Cyclohexasiloxane

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / March 26, 2012 / Rules and Regulation

Revision Date: 04-20-2017
Supersedes: None

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Cyclohexasiloxane
Synonyms:
INCI Name: Cyclohexasiloxane, cyclopentasiloxane
CAS Number: 540-97-6, 541-02-6
Formula:
Product Form: Powder
Product Use: Cosmetic use

Distributor: MakingCosmetics.com Inc.
Address: 35318 SE Center Street
Snoqualmie, WA 98065 (USA)
Phone / Fax: 425-292-9502 / 425-292-9601
Web: **www.makingcosmetics.com**

Emergency Telephone Number: 1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

GHS Classification: Not classified
GHS Signal Word: Not applicable
GHS Hazard Pictograms: Not applicable
GHS Hazard Statements: Not applicable
GHS Precautionary Statements: P261 Avoid breathing spray.
P271 Use only outdoors or in a well-ventilated area.
Potential Health Hazards: May cause irritation, tearing and mild temporary pain.
May cause irritation of the respiratory tract.
No significant effects expected from a single short-term exposure
Low ingestion hazard in normal use.

NFPA Ratings (704):

Health	0
Flammability	1
Reactivity	0
Specific Hazard	n/a

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %	Molecular Weight
Dodecamethyl cyclohexasiloxane	540-97-6	>95%	n/a
Decamethyl cyclopentasiloxane	541-02-6	1-5%	n/a

4 FIRST AID MEASURES

Eyes: In case of eye contact, rinse with plenty of water and seek medical attention if necessary
Inhalation: Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if necessary.
Skin: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary
Ingestion: Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention if necessary.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water.
Special protective equipment & precautions for firefighters: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
Specific hazards arising from the chemical: Emits toxic fumes (titanium oxides) under fire conditions. See also Stability and Reactivity section.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures:	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions:	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements
Methods and material for containment and cleaning up:	Pick up and arrange disposal without creating dust. Sweep up and place in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations

7 HANDLING & STORAGE

Precautions for safe handling:	See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.
Conditions for safe storage, incl. any incompatibilities:	Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Exposure Limits	Basis	Entity
Decamethylcyclopentasiloxane	10ppm (TWA)	DCC OEL	TWA

TWA: Time Weighted Average over 8 hours of work.
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL: Ceiling

Personal Protection:

Eyes:	Wear chemical safety glasses or goggles.
Inhalation:	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin:	Wear nitrile or rubber gloves, apron or lab coat.
Other:	Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid	**Vapor Pressure:**	Not applicable
Odor:	Odorless	**Vapor Density:**	Not applicable
Taste:	Tasteless	**Evaporation Rate:**	Not applicable
Color:	Colorless	**Flammability:**	Not flammable
Molecular Weight:	Not available	**Upper/lower Explosive Limit:**	Not explosive
pH (1% sol. in water)	Not applicable	**Solubility:**	
Boiling Point:	245oC		
Flash Point:	100oC (closed cup)		
Viscosity:	6.8 cSt		
Specific Gravity:	0.96		

10 STABILITY AND REACTIVITY

Reactivity:	Use at elevated temperatures may form highly hazardous compounds. Can react with strong oxidizing agents. Hazardous decomposition products will be formed at elevated temperatures
Chemical Stability:	Product is stable
Possibility of Hazardous Reactions:	Will not occur
Conditions to Avoid:	Not available
Incompatible Materials:	Oxidizing agents. Reactive with acids, slightly reactive with metals
Hazardous Decomposition Products:	Formaldehyde

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:	Not classified
Decamethylcyclopentasiloxane	Oral: LD50 (Rat): > 24,134 mg/kg, Assessment: The substance or mixture has no acute oral

