

Material Safety Data Sheet

Material: 60007006 CAVASOL® W7 M PHARMA

Version: 1.2 (US) Date of print: 03/14/2006 Date of last alteration: 03/08/2005

1 Product and company identification**1.1 Identification of the substance or preparation:**

Commercial product name: CAVASOL® W7 M PHARMA
Use of substance / preparation: Industrial.
Raw material for: Household products .
All other areas of application to be agreed with the
Application Engineering/ Technical Marketing Department
of the manufacturer.

1.2 Company/undertaking identification:

Manufacturer/distributor: Wacker Chemie AG
Hanns-Seidel-Platz 4
81737 München
Germany

Customer information: WACKER FINE CHEMICALS
Tel (517) 264-8165, Fax (517) 264-8795
Hours of operation:
Monday - Friday ,8 am to 5 pm (eastern standard time)
Corporate Website: www.wacker.com

Emergency telephone no. (24h): (517) 264-8500
Transportation emergency: (800) 424-9300 (CHEMTREC, USA)

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):**

CAS No.	Chemical characteristics
128446-36-6	Methyl cycloheptaamylose

2.2 Information on ingredients:

This material does not contain any hazardous substances at or above OSHA and WHMIS reportable levels.

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: 0 Fire: 2 Reactivity: 0 PPE: E

Note: Respiratory protection is only recommended in the event that ventilation or engineering controls are unable to maintain exposures below recommended levels; or in the event of a spill or other emergency response situation. Hazardous Materials Identification System and HMIS are registered trademarks of the National Paint and Coatings Association. (HMIS codes are based on contact with the product as packaged and any hydrolysis by-products, if present.)

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.

Physical Hazards:

Nuisance dust.

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Acute health effects**Route of entry or possible contact:**

eyes , skin , inhalation (in case of dust formation)

Eye contact:

Slight irritation by mechanical effects can not be excluded.

Skin contact:

No acute toxic effects are expected.

Inhalation:

No acute toxic effects are expected.

Ingestion:

Not expected in industrial use.

Additional information on acute health effects:

Re Sect. 11.2 "Toxicological data", LC50 (inhalative): no mortalities at highest technical achievable concentration (rat) .

3.3 Further information:**Chronic health effects:**

Animal tests have not revealed any carcinogenic effects.

Medical conditions which may be aggravated by exposure:

unknown

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:**

In cases of sickness seek medical advice (show label or SDS if possible).

4.2 After inhalation:

If inhaled, remove to fresh air, keep the victim laying down and restful.

4.3 After contact with the skin:

If contact with skin, wash skin with plenty of water or with water and soap.

4.4 After contact with the eyes:

If contact with eyes, immediately flush eyes with plenty of water. Get medical attention if irritation occurs.

4.5 After swallowing:

If swallowed, give victim several glasses of water. If swallowed, induce vomiting. Get medical attention if symptoms occur. Show label if possible.

5 Fire-fighting measures**5.1 Flammable properties:**

Flash point.....: 187 °C (368 °F)

Burn-off rate.....: 0.45 mm/s

Boiling point / boiling range.....: not applicable

Lower explosion limit (LEL).....: 60 g/m³

Upper explosion limit (UEL).....: not determined

Ignition temperature: not applicable

Method

(EU-GL.A.9)

(EU-GL.A.10)

5.2 Fire and explosion hazards:

The product is a combustible organic dust and under special conditions dust explosion is possible. Electrostatic charging is possible.

5.3 Recommended extinguishing media:

water , carbon dioxide , sand , dry chemical or foam-type extinguishing media

5.4 Unsuitable extinguishing media:**5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:**

Hazardous combustion products: carbon dioxide , carbon monoxide and incompletely burnt hydrocarbons .

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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:**

Avoid dust formation. Do not breathe dust. Wear personal protection equipment (see section 8).
HAZWOPER PPE Level: D

6.2 Containment:

Cover any spilled material in accordance with regulations to prevent dispersal by wind. 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. Avoid dust formation. Clean up with plenty of water. Dispose of cleansing water in accordance with local/state/federal regulations.

