# SAFETY DATA SHEET



Revision date: 31-May-2022

**Revision Number** 4

# 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product identifier** 

Product Name CV 1004 VOLATILE SILICONE FLUID

**Product Code(s)** 000000035461

Other means of identification

UN number 1993

**CAS No.** 556-67-2

Synonyms KF-994

Recommended use of the chemical and restrictions on use

**Recommended use**Cosmetics applications.

Uses advised against No information available.

<u>Supplier</u>

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## Emergency telephone number

Emergency telephone number 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

# 2. HAZARDS IDENTIFICATION

## **GHS Classification**

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

Flammable liquids	Category 3
Reproductive toxicity	Category 2

Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

### **SIGNAL WORD**

Warning

#### Label elements

Flame Health hazard



#### **Hazard statements**

H226 - Flammable liquid and vapor H361f - Suspected of damaging fertility

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations: H410 - Very toxic to aquatic life with long lasting effects

## **Precautionary Statements - Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Keep container tightly closed

Ground and bond container and receiving equipment

Use explosion-proof electrical, ventilating, lighting equipment

Use non-sparking tools

Take action to prevent static discharges

Wear protective gloves / protective clothing / eye protection / face protection

Avoid release to the environment

## **Precautionary Statements - Response**

If exposed or concerned: Get medical advice/attention

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.

Collect spillage

### **Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool

Store locked up

## **Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

### Other hazards which do not result in classification

Very toxic to aquatic life

Poisons Schedule (SUSMP) None allocated

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Chemical name	CAS No.	Weight-%
Octamethylcyclotetrasiloxane	556-67-2	100

# 4. FIRST AID MEASURES

**Description of first aid measures** 

General advice For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New

Zealand 0800 764 766) or a doctor.

**Inhalation** Remove to fresh air and keep at rest in a position comfortable for breathing. Call a

physician if symptoms occur.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while

rinsing. If symptoms persist, call a physician.

Skin contact Wash skin with soap and water. Call a physician if symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do NOT induce vomiting. IF exposed or if you feel unwell: Call a

POISON CENTER or doctor/physician.

Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

Indication of any immediate medical attention and special treatment needed

# 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media** 

Suitable Extinguishing Media Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal

protein foam can be used.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Specific hazards arising from the

chemical

Flammable. Risk of ignition. Keep product and empty container away from heat and sources of ignition. Containers may explode when heated. In the event of fire, cool tanks with water spray. Runoff may create fire or explosion hazard. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local

regulations.

Hazardous combustion products Oxides of carbon. Formaldehyde.

Special protective actions for fire-fighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

Hazchem code •3Y

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin,

eyes, and clothing. Avoid breathing vapors or mists. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the

product must be grounded. Do not touch or walk through spilled material.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

For emergency responders Shut off ignition sources. Clear area of all unprotected personnel. Use personal protection

recommended in Section 8.

**Environmental precautions** 

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Refer to protective measures listed in Sections 7 and 8. See Section 12 for additional

Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce

vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Remove ignition sources. Provide adequate ventilation. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Methods for cleaning up Use non-sparking tools. Dam up. Soak up with inert absorbent material. Pick up and

transfer to properly labelled containers.

## 7. HANDLING AND STORAGE

#### Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Keep away

from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use personal protection equipment. Use according to package label instructions. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Not to be used by pregnant workers and workers who have recently given birth

or who are breastfeeding.

**General hygiene considerations**Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and

immediately after handling the product. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up. Keep away from heat, sparks, flame and other sources of ignition (i.e.,

pilot lights, electric motors and static electricity). Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials. Keep in an area equipped with sprinklers. Keep in properly labelled containers. Protect from direct sunlight. Store below 30°C. Store in accordance with local regulations. Store in accordance with the particular national regulations. Store away from incompatible materials described in Section

10.

**Incompatible materials** Oxidizing agents.

Poisons Schedule (SUSMP) None allocated

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Control parameters**

**Exposure Limits** No value assigned for this specific material by Safe Work Australia.

### **Appropriate engineering controls**

**Engineering controls** Ensure adequate ventilation, especially in confined areas.

## Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, RESPIRATOR.









Eye/face protection Glasses.

**Skin and body protection** Wear suitable protective clothing. Antistatic boots. Overalls.

Hand protection Impervious gloves.

Respiratory protection If determined by a risk assessment an inhalation risk exists, wear an organic

vapour/particulate respirator or an air supplied mask meeting the requirements of AS/NZS

1715 and AS/NZS 1716.

**Environmental exposure controls** No information available.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical stateLiquidAppearanceClearColorColourless

Odor Essentially Odourless
Odor threshold No information available.

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pН No data available None known pH (as aqueous solution) No data available None known Melting point / freezing point No data available None known Boiling point / boiling range 101 °C (20 mmHg) None known 56 °C Flash point CC (closed cup) No data available None known **Evaporation rate** No data available None known Flammability (solid, gas)

Flammability Limit in Air

None known

Upper flammability or explosive 7.9

limits

Lower flammability or explosive 0.5

limits

1 mmHg @ 23°C Vapor pressure None known Vapor density No data available None known Relative density 0.95 None known Water solubility No data available None known Solubility(ies) Immiscible in water Miscible with some None known

alcohols, ether, hydrocarbons and

chlorinated solvents.

**Partition coefficient** No data available None known **Autoignition temperature** No data available None known No data available **Decomposition temperature** None known Kinematic viscosity No data available None known **Dynamic viscosity** None known No data available

Other information

# 10. STABILITY AND REACTIVITY

Reactivity

Reactivity No information available.

**Chemical stability** 

Stability Stable under normal conditions.