	toxicity. Inhalation: LC50 (Rat): 8.67 mg/l, Exposure time: 4 h, Test atmosphere: dust/mist, Assessment: The substance or mixture has no acute inhalation toxicity
Skin corrosion/irritation	Not classified based on available information.
Serious eye damage/eye irritation	Not classified based on available information.
Skin sensitization	Not classified based on available information.
Respiratory sensitization	Not classified based on available information.
Germ cell mutagenicity	Not classified based on available information.
Genotoxicity (Product):	Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro Result: negative Remarks: Based on test data Genotoxicity in vivo : Test Type: In vivo micronucleus test Species: Mouse Application Route: Intraperitoneal injection Result: negative Remarks: Based on test data Germ cell mutagenicity Assessment: Animal testing did not show any mutagenic effects.
Decamethylcyclopentasiloxane:	Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES) Result: negative Remarks: Based on test data Genotoxicity in vivo : Test Type: Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo Species: Rat Application Route: inhalation (vapor) Result: negative Remarks: Based on test data Germ cell mutagenicity Assessment: Animal testing did not show any mutagenic effects.
Carcinogenicity (Product):	Not classified based on available information.
Decamethylcyclopentasiloxane:	Result: negative Remarks: Based on test data Carcinogenicity – Assessment IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. OSHA: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
Reproductive Toxicity (Product):	Test Type: Reproduction/Developmental toxicity screening test Species: Rat, male and female Application Route: Ingestion Symptoms: No effects on fertility. Remarks: Based on test data Test Type: Reproduction/Developmental toxicity screening test Species: Rat, male and female Application Route: Ingestion Symptoms: No effects on fetal development. Remarks: Based on test data No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.
Decamethylcyclopentasiloxane:	Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Inhalation Symptoms: No effects on fertility. Remarks: Based on test data Effects on fetal development : Test Type: Two-generation reproduction toxicity study Species: Rat Application Route: Inhalation Symptoms: No effects on fetal development. Remarks: Based on test data Reproductive toxicity – Assessment: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.
Routes of Exposure (Product):	Routes of exposure: Ingestion Assessment: No significant health effects observed in animals at concentrations of 100

mg/kg bw or less.

Decamethylcyclopentasiloxane: Routes of exposure: Skin contact
Assessment: No significant health effects observed in animals at concentrations of 200 mg/kg bw or less.
Routes of exposure: Ingestion
Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.
Routes of exposure: inhalation (vapor)
Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.

Further information (product): Remarks: This material contains dodecamethylcyclohexasiloxane (D6). D6 was administered to rats by whole body inhalation to 0, 1, 10 and 30 ppm for a period of 13-14 weeks. An increased incidence and severity of inflammation and hyperplasia was observed in the nasal region in the 10 and 30 ppm dose groups. These observations are consistent with a mucosal irritant, however, there was little or incomplete recovery after the 28-day recovery period. The relevance of these findings to humans is unknown.

Decamethylcyclopentasiloxane: Remarks: Results from a 2 year repeated vapor inhalation exposure study to rats of decamethylcyclopentasiloxane (D5) indicate effects (uterine endometrial tumors) in female animals. This finding occurred at the highest exposure dose (160 ppm) only. Studies to date have not demonstrated if this effect occurs through a pathway that is relevant to humans.

12 ECOLOGICAL INFORMATION

Ecotoxicity

Fish: NOEC (Oncorhynchus mykiss (rainbow trout)): 0.014 mg/l
Remarks: No toxicity at the limit of solubility.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) Remarks: No toxicity at the limit of solubility.

Persistence and Degradability (Decamethylcyclopentasiloxane): Result: Not readily biodegradable.
Biodegradation: 0.14 %
Exposure time: 28 d
Method: OECD Test Guideline 310

Bioaccumulative Potential (Decamethylcyclopentasiloxane): Species: Pimephales promelas (fathead minnow)
Bioconcentration factor (BCF): >= 500
Remarks: Based on test data
Trophic magnification factor <1
Biomagnification factor <1
Does not biomagnify along the food chain.

Mobility in Soil: Not available

PBT and vPvB Assessment: Remarks: Decamethylcyclopentasiloxane (D5) meets the current REACh Annex XIII criteria for vPvB. However, D5 does not behave similarly to known PBT/vPvB substances. The weight of scientific evidence from field studies shows that D5 is not biomagnifying in aquatic and terrestrial food webs. D5 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D5 in air that does not degrade by reaction with hydroxyl radicals is not expected to deposit from the air to water, to land, or to living organisms. Based on an independent scientific panel of experts, the Canadian Minister of the Environment has concluded that "D5 is not entering the environment in a quantity or concentration or under conditions that have or may have an immediate or longterm harmful effect on the environment or its biological diversity, or that constitute or may constitute a danger to the environment on which life depends".

Other Adverse Effects: Not available

13 DISPOSAL CONSIDERATIONS

Waste Residues: Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

Product Containers: Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods

14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	Not dangerous goods
TDG (Transportation of Dangerous Goods, Canada):	Not dangerous goods
IMDG (International Maritime Dangerous Goods):	Not dangerous goods
IATA (International Air Transport Association):	Not dangerous goods
ICAO (International Civil Aviation Organization):	Not dangerous goods

15 REGULATORY INFORMATION

TSCA Inventory Status:	All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.
DSL:	All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).
California Proposition 65:	This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.
SARA 302:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 304:	This material does not contain any components with a section 304 EHS RQ
SARA 311:	
SARA 312:	
SARA 313:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

16 OTHER INFORMATION

Revision Date:	04-20-2017
Compliance:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Disclaimer:	This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness & completeness of such information for his own particular use.