

PRODUCT: Neopentylglycol

Date: August 1, 2010

MATERIAL SAFETY DATA SHEET

Page 1 of 6

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

REVISION #: 002

PRODUCT NAME: Neopentylglycol

GHS IDENTIFIER: Neopentylglycol

SYNONYMS: Neopentyl glycol; 1,3-Propanediol, 2,2-dimethyl; 2,2-Dimethyl-

1,3-propanediol; NPG

USE: Chemical intermediate – industrial use only

MANUFACUTURER: Mitsubishi Gas Chemical Co., Inc.

Mitsubishi Building, 5-2, Marunouchi, 2-chome, Chiyoda-ku

Tokyo, 100-8324, Japan

PHONE NUMBERS: Inquiries - +81-3-3283-4749 (Mon-Fri, 9AM – 6PM)

SECTION 2 - HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION: Not applied

LABEL ELEMENTS: Nothing.

IDENTIFICATION: Product consists of colorless to white hygroscopic crystals or

powder with a slightly sweet odor.

POTENTIAL HEALTH EFFECTS

LIKELY ROUTES OF EXPOSURE:

Eye and skin contact, and inhalation

EYES:

Can cause serious eye damage.

SKIN:

Prolonged or repeated contact may cause mild irritation. Persons with pre-existing skin conditions are particularly susceptible.



PRODUCT: Neopentylglycol

Date: August 1, 2010

MATERIAL SAFETY DATA SHEET

Page 2 of 6

SECTION 2 - HAZARDS IDENTIFICATION

INGESTION (swallowing):

May cause nausea and diarrhea.

INHALATION (breathing):

Dust may cause irritation of the nose and throat and respiratory tract. Persons with pre-existing lung conditions may be particularly susceptible.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Component % CAS No. EINECS No.

1,3-Propanediol, 2,2-dimethyl >99 126-30-7 204-781-0

SECTION 4 - FIRST AID MEASURES

EYE CONTACT:

Flush with lots of water for at least 15 minutes. Contact a physician.

SKIN CONTACT:

Wash thoroughly with soap and water.

INGESTION (swallowing):

Rinse out mouth with water, then drink plenty of water. Contact a physician.

INHALATION (breathing):

Move to fresh air.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING AGENT:

Use powder or foam spray, carbon dioxide.

Fight larger fires with water fog.

PROTECTION OF FIREFIGHTERS:

Keep personnel removed from and upwind. Wear full protective clothing and self-contained breathing apparatus with full face-piece. Combustion products include carbon monoxide and carbon dioxide.



PRODUCT: Neopentylglycol

Date: August 1, 2010

MATERIAL SAFETY DATA SHEET

Page 3 of 6

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Eliminate all ignition sources. Persons not wearing protective equipment should be excluded from area of spill. Shovel material into containers. Thoroughly sweep up residual material not to reach sewage or river. Avoid generating dust during clean-up operation.

SECTION 7 - HANDLING AND STORAGE

HANDLING:

Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Earth bags to avoid generating static electricity

STORAGE:

Keep in tightly-closed containers when not in use. Store in cool dry place with adequate ventilation. Do not store near heat or open flames.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS:

All material handling equipment that may generate dust clouds of the product should have properly designed explosion relief/suppression systems.

EYE / FACE PROTECTION:

Chemical splash goggles in compliance with OSHA regulations are advised when handling any chemical substance.

SKIN PROTECTION:

Wear protective gloves such as Neoprene or Buna-N.

RESPIRATORY PROTECTION:

A NIOSH-approved dust mask is recommended if engineering controls are insufficient to maintain exposure below established exposure limits.



