.

16. Other information
   The product is not applicable to GHS classifications.
   Reference Book
      Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN
      Recommendations on the TRANSPORT OF DANGEROUS GOODS 19th edit., 2015 UN
      Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)
      2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2017 TLVs and BEIs. (ACGIH)
http://monographs.iarc.fr/ENG/Classification/index.php
Supplier's data/information
Hazard Communication Standard - 2012

General Disclaimer
This information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. It is advised to make their own tests to determinate the safety and suitability of each such product or combination for their own purposes.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products’ properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2016).