

Material Safety Data Sheet

Material: 60012210 CAVASOL® W7 HP PHARMA

Version: 1.1 (US) Date of print: 14.03.2006 Date of last alteration: 19.03.2003

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

Commercial product name: CAVASOL® W7 HP PHARMA
Use of substance / preparation: Industrial.
Auxiliary agent for: medicine .

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) 264-8795Hours 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 Product Safety Department of Wacker Chemie GmbH, Germany.

2 Composition/information on ingredients**2.1 Chemical characterization (substance):**

CAS No.	Chemical characteristics
128446-35-5	2-Hydroxypropyl cycloheptaamylose

2.2 Information on ingredients:

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

3 Hazards identification**3.1 Hazards classifications****HMIS® rating (product as packaged):**

Health: 0 Fire: 2 Reactivity: 0 PPE: E

(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.

Physical Hazards:

Nuisance dust.

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.

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Ingestion:

Not expected in industrial use.

Additional information on acute health effects:

none

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

none known

Medical conditions which may be aggravated by exposure:

unknown

Target organs affected:

No known internal organ effects.

Signs and Symptoms of Exposure:

Refer to Acute Health Effects, listed above.

Carcinogens/Reproductive toxins:

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

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 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:**

	Method
Flash point.....	not applicable
Lower explosion limit (LEL).....	60 g/m ³
Upper explosion limit (UEL).....	no data at hand
Upper explosion limit (UEL).....	not established
Autoignition temperature.....	> 400 °C (> 752 °F)

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:

none known

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

At low oxygen level: carbon monoxide.

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. Wear personal protection equipment (see section 8).

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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. Clean up with plenty of water. Dispose of cleansing water in accordance with local/state/federal regulations. Avoid formation of dust and dust deposition.

6.4 Further information:

Eliminate all sources of ignition.

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

Avoid dust formation.

Precautions against fire and explosion:

Observe the general rules for fire prevention. Avoid dust deposit, remove dust regularly. Take precautionary measures against electrostatic charging. Keep away from sources of ignition and do not smoke. The product is a combustible organic dust and under special conditions dust explosion is possible (German dust explosion class 1, KSt < 200 bar m s⁻¹). These special conditions are sufficient oxygen and dust concentration, sufficient ignition energy and temperature. Dust may form explosive mixture with air. Avoid formation of dust.

7.2 Storage**Advice for storage of incompatible materials:**

none known .

Further information for storage:

none known .

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**Threshold limit values (TLV):**

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

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 .

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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**Method**

Flash point.....: not applicable
Autoignition temperature.....: > 400 °C (> 752 °F)
Lower explosion limit (LEL).....: 60 g/m³
Upper explosion limit (UEL).....: no data at hand
Upper explosion limit (UEL).....: not established
Vapour pressure.....: not applicable
Bulk density.....: approx. 350 kg/m³
Water solubility / miscibility.....: 2300 g/l at 24 °C (75 °F)
pH-Value.....: 5 - 8 at 20 °C (68 °F) (20 g/l H₂O)
Distribut. coeff. n-octanol/water....: < 0.000 at 20 °C (68 °F) (Log p_{ow})
Viscosity (dynamic).....: not applicable

9.3 Further information

Median value: approx. 20 µm
disturbed dust
Dust explosion class: 1
Kst value.....: 174 m*bar/sec
Maximum explosion pressure: 9.2 bar
Combustion temperature: 420 °C (788 °F)
Minimum ignition energy: 12 - 26 mJ without induction
Minimum ignition energy: 4 - 9 mJ with induction
deposited dust
Combustion figure: 5 at 100 °C (212 °F)
Combustion figure: 5 at 20 °C (68 °F)
Ignition temperature: > 450 °C (> 842 °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: strong oxidizing agents .

10.3 Hazardous decomposition products:

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

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:

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

Exposition	Value/value range	Species	Source
oral	> 2243 mg/kg	rat	test report
dermal	> 2000 mg/kg	rat	literature

Primary irritation:

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

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 90-day Oral Toxicity Study in Rodents	NOAEL	4400 mg/kg/h/d	literature

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

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

Method	Degree of elimination	Classification	Source
CO2 Evolution Test/Modified Sturm Test	< 6 %, in 28 day(s)		test report

Biodegradation / further information:

Not easily biodegradable.

Hydrolysis:

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

12.2 Behaviour in environmental compartments
Further information:

Bioaccumulation improbable. log POW <= 3.0

12.3 Ecotoxicological effects:

Species	Test method	Exp. Time	Result	Source
zebra fish (Brachydanio rerio)	acute	96 h	> 1131 mg/l (LC50)	test report
Daphnia magna	acute	48 h	> 1084 mg/l (EC50)	test report
Selenastrum capricornutum	acute	72 h	> 1182 mg/l (IC50)	test report

No likelihood of damaging effect on water organisms.

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

Test system	Exp. Time	Result	Source
sludge	0,5 h	> 100 mg/l (EC50)	test report

According to present experience, no adverse effects on water purification plants.

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12.4 Further ecological information**General information:**

Do not introduce into waters and into soil. Only introduce into water purification plants in diluted state. No environmental problems expected if handled and treated in accordance with standard industrial practices and local regulations where applicable.

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 in a domestic waste incinerator. 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.

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

Valuation.....: not Regulated

14.2 Transport by sea IMDG-Code

Valuation.....: not Regulated
Marine Pollutant.....: no

14.3 Air transport ICAO-TI/IATA-DGR

Valuation.....: not Regulated

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.

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:

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.

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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:

57-55-6 Propylene glycol

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 one or more of its components is not listed on the Canadian Domestic Substances List.

Non-DSL Chemicals:

CAS No.	Chemical	Upper limit wt. %
128446-35-5	.beta.-Cyclodextrin, 2-hydroxypropyl ethers	96.0

Canadian Ingredient Disclosure List:

57-55-6 Propylene glycol

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:

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

DOT - Department of Transportation

hPa - Hectopascals

mPa*s - Milli Pascal-Seconds

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

ppm - Parts per Million

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

WHMIS - Canadian Workplace Hazardous Materials Identification System

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

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:

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

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