6.4 Further information:

Consider explosion protection. Eliminate all sources of ignition.

7 Handling and storage**7.1 Handling****Precautions for safe handling:**

Avoid dust formation.

Precautions against fire and explosion:

Danger of dust explosion: Do not stir up dust; remove dust after wetting. Observe the general rules for fire prevention. Avoid dust deposit, remove dust regularly. Take precautionary measures against electrostatic charging. Take precautionary measures against dust explosion. Observe regulations according to German VDI 2263.

7.2 Storage**Conditions for storage rooms and vessels:**

Observe precautionary measures against dust explosion.

Advice for storage of incompatible materials:

none known .

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:

yes (to maintain concentration below TLV)

8.2 Associate substances with specific control parameters such as limit values**Maximum airborne concentrations at the workplace:**

CAS No.	Material	Type	mg/m ³	ppm	Dust fract.
	Particulates not otherwise classified	OSHA PEL	15.0		Inhalable dust
	Particulates not otherwise classified	OSHA PEL	5.0		Respirable dust
	Particulates not otherwise classified	ACGIH TWA	10.0		Inhalable dust
	Particulates not otherwise classified	ACGIH TWA	3.0		Respirable dust

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Re Particulates not otherwise classified: The value is for particulate matter containing no asbestos and < 1% crystalline silica (ACGIH).

8.3 Personal protection equipment (PPE)**Respiratory protection:**

In case of dust formation use a NIOSH approved respirator for: fine dust .

Hand protection:

Recommendation: rubber gloves .

Eye protection:

Recommendation in case of dust formation: tight fitting chemical safety goggles .

Other protective clothing or equipment:

Recommendation in case of dust formation: antistatic clothing and shoes .

8.4 General hygiene and protection measures:

Avoid breathing dust/vapor/mist/gas/aerosol. Do not eat, drink or smoke when handling. Wash thoroughly after handling.

9 Physical and chemical properties**9.1 Appearance**

Physical state / form.....: solid - powder

Colour.....: white

Odour.....: odourless

9.2 Safety parameters

Melting point / melting range.....: 164.5 - 172.4 °C (328 - 342 °F)

Boiling point / boiling range.....: not applicable

Flash point.....: 187 °C (368 °F)

Ignition temperature: not applicable

Lower explosion limit (LEL).....: 60 g/m³

Upper explosion limit (UEL).....: not determined

Vapour pressure.....: < 0.000001 hPa

Density.....: 1.33 g/cm³

Bulk density.....: approx. 400 kg/m³

Water solubility / miscibility.....: > 750 g/l at 25 °C (77 °F)

pH-Value.....: not applicable

Distribut. coeff. n-octanol/water....: -1.20 at 24 °C (75 °F) (Log *P*_{ow})

Viscosity (dynamic).....: not applicable

Method

(EU-GL.A.1)

(EU-GL.A.9)

(EU-GL.A.4)

(EU-GL.A.3)

(EU-GL.A.6)

(OECD 107)

9.3 Further information

Median value: 23 µm

disturbed dust

Dust explosion class: ST2

Kst value.....: 272 m*bar/sec

Maximum explosion pressure: 9.6 bar

Ignition temperature: 370 °C (698 °F)

Minimum ignition energy: 1 - 3 mJ with induction

Minimum ignition energy: 1 - 3 mJ without induction

deposited dust

Burning behavior: 2 at 100 °C (212 °F)

Burning behavior: 2 at 20 °C (68 °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:

Reacts with: oxidizing agents .

10.3 Hazardous decomposition products:

If stored and handled in accordance with standard industrial practices and local regulations where applicable: none known .