PRODUCT: Neopentylglycol

Date: August 1, 2010

MATERIAL SAFETY DATA SHEET

Page 4 of 6

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless to white hygroscopic

crystals or powder (25° C)

Odor: Slightly sweet

Odor Threshold: Unavailable Specific Gravity: 1.047

Vapor Pressure: 4 kPa /30mmHG (124° C)

Vapor Density: Unavailable

Initial Boiling Point: 211° C (410° F) Melting point: 129-130° C (260° F) Evaporation Rate: Unavailable Solubility in Water: 830 g/L Bulk Density: 500-600 kg/M³ Viscosity: Unavailable Volatile %: Unavailable

pH: Unavailable

Octanol/water partition coefficient: -1.04 Decomposition Temperature: Unavailable

Flash Point:: 152° C

Autoignition Temperature: 399° C

SECTION 10 - STABILITY AND REACTIVITY

STABILITY (conditions to avoid):

Stable under normal conditions

INCOMPATIBILITIES (materials to avoid):

Avoid contact with acids, heavy metals, minerals and oxidizing agents

DECOMPOSITION:

Possibility to generate Carbon Monooxide or Carbon Dioxide under some condition

HAZARDOUS POLYMERIZATION:

Not known to occur

SECTION 11 - TOXICOLOGICAL INFORMATION

The following is based on literature information:

Acute oral LD₅₀ (rat) - greater than 6400 mg/kg

Acute dermal LD₅₀ (guinea pig) - greater than 4000 mg/kg

Skin Irritation – not irritating

Skin Sensitization - unavailable

Ames Test – negative

Reproductive toxicity - unavailable

STOT (single exposure) - unavailable

STOT (repeated exposure) – unavailable

Aspiration hazard - unavailable



PRODUCT: Neopentylglycol

Date: August 1, 2010

MATERIAL SAFETY DATA SHEET

Page 5 of 6

SECTION 12 - ECOLOGICAL INFORMATION

The following is based on various literature sources:

BIODEGRADATION:

COD – 2060 mg O₂/gm Greater than 90% after 11 days (OECD302B) 47% after 14 days (Zahn-Weller test)

BIOACCUMULATION:

Does not bioaccumulate BCF (*Oryzias latipes*) – 0.3-0.5, 42 days @ 77° F (25° C) (OECD 305C)

AQUATIC TOXICITY:

Not toxic to fish

24-hr EC₅₀ (daphnia) – greater than 500 mg/L

72-hr EC₅₀ (algae) – greater than 500 mg/L

96-hrLEC₅₀ (fish) – greater than 1000 mg/L

SECTION 13 - DISPOSAL CONSIDERATIONS

Incineration is the recommended disposal method for all chemical wastes, although material may be deposited in a landfill in accordance with all applicable regulations. This material, if disposed of, is not considered a hazardous waste under current U.S EPA RCRA regulations.

SECTION 14 - TRANSPORT INFORMATION

Not regulated under current DOT, TDG (Canadian), ICAO (air) transport regulations.

SECTION 15 - REGULATORY INFORMATION

TSCA INFORMATION:

All components in this product are in compliance with TSCA Inventory requirements.

EINECS:

All components in this product are on the European Inventory of Existing Chemical Substances.



PRODUCT: Neopentylglycol

Date: August 1, 2010

MATERIAL SAFETY DATA SHEET

Page 6 of 6

SECTION 15 - REGULATORY INFORMATION

CEPA:

All components in this product are listed on the Canadian Domestic Substances List (DSL).

ENCS:

All components in this product are on the Japanese Existing & New Chemical Substances

KECI:

All components in this product are on the Korean Existing Chemicals Inventory.

AICSI:

All components in this product are on the Australian Inventory of Chemical Substances

PICCS:

All components in this product are on the Philippine Inventory of Chemicals and Chemical Substances.

SECTION 16 - OTHER INFORMATION

HAZARD RATING:

HEALTH 1 0 - LEAST
FIRE 1 1 - SLIGHT
REACTIVITY 0 2 - MODERATE
OTHER - 3 - HIGH
4 - EXTREME

HAZARD RATING METHOD: HMIS

REASON FOR REVISION:

Reviewed and updated to GHS format.

The product information contained herein is believed to be accurate as of the date of the Material Safety Data Sheet, and is provided without warranty, expressed or implied, as to the results of use of this information or the product to which it relates. Recipient assumes all responsibility for the use of this information and the use (alone or in combination with any other product), storage or disposal of the product, including any resultant personal injury or property damage.