

## Material safety data sheet

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SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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Catalog Numbers: 27211

Catalog Name: (JP) Concentrated Glycerin

(JP: The Japanese Pharmacopoeia)

Company Identification:

Junsei Chemical Co., Ltd.

4-16, 4-Chome, Nihonbashi-Honcho, Chuo-ku

Tokyo, 103-0023 JAPAN

EMERGENCY TELEPHONE NUMBER: +81-48-988-3621

Sales Headquarters

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FAX: +81-48-988-8719 E-mail: shiyaku-t@junsei.co.jp

Web: http://www.junsei.co.jp/

CREATION DATE: July 24, 2008

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SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

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COMPONENT: Glycerol

SYNONYMS: Glycerine, Propane-1,2,3-triol

CAS NUMBER: 56-81-5 US TSCA: inventory

EC NUMBER (EINECS): 200-289-5 JAPAN NUMBER (ENCS): 2-242 PERCENTAGE: (JP) 98.0+%

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SECTION 3 HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW

Hygroscopic.

Potential Health Effects

Eve:

May cause mild eye irritation.

Skin:

May cause mild skin irritation. Low hazard for usual industrial handling.

Ingestion:

May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause headache. Expected to be a low ingestion hazard. Inhalation:

Low hazard for usual industrial handling. Inhalation of a mist of this material may cause respiratory tract irritation. Chronic: May cause kidney injury. -----FIRST AID MEASURES Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Skin: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid. Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Notes to Physician: FIRE FIGHTING MEASURES \_\_\_\_\_\_ General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam. ACCIDENTAL RELEASE MEASURES SECTION 6 \_\_\_\_\_\_ General Information: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. \_\_\_\_\_\_

SECTION 7

HANDLING AND STORAGE

Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

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SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

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Engineering Controls:

Use adequate ventilation to keep airborne concentrations low. Personal Protective Equipment

Eyes:

Wear chemical goggles and face shield.

Skin:

Wear appropriate protective gloves to prevent skin

exposure.

Clothing:

Wear appropriate protective clothing to prevent skin

exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator

when necessary.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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Physical State: Viscous liquid
Appearance: APHA: 10 max - clear

Odor: odorless pH: Not available.

Vapor Pressure: 0.003 mbar @ 50 deg C
Viscosity: 1069 mPas 20 deg C
Boiling Point: 290 deg C @ 760.00mm Hg

Freezing/Melting Point: 18 deg C

Autoignition Temperature: 400 deg C ( 752.00 deg F) Flash Point: 160 deg C ( 320.00 deg F)

Explosion Limits, lower: Not available. Explosion Limits, upper: Not available. Decomposition Temperature: >290 deg C

Solubility in water: >500 G/L WATER (20 deg C)

Specific Gravity/Density: 1.2610
Molecular Formula: C3H803
Molecular Weight: 92.09

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SECTION 10
          STABILITY AND REACTIVITY
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    Chemical Stability:
         Stable under normal temperatures and pressures.
    Conditions to Avoid:
         Incompatible materials, exposure to moist air or water, temperatures
         above 140-C.
    Incompatibilities with Other Materials:
         Strong oxidizing agents, lead oxide, nitric acid, sulfuric acid,
         hydrogen peroxides, potassium permanganate, calcium hypochlorite,
         perchloric acid.
    Hazardous Decomposition Products:
         Carbon monoxide, carbon dioxide.
    Hazardous Polymerization: May occur.
            TOXICOLOGICAL INFORMATION
    RTECS#:
         CAS# 56-81-5: MA8050000
    LD50/LC50:
         CAS# 56-81-5: Draize test, rabbit, eye: 126 mg Mild; Draize test,
         rabbit, eye: 500 mg/24H Mild; Draize test, rabbit, skin: 500 mg/24H
         Mild; Inhalation, rat: LC50 = >570 mg/m3/1H; Oral, mouse: LD50 =
         4090 mg/kg; Oral, rabbit: LD50 = 27 gm/kg; Oral, rat: LD50 = 12600
         mg/kg; Skin, rabbit: LD50 = >10 gm/kg.
    Carcinogenicity:
      GLYCEROL -
         Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
         See actual entry in RTECS for complete information.
SECTION 12 ECOLOGICAL INFORMATION
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    Ecotoxicity:
         Daphnia: LC50: >10000 mg/l; 24 H;Algae: LC50: >= 2900 mg/l; ;Fish
         toxicity: LC50 (24 hr) goldfish > 5g/l [Shell Chemie - Shell
         Industrie Chemiclalien Gids, 1.1.1975]
The product is not dangerous
         for aquatic organisms.
Invertebrate toxicity: Cell multiplication
         inhibition test Pseudomonas putida >10g/I, green algae >10g/I,
         Entosiphon sulcatum 3.2g/I
             [Bringmann, G. Water Res. 1980, 14, 231-241]
    Other
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Biodegradable. SECTION 13 DISPOSAL CONSIDERATIONS Dispose of in a manner consistent with federal, state, and local regulations. SECTION 14 TRANSPORT INFORMATION IATA Not regulated as a hazardous material. IMO Not regulated as a hazardous material. RID/ADR Shipping Name: Not regulated. Hazard Class: UN Number: Packing group: SECTION 15 REGULATORY INFORMATION European/International Regulations European Labeling in Accordance with EC Directives Hazard Symbols: Not available. Risk Phrases: Safety Phrases: S 24/25 Avoid contact with skin and eyes. WGK (Water Danger/Protection) CAS# 56-81-5: 0 United Kingdom Occupational Exposure Limits CAS# 56-81-5: OES-United Kingdom, TWA mist: 10 mg/m3 TWA Canada CAS# 56-81-5 is listed on Canada's DSL List. CAS# 56-81-5 is not listed on Canada's Ingredient Disclosure List. Exposure Limits CAS# 56-81-5: OEL-AUSTRALIA:TWA 10 mg/m3 OEL-BELGIUM: TWA 10 mg/m3 OEL-FINLAND: TWA 20 mg/m3 OEL-FRANCE:TWA 10 mg/m3 OEL-THE NETHERLANDS: TWA 10 mg/m3 OEL-UNITED KINGDOM: TWA 10 mg/m3 OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV US FEDERAL

TSCA	CAS#	56-81	-5 is liste	d on the	e TSCA	inventory.		
SECTION 16	6	OTHER	INFORMATION					