

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: CES-1104

Synonyms: Encapsulated Silicone

INCI Name: Dimethicone (and) Aqua (and) Glycerin (and) Pentylene glycol (and) Dimethicone/Vinyl Dimethicone Crosspolymer (and) Amodimethicone (and) Carbomer (and) Phenoxyethanol (and) Sodium Hydroxide (and) Disodium EDTA

1.2. Intended Use of the Product

Recommended Uses And Restrictions: Cosmetics, personal care products

1.3. Name, Address, and Telephone of the Responsible Party

Customer

NuSil Technology LLC
1050 Cindy Lane
Carpinteria, California 93013
USA
(805) 684-8780
ehs@nusil.com
www.nusil.com

1.4. Emergency Telephone Number

Emergency Number: 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and Maritime)

SECTION 2: HAZARD IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS classification (KR)

Health Hazards

Serious eye damage/eye irritation, Category 2A

Hazard Pictograms (GHS-KR)



Signal Word (GHS-KR)

: Warning

Hazard Statements (GHS-KR)

: H319 - Causes serious eye irritation

Precautionary Statements (GHS-KR)

: P264 - Wash hands, forearms and exposed areas thoroughly after handling.
P280 - Wear eye protection, protective clothing, protective gloves.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice and attention.

2.2. Other Hazards

Other Hazards Which Do Not Result In Classification : Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

SECTION 3: COMPOSITION, INFORMATION ON INGREDIENTS

3.1. Mixture/Substance

Distinction of Substance or Mixture : Mixture

Substance Name	CAS No	Formula	Concentration
Glycerin	56-81-5	C3H8O3	20 - 30%
Pentane-1,2-diol	5343-92-0	C5H12O2	< 5%

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures After Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

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First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid Measures After Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Causes serious eye irritation.

Symptoms/Injuries After Inhalation: None expected under normal conditions of use.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Treatment: If you feel unwell, seek medical advice (show the label where possible)

SECTION 5: EXPLOSION, FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Application of water stream to hot product may cause frothing and increase fire intensity. A heavy water stream may spread burning liquid.

Personal Protection (emergency Response): Do not enter fire area without proper protective equipment, including respiratory protection

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but will burn at high temperatures.

5.3. Advice for Firefighters

Specific Fire Fighting: Exercise caution when fighting any chemical fire. When heated, material emits irritating fumes.

Personal Protection (emergency Response): Do not enter fire area without proper protective equipment, including respiratory protection

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions, Protective Equipment and Emergency Procedures Avoid breathing (vapour, mist, spray).

6.2. Environmental Precautions

Environmental Precautions Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up

Methods and Equipment for Containment and Cleaning up Clear up spills immediately and dispose of waste safely. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Contact competent authorities after a spill.

Prevention Measures for Secondary Accidents Ventilate area. Eliminate ignition sources.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Technical Measures: Comply with applicable regulations.

Local And General Ventilation: Ensure adequate air ventilation.

Precautions For Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Prevents Handling Of Incompatible Substances Or Mixtures: Keep away from : Strong acids, strong bases, strong oxidizers.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Incompatible Substances Or Mixtures: Refer to section 10

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container tightly closed.

Material Used In Packaging/containers: No additional information.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure limits/ Biological limits

Glycerin (56-81-5)		
Korea	ISHA TWA (mg/m ³)	10 mg/m ³

Biological Limits No data available

8.2. Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Gloves. Protective clothing.

Respiratory Protection: Use an approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

Hand Protection: Wear chemically resistant protective gloves.

Eye protection: Chemical goggles or safety glasses.

