

Safety Data Sheet



A Subsidiary of PETRONAS Chemicals Group

BRB CM 50

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Version 3

1. Identification

Product identifier

Product name BRB CM 50

Other means of identification

Product code 1041177

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Cosmetic additive, solvent Home care Personal care Cleaning agent Chemical intermediate Laboratory chemicals Additives for pigment/paint/ink

Restrictions on use No information available

Details of the supplier of the safety data sheet

BRB International BV
Branskamp 12
6014 CB Ittervoort
The Netherlands
☎ 0031-475-560300

BRB North America Inc.
68 3rd Street, Suite 247
Brooklyn, NY 11231
USA
☎ 001-917-8341770

BRB Malaysia Sdn Bhd
No 112, Kawasan Perindustrian Gebeng
Kuantan, Pahang 26080
Malaysia
☎ 00603-5858-588

For further information, please contact

Contact Point Regulatory Affairs Department
E-mail address MSDS@brbbv.com

Emergency telephone number

Emergency telephone +1 215 207 0061 (NCEC 24/7) For additional emergency telephone numbers see section 16 of the safety data sheet.

2. Hazard(s) identification

Classification

Flammable liquids***

Category 4***

Label elements

Warning***

Hazard statements

Combustible liquid***

Appearance No information available

Physical state Liquid

Odor odorless

Precautionary Statements - Prevention

Keep away from flames and hot surfaces. - No smoking
Wear protective gloves/eye protection/face protection***

In case of fire: Use CO2, dry chemical, or foam to extinguish***

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool***

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant***

Hazards not otherwise classified (HNOC)**OTHER INFORMATION**

May be harmful in contact with skin. Harmful to aquatic life with long lasting effects.***

3. Composition/information on ingredients**Substance****Mixture *****

Chemical name	CAS No.	Weight-%	Trade secret
Decamethylcyclopentasiloxane***	541-02-6	> 96	*
Octamethylcyclotetrasiloxane***	556-67-2	<0.1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures**Description of first aid measures**

General advice	IF exposed or concerned: Get medical advice/attention.
Inhalation	Remove to fresh air.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing.***
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.***
Ingestion	Clean mouth with water and drink afterwards plenty of water.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8).***

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media Large Fire	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.*** CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray.***
Hazardous combustion products	Carbon dioxide (CO ₂). Carbon monoxide. Formaldehyde. Silicon dioxide.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	Yes.***
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material.***
For emergency responders	Use personal protection recommended in Section 8.

Methods and material for containment and cleaning up

Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far ahead of liquid spill for later disposal.***
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.***
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.
Reference to other sections	See section 8 for more information. See section 13 for more information. See Section 12 for additional Ecological Information.

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation.***
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static
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electricity). Keep in properly labeled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations.***

8. Exposure controls/personal protection

Control parameters

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

Biological occupational exposure limits

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

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).***

Gloves			
Duration of contact	PPE - Glove material	Glove thickness	Break through time
Long term (repeated)***	Wear protective nitrile rubber gloves***	>=0.4 mm***	>=480 minutes***

Skin and body protection Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained.

General hygiene considerations Do not eat, drink or smoke when using this product. 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.***

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Liquid
Appearance No information available
Color Colorless
Odor odorless
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	***
pH (as aqueous solution)	No data available	No information available
Melting point/freezing point	approx. -38 °C*** /*** -36.4 °F***	
Boiling point / boiling range	approx. 210 °C*** /*** 410 °F***	
Flash Point	approx. 82.7 °C*** /*** 180.9 °F***	
Evaporation Rate	No data available	No information available
Flammability (solid, gas)	No data available	None known

Flammability Limit in Air		None known
Upper flammability limit:	13.21 vol%*** Vol-%	
Lower flammability limit:	0.45 vol%*** Vol-%	
Vapor pressure	No data available	***
	approx.*** 0.33*** hPa***	@ 25 °C***
Vapor Density	1	
Relative Density	approx. 0.960 g/cm3	@ 20°C
Water solubility	No data available	@ 20°C
Solubility in other solvents	No data available	
Partition coefficient	approx. 8.1	@ 25 °C
Autoignition Temperature	approx. 372 °C*** /*** 701.6 °F***	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	@ 40°C
	4 mm2/s	@ 25°C
Dynamic viscosity	3.5 mPa s	@ 25 °C
Other information		
Explosive properties	No information available	
Oxidizing properties	No information available	
Softening point	No information available	
Molecular weight	No information available	
VOC Content (%)	No information available	
Density	No data available	
Bulk Density	No data available	

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to Avoid	Heat, flames and sparks.***
Incompatible materials	Acids. Bases. Incompatible with oxidizing agents.
Hazardous decomposition products	Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon monoxide. Carbon dioxide (CO2). Silicon dioxide. If this product is heated to > 150 °C, trace quantities of formaldehyde may be released, and adequate ventilation is required.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	May be harmful in contact with skin.***
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Acute toxicity**Numerical measures of toxicity**

Oral LD50

> 5005*** mg/kg	Rat	OECD 401
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Dermal LD50

> 2002*** mg/kg	Rabbit	OECD 402
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Inhalation LC50

> 5005***	Rat	OECD 403
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Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Decamethylcyclopentasiloxane* ** 541-02-6	> 5000 mg/kg (Rat OECD 401)	> 2000 mg/kg (Rabbit OECD 402)	approx. 8.67 mg/L (Rat 4h OECD 403)

