

Cyclomethicone

Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Name: Cyclomethicone Product Code: 515-394X Compound used in customer substance/mixture/product. 1.2 Intended Use: 1.3 Supplier: Majestic Mountain Sage Inc 2490 S 1350 W Nibley, Utah 84321 - United States of America T 435.755.0863 - F 435.755.2108 www.TheSage.com

1.4 Emergency Telephone Number

No additional information available.

SECTION 2: Hazards Identification

2.1 Classification

Flammable Liquids, Category 4 H227: Combustible liquid.

2.2 Label Elements

Signal Word: Warning

Hazard Statements: H227

Combustible liquid.

2.3 Precautionary Statements

General:	Not applicable.
Prevention:	Wear protective gloves.
	Wear eye or face protection.
	Keep away from flames and hot surfaces. No
	smoking.
Response:	Not applicable.

Store in a well-ventilated place. Keep cool.

Dispose of contents and containers in accordance with all local, regional, national and international regulations.

2.4 Hazards not Otherwise Classified (HNOC)

None known.

SECTION 3: Composition/Information on Ingredients

3.1 Substance

Synonyms: Decamethylcyclopentasiloxane

Chemical Name	CAS No.	Weight %
Decamethylcyclopentasiloxane	541-02-6	75-100

SECTION 4: First Aid Measures

4.1 Description of First Aid Measures

Eye Contact:

Immediately flush with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses and continue flushing for at least 10 minutes. Seek immediate medical attention if irritation occurs.

Skin Contact:

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion:

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that the vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms: No information available.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to Physicians:	Treat symptomatically. Contact poison treatment
	specialist immediately if large quantities have been
	ingested or inhaled.

Specific Treatments: No specific treatment.

Protection of First Aid Personnel:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

Suitable: Dry chemical, CO_2 , water spray (fog) or foam.

Unsuitable: Do not use water jet.

5.2 Specific Hazards Arising From the Chemical

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

5.3 Hazardous Thermal Decomposition Products

Carbon monoxide, carbon dioxide, metal oxide/oxides, silicon oxides. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

5.4 Special Protective Actions for Firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

5.5 Protective Equipment and Precautions for Firefighters

Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For Emergency Responders:

If specialized equipment is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel."

6.2 Environmental Precautions

Avoid dispersal of spilled materials and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and Material for Containment and Cleaning Up

Small Spill:

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Note: See Section 13 of SDS for waste disposal.

Large Spill:

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements, or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material (e.g. sand, earth, vermiculite or diatomaceous earth) and place in container for disposal according to local regulations (see Section 13 of SDS). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 13 of SDS for waste disposal.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

Protective Measures:

Put on appropriate personal protective equipment (see Section 8 of SDS). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Advice on General Occupational Hygiene:

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash their hands and face before eating, drinking and smoking. See also Section for additional information on hygiene measures.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10 of SDS) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Exposure Guidelines:

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Appropriate Engineering Controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below and lower explosive limits. Use explosion-proof ventilation equipment.

8.3 Environmental Exposure Controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters, or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

8.4 Individual Protection Measures, Such as Personal Protective Equipment

Hygiene Measures:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/Face Protection:

Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Hand Protection:

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body Protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other Skin Protection:

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection:

If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134). Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical State: Color:	Liquid Colorless
Odor:	Faint odor
Odor Threshold:	No information available
<u>Property</u> pH:	<u>Values</u> No information available
Melting Point:	< -40°C (< -40°F)
Boiling Point:	210.00°C (410.00°F)
Flash Point:	76.6°C (169.9°F) (Closed cup)
Evaporation Rate:	<1 (n-Butyl acetate = 1)

Flammability (solid, gas): Flammability Limit in Air	No information available
Upper Flammability Limit:	No information available
Lower Flammability Limit:	No information available
Vapor Pressure:	0.16 hPa @ 20°C (68°F)
Vapor Density:	No information available
Relative Density:	0.95
Density:	0.95 g/cm ³
Solubility:	Soluble in toluene
Water Solubility:	Insoluble
Partition Coefficient:	8.02 @ 23°C (73°F)
Auto-ignition Temperature:	392°C (738°F)
Decomposition Temperature:	No information available
SADT:	No information available
Kinematic Viscosity:	No information available
Dynamic Viscosity:	4 mPa•s @ 20°C (68°F)

SECTION 10: Stability and Reactivity

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical Stability

The product is stable.

10.3 Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, grind or expose containers to heat or sources of ignition.

10.5 Incompatible Materials

Reactive or incompatible with the following materials: oxidizing materials.

10.6 Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

11.1 Information on the Likely Route of Exposure Not available.

11.2 Information on Toxicological Effects

Product/Ingredient Name	Result	Species	Dose	Exposure
Product Toxicological Data				
	LD50 Oral	Rat	> 5,000 mg/kg 16 CFR 1500.3 (c)(2)(I)	-
	LD50 Dermal	Rabbit	> 2,000 mg/kg OECD - Guideline 402 (Acute Dermal Toxicity)	

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Irritation/Corrosion:

Skin:

Based on available data, the classification criteria are not met.

Eyes:

Based on available data, the classification criteria are not met.

Respiratory:

Based on available data, the classification criteria are not met.