Skin And Body Protection: Wear suitable protective clothing.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Appearance	: Gel
Physical State	: Liquid
Odour	: Characteristic
pH	: 5.2-6.2
Melting Point	: No data available
Boiling Point	: No data available
Flash Point	: >180°F (82.2°C)
Autoignition Temperature	: No data available
Vapour Pressure	: No data available
Relative Vapour Density At 20 °c	: No data available
Specific Gravity	: 1.03
Solubility	: Water: Dispersable Alcohol: Dispersable Lipids: Insoluble Others: Not Tested
N-octanol/ Water Partition Coefficient	: No data available
Decomposition Temperature	: No data available
Viscosity	: 40,000 - 78,000 cP
Explosive Limits (g/m ³)	: No data available
Explosive Limits (vol %)	: No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: Hazardous reactions will not occur under normal conditions.

10.2 Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3 Possibility Of Hazardous Reactions: Hazardous polymerization will not occur.

10.4 Conditions To Avoid: Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

10.5 Incompatible materials: Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous Decomposition Products: Carbon oxides (CO, CO₂). Silicon oxides. May produce explosive hydrogen gas on contact with incompatibilities or upon thermal decomposition. Will decompose above 150 °C (>300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects - Product

General Toxicity	Not classified
Toxicity Hazard	Not classified
Acute Toxicity (Oral) - Description	Not classified
Acute Toxicity (Dermal) - Description	Not classified
Acute Toxicity (Dust) - Description	Not classified
Acute Toxicity (Mist) - Description	Not classified
Serious Eye Damage/eye Irritation - Description	Causes eye irritation.
Skin Corrosion/irritation - Description	Not classified
Skin Or Respiratory Sensitization - Description	Not classified
Germ Cell Mutagenicity - Description	Not classified
Carcinogenicity	Not classified
Reproductive Toxicity - Description	Not classified
Specific Target Organ Toxicity (single Exposure) - Description	Not classified
Specific Target Organ Toxicity (repeated Exposure) - Description	Not classified
Aspiration Hazard - Description	Not classified
Other Health Hazard	No data available

11.2 Information on Toxicological Effects Ingredient(s)

Glycerin (56-81-5)	
LD50 Oral Rat	5570 mg/kg
LD50 Dermal Rabbit	> 10 g/kg
LC50 Inhalation Rat (mg/l)	> 570 mg/m ³ (Exposure time: 1 h)

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity	: No data available
Fish Toxicity / Other Toxicity	: No data available
Other Information	: Avoid release to the environment.

Glycerin (56-81-5)	
LC50 Fish 1	54000 (51000 - 57000) mg/l (Exposure time: 96 h - Species: <i>Oncorhynchus mykiss</i> [static])
LC 50 Fish 2	11 mg/l (Exposure time: 96 h - Species: <i>Cyprinodon variegatus</i>)

12.2. Persistence and Degradability

No data available

12.3. Bioaccumulative Potential

Glycerin (56-81-5)	
BCF Fish 1	(no bioaccumulation)
Log Pow	-1.76

12.4. Mobility in Soil

No data available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Description of waste materials: Avoid release to the environment.

Waste treatment methods: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 In accordance with UN TDG	Not regulated for transport
14.2 In Accordance with IATA	Not regulated for transport
14.3 In Accordance with IMDG	Not regulated for transport

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SECTION 15: REGULATORY INFORMATION

Asia/Pacific Regulations

Glycerin (56-81-5)

Regional Legislation

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian DSL (Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Pentane-1,2-diol (5343-92-0)

ISHA

Name, Toxicity and Protective Measures of New Chemical Substances

Regional Legislation

Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Canadian NDSL (Non-Domestic Substances List)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

SECTION 16: OTHER INFORMATION

Revision Date : 2015/02/11
Other Information : The SDS is prepared in accordance with SDS requirements of the Ministry of Employment and Labor (MOEL) of South Korea public notice No. 2012-14

We believe that the information contained herein is current as of the date of this Safety Data Sheet, and is offered in good faith. Since the use of this information and of these opinions and the conditions of the use of the product are not within the control of NuSil Technology, it is the user's obligation to determine the conditions of safe use of the product.

SDS Korea GHS