

Material: 60006878 WACKER-BELSIL® PDM 20

Version: 1.2 (US) Date of print: 22.11.2005 Date of last alteration: 26.09.2003

Product and company identification

.1 Identification of the substance or preparation:

Commercial product name: WACKER-BELSIL® PDM 20

Use of substance / preparation: Industrial.

Intermediate chemical

1.2 Company/undertaking identification:

Manufacturer/distributor: Wacker-Chemie GmbH

Hanns-Seidel-Platz 4 81737 München

Germany

Customer information: Wacker Chemical Corporation

3301 Sutton Road

Adrian, Michigan 49221-9397

USA

Customer Care Center:Tel (517) 264-8240, Fax (517) 264-8740 Hours of operation:Monday - Friday,

8 am to 5 pm (eastern standard time)

Corporate website: www.wackersilicones.com

Emergency telephone no. (24h): (517) 264-8500

Transportation emergency: (800) 424-9300 (CHEMTREC, USA)

(703) 527-3887 (CHEMTREC, international) (613) 996-6666

(CANUTEC, Canada)

This MSDS was prepared by the Regulatory Affairs and Product Safety Department (RAPS) of Wacker Chemical Corporation.

2 Composition/information on ingredients

2.1 Chemical characterization (substance):

Chemical characteristics

Polydimethylphenylsiloxane

2.2 Information on ingredients:

This material does not contain any OSHA or WHMIS reportable hazardous ingredients.

Substances listed in the Subsections HAPS and California Proposition 65 Carcinogens / Reproductive Toxins that are not listed in Section 2 are only present at quantities below 0.1% or they are inextricably bound in the product.

3 Hazards identification

3.1 Hazards classifications

HMIS® rating (product as packaged):

Health: 1 Fire: 1 Reactivity: 0 PPE: B

(HMIS codes are based on contact with the product as packaged and any hydrolysis by-products, if present.) Hazardous Materials Identification System and HMIS are registered trademarks of the National Paint and Coatings Association.

Canadian WHMIS Classification: None.

3.2 Emergency overview and potential hazards

This material is not hazardous under OSHA criteria. This material is not hazardous under WHMIS criteria.



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Physical Hazards:

No known physical hazards.

Acute health effects

Route of entry or possible contact:

eyes , skin .

Eye contact:

May cause slight eye irritation.

Skin contact:

No known skin hazards.

Inhalation:

Inhalation is not expected due to low vapor pressure.

Ingestion:

Not expected in industrial use.

Addtional information on acute health effects:

none

3.3 Further information:

Chronic health effects:

No known or expected chronic health effects.

Medical conditions which may be aggravated by exposure:

none known

Target organs affected:

No known internal organ effects.

Signs and Symptoms of Exposure:

Refer to Acute Health Effects, listed above.

Carcinogens/Reproductive toxins:

There are no carcinogenic ingredients present at or over 0.1% in this material. This material does not contain any reproductive toxins at or above OSHA or WHMIS reportable levels.

See Section 11 for Toxicological Information, if any.

4 First-aid measures

4.1 General information:

Get medical attention if irritation occurs or if breathing becomes difficult. Remove contaminated clothing and shoes.

4.2 After inhalation:

No special treatment is required.

4.3 After contact with the skin:

Remove material with a waterless skin cleaner from skin. Wash with soap and water.

4.4 After contact with the eyes:

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

4.5 After swallowing:

For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids.

5 Fire-fighting measures

5.1 Flammable properties: Flash point.....: approx. 170 °C (338 °F) (ISO 2719) Lower explosion limit (LEL)...: not applicable Upper explosion limit (UEL)...: not applicable Autoignition temperature...: approx. 450 °C (842 °F) (DIN 51794) NFPA Hazard Class (comb./flam.liquid): IIIB

5.2 Fire and explosion hazards:

none known

Recommended extinguishing media:

water-mist , carbon dioxide , sand , dry chemical or alcohol-resistant foam .



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5.4 Unsuitable extinguishing media:

sharp water jet , water-spray .

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:

Hazardous decomposition products: carbon monoxide , carbon dioxide , silicon dioxide , formaldehyde , incompletely burnt hydrocarbons .

5.6 Fire fighting procedures:

Fire fighters should wear full protective clothing including a self-contained breathing apparatus.

6 Accidental release measures

6.1 Precautions:

If material is released indicate risk of slipping.

HAZWOPER PPE Level: D

6.2 Containment:

Prevent material from entering surface waters, drains or sewers and open soil. Contain any fluid that runs out using suitable material (e.g. earth).

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up:

Take up mechanically and dispose of according to local/state/federal regulations. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner.

7 Handling and storage

7.0 General information:

No special protective measures required.

7.1 Handling

Precautions for safe handling:

Spilled substance increases risk of slipping.

Precautions against fire and explosion:

Observe the general rules for fire prevention.

7.2 Storage

Conditions for storage rooms and vessels:

none known

Advice for storage of incompatible materials:

not applicable

Further information for storage:

Keep container tightly closed.

8 Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

not necessary

8.2 Associate substances with specific control parameters such as limit values none known .

8.3 Personal protection equipment (PPE)

Respiratory protection:

Respiratory protection is not normally required.

Hand protection:

Recommendation: rubber gloves .



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Eye protection:

Safety glasses with side shields or chemical safety goggles.

Other protective clothing or equipment:

Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

8.4 General hygiene and protection measures:

Avoid contact with eyes. Do not eat or drink when handling. Wash thoroughly after handling.

