1 Product and company identification

1.1 Identification of the substance or preparation:

**Commercial product name:** Vinnapas WCP 67 (bulk)

**Product group:** Polymer Dispersion

**Use of substance / preparation:** Industrial.
Binder for: Building materials, Sealants, plasters. 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 Polymer Systems GmbH & Co.KG
Johannes-Hess-Straße 24
84489 Burghausen
Germany

**Customer information:** Wacker Polymer Systems L.P.
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.wacker-polymer-systems.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 (preparation):

**Chemical characteristics**
Polymeric dispersion of copolymers of acrylic acid ester in water

2.2 Information on ingredients:

<table>
<thead>
<tr>
<th>Type</th>
<th>CAS No.</th>
<th>Substance</th>
<th>Content [wt.%]</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>INHA 9036-19-5 Polyoxyethylene (t-octylphenyl) ether</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lower 5.0 Upper</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Type:** HYD - by-product upon hydrolysis, INHA - ingredient, NEBE - by-product, MONO - residual monomer, VERU - impurity, VUL - by-product upon vulcanization. ***Note:** C1 - IARC carcinogen, C2 - NTP carcinogen, C3 - OSHA carcinogen, NH - non-hazardous, R - reproductive toxin.

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: 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.

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:
No known physical hazards.

Acute health effects
Route of entry or possible contact: eyes, skin, inhalation, ingestion.

Eye contact:
No acute toxic effects are expected.

Skin contact:
May cause slight skin irritation.

Inhalation:
No acute toxic effects are expected.

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

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 if possible).

4.2 After inhalation:
No special measures required.

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, 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
Boiling point / boiling range: approx. 100 °C (212 °F) at 1013 hPa
Lower explosion limit (LEL): not applicable
Ignition temperature: not applicable

5.2 Fire and explosion hazards:
Material does not burn. Dried up material is combustible. This material does not present any unusual fire or explosion hazards.
5.3 Recommended extinguishing media:
Use extinguishing measures appropriate to the source of fire. Water may be used to cool tanks and structures adjacent to the fire.

5.4 Unsuitable extinguishing media:
not applicable

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:
Hazardous combustion products: carbon monoxide and carbon dioxide.

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:
Wear personal protection equipment (see section 8). If material is released indicate risk of slipping.

HAZWOPER PPE Level: D

6.2 Containment:
Prevent material from entering sewers or surface waters. 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 up with plenty of water. Dispose of cleansing water in accordance with local/state/federal regulations.

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:
No special precautions against fire and explosion required.

7.2 Storage
Conditions for storage rooms and vessels:
Protect against frost.

Advice for storage of incompatible materials:
not applicable .

Further information for storage:
not applicable .

Minimum temperature allowed during storage and transportation: 0 °C (32 °F)

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: not necessary
   Hand protection: Recommendation: rubber gloves
   Eye protection: chemical safety goggles
   Other protective clothing or equipment: not necessary

8.4 General hygiene and protection measures:
   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..............................: slight

9.2 Safety parameters
   Melting point / melting range.......: approx. 0.00 °C (32 °F)
   Boiling point / boiling range.......: approx. 100 °C (212 °F) at 1013 hPa
   Flash point........................: not applicable
   Ignition temperature.................: not applicable
   Lower explosion limit (LEL).........: not applicable
   Vapour pressure........................: 23 hPa at 20 °C (68 °F)
   Density................................: approx. 1.07 g/cm³
   Water solubility / miscibility.......: Moderately Soluble
   pH-Value................................: 9 - 10
   Viscosity (dynamic)...................: < 100 mPa*s at 23 °C (73 °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

10.4 Further information:
   Hazardous polymerization cannot occur.

11 Toxicological information

11.1 General information:
   The toxicology results listed below are based on tests with a similar material.

11.2 Toxicological data:
   Acute toxicity (LD50/LC50-values relevant to classification):
<table>
<thead>
<tr>
<th>Exposition</th>
<th>Value/value range</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>oral</td>
<td>&gt; 2000 mg/kg</td>
<td>rat</td>
<td>test report</td>
</tr>
</tbody>
</table>
Primary irritation:

<table>
<thead>
<tr>
<th>Exposition</th>
<th>Effect</th>
<th>Species/Testsystem</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>to skin</td>
<td>mildly irritating</td>
<td>rabbit</td>
<td>test report</td>
</tr>
</tbody>
</table>

Experience with man:
During manufacture and use: No information on damage to health.

12 Ecological information

12.1 Information on elimination (persistence and degradability)

Biodegradation / further information:
Not easily biodegradable.

Further information:
Polymer components: Elimination by adsorption in activated sludge. Separation by flocculation is possible.

12.2 Behaviour in environmental compartments

Mobility
-

Further information:
No harmful effects expected.

12.3 Ecotoxicological effects:
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 Further ecological information

General information:
Prevent material from introduction into surface water 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 by incineration in an approved facility. Observe local/state/federal regulations. After chemical deflocculation: Can be stored with domestic waste. 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. Recommended cleaning agent: water

14 Transport information

14.1 US DOT & CANADA TDG SURFACE
Valuation.................: Not regulated for transport
Other Information........: Protect from freezing.

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.

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:
80-62-6 Methyl methacrylate

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:

<table>
<thead>
<tr>
<th>R-Phrase</th>
<th>Description</th>
</tr>
</thead>
</table>

EU Safety Phrases:

<table>
<thead>
<tr>
<th>S-Phrase</th>
<th>Description</th>
</tr>
</thead>
</table>

Details of international registration status

Listed on the following inventories:
- IECSC - China
- PICCS - Philippines
- ECL - Korea
- AICS - Australia
- EINECS - Europe

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

Flash point determination methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Common name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM D56</td>
<td>Tagliabue (Tag) closed cup</td>
</tr>
<tr>
<td>ASTM D92, DIN 51756, ISO 2592</td>
<td>Cleveland open cup</td>
</tr>
<tr>
<td>ASTM D91, DIN 51756, ISO 2719</td>
<td>Pensky-Martens closed cup</td>
</tr>
<tr>
<td>ASTM D2578, DIN 55680, ISO 3679</td>
<td>Setaflash or Rapid closed cup</td>
</tr>
<tr>
<td>DIN 51755</td>
<td>Abel-Pensky closed cup</td>
</tr>
</tbody>
</table>

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)