Sensitization:

Product/Ingredient Name	Route of Exposure	Species	Result
Product Toxological Data	Bühler-Patch-Test skin sensitization on guinea pigs	-	Negative
Skin: Respiratory:	Not determined.		

Respiratory:	Not determined.
Mutagenicity:	Not determined.
Carcinogenicity:	Not determined.
Reproductive Toxicity:	Not determined.
Teratogenicity:	Not determined.
Specific Target Organ	
Toxicity (STOT)-Single	
Exposure:	Not available.
STOT-Repeated Exposure:	Not available.
Aspiration Hazard:	Not available.

11.3 Potential Acute Health Effects

Eye Contact:	No known significant effects or critical hazards.
Inhalation:	No known significant effects or critical hazards.

Skin Contact:	No known significant effects or critical hazards.
Ingestion:	No known significant effects or critical hazards.

11.4 Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Eye Contact:	No specific data.
Inhalation:	No specific data.
Skin Contact:	No specific data.
Ingestion:	No specific data.

11.5 Delayed, Immediate Effects, Chronic Effects from Short & Long-term Exposure

Short Term Exposure:	
Potential Immediate Effects:	Not available.
Potential Delayed Effects:	Not available.
Long Term Exposure:	
Potential Immediate Effects:	Not available.
Potential Delayed Effects:	Not available.

11.6 Potential Chronic Health Effects

Summary:	Not determined.
General:	No known significant effects or critical hazards.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental Effects:	No known significant effects or critical hazards.
Fertility Effects:	No known significant effects or critical hazards.

11.6 Numerical Measures of Toxicity - Product Information

Not available.

11.7 Other Information

Rodents repeatedly exposed to decamethylcyclopentasiloxane (D5) via inhalation or ingestion developed increased liver weights relative to unexposed control animals. When the exposure was stopped, livers returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. Liver enlargement was due to an increase in metabolizing enzymes, and a temporary increase in the number and size of normal cells (hyperplasia and hypertrophy). These biochemical pathways are more sensitive in rodents than in humans. Inhalation exposures that are typical in industrial use (5-10 ppm) showed no toxic effects in rodents. A two-year combined chronic toxicity and carcinogenicity inhalation study was conducted with decamethylcyclopentasiloxane (D5) in Fisher-344 rats by whole body inhalation. A statistically significant increase in the trend for uterine endometrial tumors was observed in female rats exposed for 24 months at the highest dose of 160 ppm. The same effects were not seen at the other dose levels of 10 and 40 ppm. No adverse effects were seen in male rats at any level. Whether or not this increase in incidence is truly related to the exposure at D5 is questionable and yet to be determined. Based on our present knowledge, it is unlikely that industrial, commercial or consumer uses of products containing D5 would result in a significant risk to humans. The Recommended Exposure Guideline for D5 is 10 ppm.

SECTION 12: Ecological Information

12.1 Ecotoxicity

No information available.

12.2 Persistence and Degradability

No information available.

12.3 Bioaccumulation

Product/Ingredient Name	Species	Exposure	LogPow	BCF	Potential
Product Ecotoxicological Data	-	-	8.02	-	High

12.4 Mobility in Soil

Soil/Water Partition Coefficient (KOC): Not available

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions, and any by-products should at all times comply with the requirements of environmental legislation and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the regulations of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. See Section 8 for information on appropriate personal protective equipment.

SECTION 14: Transport Information

14.1 DOT

DOT Shipping Name:	Combustible liquid, n.o.s. (decamethylcyclopentasiloxane)
DOT Hazard Class:	CBL
Dot Label(s):	NON
UN/NA Number:	NA 1993
Packing Group:	III
Special Precautions for User:	This product is combustible as defined by the US Department of Transportation (DOT). It is regulated for transport in the US in containers greater than 119 gallons. The product is not regulated for transport by the IATA, ADR/RID, ADNR, or the IMDG regulations.

SECTION 15: Regulatory Information

15.1 International Inventories

United States (TSCA 8b): Canada (DSL/NDSL): Japan (ENCS): New Zealand (NZIoC): China (IECSC): Korea (KECL): Philippines (PICCS): Australia (AICS): Taiwan (CSNN): All components are listed or exempt. All components are listed or exempt.

15.2 US Federal Regulations

TSCA 12(b) - Chemical Export Notification: None required.

TSCA 5(a)2 - Final Significant New Use Rules: Not listed.

TSCA 5(a)2 - Proposed Significant New Use Rules: Not listed.

TSCA 5(e) - Substances Consent Order: Not listed.

SARA 311/312 Hazard Categories: Fire hazard.

15.3 U.S. State Regulations

California Proposition 65: This product does not contain any Proposition 65 chemicals.

15.4 Canada Regulations

WHMIS: Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F). Class D-2A: Material causing other toxic effects (very toxic).

SECTION 16: Other Information

16.2 HMIS Rating

Health Hazards:	1
Flammability:	2
Physical Hazards:	0

Notes:

This safety data sheet is based on the properties of the material known at the time the data sheet was issued. The safety data sheet is intended to provide information for a health and safety assessment of the material and the circumstances, under which it is packaged, stored or applied in the workplace. For such a safety assessment holds no responsibility. This document is not intended for quality assurance purposes.