**Explosion data** 

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing. Heating can cause expansion or decomposition of the

material, which can lead to the containers exploding.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid Heat, flames and sparks. Static discharge (electrostatic discharge). Avoid contact with

combustible substances. Direct sunlight.

Incompatible materials

Incompatible materials Oxidizing agents.

**Hazardous decomposition products** 

Hazardous decomposition products Oxides of carbon. Formaldehyde.

# 11. TOXICOLOGICAL INFORMATION

**Acute toxicity** 

Information on likely routes of exposure

**Product Information**No adverse health effects expected if the chemical is handled in accordance with this

Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the

chemical is mishandled and overexposure occurs are:

**Inhalation** May cause irritation.

**Eye contact** May cause irritation.

**Skin contact** May cause irritation.

**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**Symptoms** No information available.

### Numerical measures of toxicity - Product Information

No information available.

**Component Information** 

	Inhalation LC50
Octamethylcyclotetrasiloxane = 1540 mg/kg (Rat) = 794 µL/kg (Rabbit)	= 36 g/m <sup>3</sup> (Rat) 4 h

See section 16 for terms and abbreviations

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation**No information available.

Serious eye damage/eye irritation No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** The substance was not mutagenic to bacteria.

**Carcinogenicity** Not listed as carcinogenic according to IARC.

Reproductive toxicity Suspected of damaging fertility or the unborn child. Classification is based on mixture

calculation methods based on component data.

**STOT - single exposure**No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

Chronic effects: A two year combined chronic and carcinogenicity assay was conducted on

octamethylcyclotetrasiloxane. Rats were exposed by whole-body vapour inhalation

6hrs/day, 5days/week for up to 104 weeks to 0, 10, 30, 150 or 700ppm of

octamethylcyclotetrasiloxane. The increase in incidence of (uterine) endometrial cell hyperplasia and uterine adenomas (benign tumours) were observed in female rats at 700ppm. Since these effects only occurred at 700ppm, a level that greatly exceeds typical workplace or consumer exposure, it is unlikely that industrial, commercial or consumer uses of products containing octamethylcyclotetrasiloxane would result in a significant risk to

humans.

Other adverse effects Repeated inhalation or oral exposure of mice and rats to decamethylcyclopentasiloxane

produced an increase in liver size. No gross histopathological or significant clinical chemistry effects were observed. An increase in liver metabolizing enzymes, as well as a transient increase in the number of normal cells (hyperplasia) followed by an increase in

cell size (hypertrophy) were determined to be the underlying causes of the liver enlargement. The biochemical mechanisms producing these effects are highly sensitive in rodents, while similar mechanisms in humans are insensitive. Octamethylcyclotetrasiloxane administered to rats by whole body inhalation at concentrations of 500 and 700 ppm for70 days prior to mating, through mating, gestation and lactation resulted in decreases in live litter size. Additionally, increases in the incidence of deliveries of offspring extending over an unusually long time period (dystocia) were observed at these concentrations. Statistically significant alterations in these parameters were not observed in the lower concentrations evaluated (300 and 70 ppm). In a previous range-finding study, rats exposed to vapour concentrations of 700 ppm had decreases in the number of implantation sites and live litter size. The significance of these findings to humans is not known.

# 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

**Ecotoxicity** 

Keep out of waterways. Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Octamethylcyclotetrasilox	-	LC50: >500mg/L (96h,	-	EC50: =25.2mg/L (24h,
ane		Brachydanio rerio) LC50:		Daphnia magna)
		>1000mg/L (96h,		
		Lepomis macrochirus)		

#### Persistence and degradability

Persistence and degradability

Degradable under anaerobic conditions in laboratory experiments.

Bioconcentration Factor (BCF), fathead minnows: 12,400.

Bioaccumulative potential

**Bioaccumulation** No information available.

**Component Information** 

Chemical name	Partition coefficient	
Octamethylcyclotetrasiloxane	5.1	

**Mobility** 

Mobility in soil No information available.

Other adverse effects

## 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

Waste from residues/unused products

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging**Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Dispose of in accordance with federal, state and local regulations.

# 14. TRANSPORT INFORMATION

#### **ADG**

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and

Rail: DANGEROUS GOODS.

**UN** number 1993

Proper shipping name FLAMMABLE LIQUID, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE)

Hazard class **Packing group** Ш **Special Provisions** 223, 274 Hazchem code •3Y

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

**UN** number

**UN** proper shipping name FLAMMABLE LIQUID, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE)

Transport hazard class(es) 3 **Packing group** Ш

#### **IMDG**

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

**UN** number 1993

**UN** proper shipping name FLAMMABLE LIQUID, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE)

Transport hazard class(es) Ш Packing group **IMDG EMS Fire** F-E **IMDG EMS Spill** S-D Marine pollutant Yes

# 15. REGULATORY INFORMATION

## Safety, health and environmental regulations/legislation specific for the substance or mixture

# National regulations

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Poisons Schedule (SUSMP) None allocated

## Major hazard (accident/incident planning) regulation

Verify that license requirements are met

Hazardous chemical Threshold quantity (T) 50 000

Liquids that meet the criteria for Class 3 Packing Group II or III

**International Inventories** 

**AIIC** All the constituents of this material are listed on the Australian Inventory of Industrial

Chemicals.

#### Legend:

AIIC - Australian Inventory of Industrial Chemicals

### **International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

# 16. OTHER INFORMATION

Supplier Safety Data Sheet 10/2011

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Change in Hazardous Chemical Classification

Issuing Date: 31-May-2022

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

#### **Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

## Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

C Carcinogen

## Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian Industrial Chemicals Introduction Scheme (AICIS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set

RTECS (Registry of Toxic Effects of Chemical Substances)

World Health Organization

#### **Disclaimer**

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris and Australian Botanical Products.

**End of Safety Data Sheet**