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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	> 8000 mg/kg	rat (Limit Test)	test report
by inhalation	> 2.95 mg/l/4h (spray / dust)	rat (Limit Test)	test report

Primary irritation:

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

Sensitization:

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

Subacute to chronic toxicity:

Species	Test method	End point	Value	Source
rat	Repeated Dose 28-day Oral Toxicity Study in Rodents	NOEL	300 mg/kg/d	test report

Reference points for mutagenic (carcinogenic) potential:

Test system	Effect	Source
Bacterial Reverse Mutation Test	not mutagenic	test report
In vitro Mammalian Chromosomal Aberration Test	not mutagenic	test report
Genetic Toxicology: DNA Damage and Repair, Unscheduled DNA Synthesis in Mammalian Cells in vitro	not mutagenic	test report
Mammalian Bone Marrow Chromosomal Aberration Test	not mutagenic	test report

12 Ecological information**12.1 Information on elimination (persistence and degradability)****Biodegradation:**

Method	Degree of elimination	Classification	Source
Modified OECD Screening Test	9 %, in 28 day(s)	Not easily biodegradable.	test report

Hydrolysis:

Method	Classification	Source
Hydrolysis as a function of pH.	Hydrolytic stability.	test report

Further information:

-

12.2 Behaviour in environmental compartments**Mobility**

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Further information:

Bioaccumulation is not expected to occur. log POW <= 3.0

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12.3 Ecotoxicological effects:

Species	Test method	Exp. Time	Result	Source
Daphnia magna	acute	48 h	267 mg/l (EC50)	test report
Daphnia magna	repro	21 d	100 mg/l (NOEC)	test report
rainbow trout (Oncorhynchus mykiss)	acute	96 h	> 5700 mg/l (LC50)	test report
carp (Cyprinus carpio)	subacute	14 d	100 mg/l (NOEC)	test report
Selenastrum capricornutum	acute	72 h	5700 mg/l (IC50)	test report
Terrestrial plants (Avena sp., Brassica sp., Lactuca sp.)	prolonged		100 mg/kg (NOEC)	test report
Earthworm (Eisenia sp.)		14 d	1,000 mg/kg (NOEC)	test report

No expected damaging effects to water organisms.

Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition):

According to current knowledge adverse effects on water purification plants are not expected.

12.4 Additional information**Other harmful effects**

-

General information:

No environmental problems expected if handled and treated in accordance with standard industrial practices and local regulations where applicable. Prevent material from entering surface waters, drains or sewers and open soil.

13 Disposal considerations**13.1 Product disposal****Recommendation:**

Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of by incineration in an approved facility. Observe local/state/federal regulations.

13.2 Packaging disposal**Recommendation:**

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

Recommended cleaning agent:

water

14 Transport information**14.1 US DOT & CANADA TDG SURFACE**

Valuation.....: Not regulated for transport

14.2 Transport by sea IMDG-Code

Valuation.....: Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation.....: Not regulated for transport

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.

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CERCLA Regulated Chemicals:

This material does not contain any CERCLA 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.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS:

67-56-1 Methanol

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-	-

Details of international registration status

Listed on the following inventories:

IECSC - China
ECL - Korea
PICCS - Philippines
AICS - Australia
HSNO - New Zealand

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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	ppm - Parts per Million
DOT - Department of Transportation	SARA - Superfund Amendments and Reauthorization Act
hPa - Hectopascals	STEL - Short Term Exposure Limit
mPa*s - Milli Pascal-Seconds	TSCA - Toxic Substances Control Act
OSHA - Occupational Safety and Health Administration	TWA - Time Weighted Average
PEL - Permissible Exposure Limit	WHMIS - Canadian Workplace Hazardous Materials Identification System
Flash point determination methods	Common name
ASTM D56	Tagliabue (Tag) closed cup
ASTM D92, DIN 51376, ISO 2592	Cleveland open cup
ASTM D93, DIN 51758, ISO 2719	Pensky-Martens closed cup
ASTM D3278, DIN 55680, ISO 3679	Setaflash or Rapid closed cup
DIN 51755	Abel-Pensky closed cup

16.3 Conversion table:

Pressure: 1 hPa * 0.75 = 1 mm Hg = 1 Torr; 1 bar = 1000 hPa
Viscosity: 1 mPa*s = 1 Centipoise (Cp)