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

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

Decamethylcyclopentasiloxane (541-02-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion	Rabbit				non-irritant

Serious eye damage/eye irritation

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

Decamethylcyclopentasiloxane (541-02-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit				non-irritant

Respiratory or skin sensitization

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

Decamethylcyclopentasiloxane (541-02-6)

Method	Species	Exposure route	Results
OECD Test No. 429: Skin Sensitization: Local Lymph Node Assay	Mouse		Not a skin sensitizer

Germ cell mutagenicity

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

Decamethylcyclopentasiloxane (541-02-6)

Method	Species	Results
OECD 471	in vitro	Not mutagenic
OECD 473	in vitro	Not mutagenic
OECD 476	in vitro	Not mutagenic
OECD 474	in vivo	Not mutagenic
OECD 486	in vivo	Not mutagenic

Carcinogenicity

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

Decamethylcyclopentasiloxane (541-02-6)

Method	Species	Results
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OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies	Rat	Not Carcinogenic
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Reproductive toxicity Based on available data, the classification criteria are not met.

Decamethylcyclopentasiloxane (541-02-6)

Method	Species	Results
OECD 416	Rat	Negative
OECD 414	Rat	Negative

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

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

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Decamethylcyclopentasiloxane (541-02-6)

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD 408	Rat	Oral	≥ 1000 mg/kg bw/day		NOAEL
OECD 410	Rat	Dermal	≥ 1600 mg/kg bw/day		NOAEL
OECD 453	Rat	Inhalation	2420 mg/m ³		NOAEC
OECD 453	Rat	Inhalation	600 mg/m ³		NOAEC

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

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.***

Decamethylcyclopentasiloxane (541-02-6)

Method	Species	Endpoint type	Effective dose	Exposure time	Results
OECD Test No. 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test	Selenastrum capricornutum	EC50	> 12 µg/l	96 hours	
OECD Test No. 201: Freshwater Alga and Cyanobacteria, Growth Inhibition Test	Selenastrum capricornutum	NOEC	≥ 12 µg/l	96 hours	
OECD Test No. 204: Fish, Prolonged Toxicity Test: 14-Day Study	Oncorhynchus mykiss (rainbow trout)	LC50	> 16 µg/l	96 hours	
OECD Test No. 204: Fish, Prolonged Toxicity Test: 14-Day Study	Oncorhynchus mykiss (rainbow trout)	NOEC	≥ 16 µg/l	96 hours	
OECD Test No. 210: Fish, Early-Life Stage Toxicity	Oncorhynchus mykiss (rainbow trout)	NOEC	≥ 14 µg/l	2160 hours	

Test	trout)				
OECD Test No. 202: Daphnia sp., Acute Immobilization Test	Daphnia magna	EC50	> 2.9 µg/l	48 hours	
OECD Test No. 202: Daphnia sp., Acute Immobilization Test	Daphnia magna	NOEC	>= 2.9 µg/l	48 hours	
OECD Test No. 211: Daphnia magna Reproduction Test	Daphnia magna	NOEC	>= 15 µg/l	504 hours	

Persistence and degradability No information available.

Product Information

Biodegradation No information available

BOD No information available

ThCO₂ No information available

DOC No information available

Chemical name	Biodegradation
Decamethylcyclopentasiloxane*** 541-02-6	Biodegradation: 0.14% (28d OECD 310)

Bioaccumulation No information available.

Bioaccumulation (factor)

Chemical name	Partition coefficient
Decamethylcyclopentasiloxane*** 541-02-6	8.1

Mobility No information available.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging Contaminated packages must be completely emptied and can be re-used following proper cleaning. Clean IBCs or drums at approved facility. Packaging which cannot be properly cleaned must be disposed of. Handle contaminated packages in the same way as the product itself.

14. Transport information

DOT

UN/ID no NA1993***
Proper shipping name Combustible liquid, n.o.s.***
Transport hazard class(es) Combustible liquid***
Packing group III***
Special Provisions IB3, T1, TP1, 148***

DOT Marine Pollutant Description	NP***
Emergency Response Guide Number	NA1993, Combustible liquid, n.o.s.(Decamethylcyclopentasiloxane), III***
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IATA Not regulated

IMDG Not regulated

15. Regulatory information

International Inventories

TSCA Complies.***

DSL/NDSL Complies.***

EINECS/ELINCS Complies.***

ENCS Complies.***

IECSC Complies.***

KECL Complies.***

PICCS Complies.***

AICS Complies.***

NZIoC Complies.***

TCSI Contact supplier for inventory compliance status.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

TCSI - Taiwan Chemical Substance Inventory

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. Other information

<u>NFPA</u>	Health hazards 0	Flammability 2***	Instability 0	Special hazards -
<u>HMIS</u>	Health hazards 0	Flammability 2***	Physical hazards 0	PERSONAL PROTECTION X

Emergency telephone number ***

Mexico	+52 55 5004 8763 (NCEC 24/7)
Chile	+56 2 2582 9336 (NCEC 24/7)
Colombia	+57 601 508 7337 (NCEC 24/7)***
Argentina	+54 11 5984 3690 (NCEC 24/7)

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

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

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 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)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 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
 World Health Organization

Revision date 17-Aug-2023

Revision note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.