9 Physical and chemical properties

9.1 Appearance

Physical state / form....: liquid Colour....: colourless Odour...: odourless

9.2 Safety parameters

barce, parameters		11001104
Melting point / melting range a	approx65 °C (-85 °F)	
Flash point a	approx. 170 °C (338 °F)	(ISO 2719)
Autoignition temperature a	approx. 450 °C (842 °F)	(DIN 51794)
Lower explosion limit (LEL) r	not applicable	
Upper explosion limit (UEL) r		
Density	0.99 - 1.01 g/cm3 at 25 °C (77 °F), at	(DIN 51757)
]	1013 hPa	
Water solubility / miscibility v	virtually insoluble	
Solubility in organic solvent t	totally miscible with common organic	
3	solvents	
pH-Value a	approx. 7	
Viscosity (dynamic)	18 - 22 mPa*s at 25 °C (77 °F)	(DIN 51562)

Method

9.3 Further information

Thermal decomposition..... > 350 °C (> 662 °F)

10 Stability and reactivity

10.0 General information:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.1 Conditions to avoid:

none known

10.2 Materials to avoid:

none known

10.3 Hazardous decomposition products:

If stored and handled in accordance with standard industrial practices and local regulations where applicable: none known . Measurements have shown the formation of small amounts of benzene at temperatures above about 180 °C (356 °F). Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

10.4 Further information:

Hazardous polymerization cannot occur.

11 Toxicological information

11.1 General information:

Toxicological testing has been conducted with this material.

11.2 Toxicological data:

Acute toxicity (LD50/LC50-values relevant to classification):

Exposition	Value/value range	Species	Source
oral	> 2000 mg/kg	rat (Limit Test)	literature
dermal	> 2000 mg/kg	rat (Limit Test)	test report



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Primary irritation:

Exposition	Effect	Species/Testsystem	Source
to skin	not irritating	rabbit	test report
to eyes	mildly irritating	rabbit	test report

Sensitization:

Exposition	Effect	Test method	Species	Source
to skin	not sensitizing	Magnusson-	guinea-pig	test report
		Kligmann		

Subacute to chronic toxicity:

est method	End point	Value	Source
ral Toxicity Study in	NOEL	1000 mg/kg/h/d	literature
e	peated Dose 28-day	peated Dose 28-day NOEL al Toxicity Study in	peated Dose 28-day NOEL 1000 mg/kg/h/d al Toxicity Study in

Reference points for mutagenic (carcinogenic) potential:

Test system	Effect	Source
Bacterial Reverse Mutation Test	not mutagenic	test report

Experience with man:

Human patch test: Product displays good compatibility with the skin.

12 Ecological information

12.1 Information on elimination (persistence and degradability)

Biodegradation / further information:

Biologically not degradable.

12.2 Behaviour in environmental compartments

Further information:

Bioaccumulation is not expected to occur.

12.3 Ecotoxicological effects:

12.4 Further ecological information

General information:

If used and handled according to current regulations: According to recent knowledge no hazardous influence to environment.

13 Disposal considerations

13.1 Product disposal

Recommendation:

Dispose of according to regulations by incineration in a special waste incinerator. Observe local/state/federal regulations.

13.2 Packaging diposal

Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

14 Transport information

14.1 US DOT & CANADA TDG SURFACE

Valuation....: not Regulated

14.2 Transport by sea IMDG-Code

Valuation..... not Regulated

14.3 Air transport ICAO-TI/IATA-DGR

Valuation..... not Regulated



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15 Regulatory information

15.1 U.S. Federal regulations

TSCA inventory status and TSCA information:

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12(b) Export Notification:

This material does not contain any TSCA 12(b) regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

This product does not present any SARA 311/312 hazards.

HAPS:

This material does not contain any hazardous air pollutants.

15.2 U.S. State regulations

California Proposition 65 Carcinogens:

This material does not contain any chemicals known to the state of California to cause cancer.

California Proposition 65 Reproductive Toxins:

This material does not contain any chemicals known to the state of California to cause reproductive effects.

Massachusetts Substance List:

This material contains no listed components.

New Jersey Right-to-Know Hazardous Substance List:

This material contains no listed components.

Pennsylvania Right-to-Know Hazardous Substance List:

This material contains no listed components.

15.3 Canadian regulations

This product has been classified in accordance with the Hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Hazard Classes:

None.

DSL Status:

This material or its components are listed on the Canadian Domestic Substances List.

Non-DSL Chemicals:

This material does not contain any non-DSL chemicals.

Canadian Ingredient Disclosure List:

This material contains no listed components.

15.4 Other international regulations

EU Risk Phrases:

R-Phrase	Description
R-	-

EU Safety Phrases:

S-Phrase	Description
S-	



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Details of international registration status

Listed on the following inventories:

IECSC - China EINECS - Europe - Japan ENCS PICCS - Philippines ECL - Korea AICS - Australia

16 Other information

16.1 Additional information:

This Material Safety Data Sheet (MSDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This MSDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental

Industrial Hygienists

DOT - Department of Transportation

hPa - Hectopascals

mPa*s - Milli Pascal-Seconds

OSHA - Occupational Safety and Health Administration WHMIS - Canadian Workplace Hazardous Materials

PEL - Permissible Exposure Limit

Flash point determination methods

ASTM D56

ASTM D92, DIN 51376, ISO 2592 ASTM D93, DIN 51758, ISO 2719 ASTM D3278, DIN 55680, ISO 3679

DIN 51755

ppm - Parts per Million

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

Identification System

Common name

Tagliabue (Tag) closed cup Cleveland open cup

Pensky-Martens closed cup

Setaflash or Rapid closed cup

Abel-Pensky closed cup

16.3 Conversion table:

1 hPa * 0.75 = 1 mm Hg = 1 Torr; 1 bar = 1000 hPa Pressure:

Viscosity: 1 mPa*s = 1 Centipoise (Cp)