SAFETY DATA SHEET
THE DOW CHEMICAL COMPANY*

Product name: PARALOID™ B-72 100% Resin

THE DOW CHEMICAL COMPANY* encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name: PARALOID™ B-72 100% Resin

Recommended use of the chemical and restrictions on use
Identified uses: Coatings product

COMPANY IDENTIFICATION
THE DOW CHEMICAL COMPANY*
Agent for Rohm and Haas Chemicals LLC
100 INDEPENDENCE MALL WEST
PHILADELPHIA PA 19106-2399
UNITED STATES

Customer Information Number: 215-592-3000
SDSQuestion@dow.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: 1 800 424 9300
Local Emergency Contact: 800-424-9300

2. HAZARDS IDENTIFICATION

Hazard classification
This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.
Reproductive toxicity - Category 2

Label elements
Hazard pictograms

Signal word: WARNING!

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Hazards
Suspected of damaging fertility or the unborn child.

Precautionary statements
Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.

Response
IF exposed or concerned: Get medical advice/attention.

Storage
Store locked up.

Disposal
Dispose of contents/container to an approved waste disposal plant.

Other hazards
If converted to small particles during further handling, processing, or by other means, may form combustible dust concentrations in air.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Acrylic copolymer
This product is a mixture.

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylic polymer(s)</td>
<td>Not hazardous</td>
<td>&gt;= 99.0 - 100.0 %</td>
</tr>
<tr>
<td>Individual residual monomers</td>
<td>Not Required</td>
<td>&lt;= 0.1 %</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>&lt;= 0.8 %</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Description of first aid measures
Inhalation: Move to fresh air.

Skin contact: Wash with water and soap as a precaution. If skin irritation persists, call a physician.

Eye contact: Flush eyes with water as a precaution. If eye irritation persists, consult a specialist.

Ingestion: Drink 1 or 2 glasses of water. Consult a physician if necessary. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and
special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician:** Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

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**5. FIREFIGHTING MEASURES**

**Suitable extinguishing media:** Use the following extinguishing media when fighting fires involving this material: Carbon dioxide (CO2)  Dry chemical  Water spray

**Unsuitable extinguishing media:** no data available

**Special hazards arising from the substance or mixture**

**Hazardous combustion products:** no data available

**Unusual Fire and Explosion Hazards:** Material as sold is combustible; burns vigorously with intense heat.

**Advice for firefighters**

**Fire Fighting Procedures:** Use water spray to cool unopened containers. Remain upwind. Avoid breathing smoke.

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus and protective suit.

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

**Environmental precautions:** CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**Methods and materials for containment and cleaning up:** Floor may be slippery; use care to avoid falling. Eliminate all ignition sources. Ventilate the area. Transfer spilled material to suitable containers for recovery or disposal.

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**7. HANDLING AND STORAGE**

**Precautions for safe handling:** Store in a cool, dry, well ventilated place. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapours/dust. Static charges can accumulate: use bonding and grounding between transfer equipment and receiving containers and for any other operations capable of generating static electricity.
Conditions for safe storage: Material can burn; limit indoor storage to approved areas equipped with automatic sprinklers. Ground all metal containers during storage and handling.
Other data: Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required.

8. EXPOSURE CONTROLS/PERSOAL PROTECTION

Control parameters
Exposure limits are listed below, if they exist.

<table>
<thead>
<tr>
<th>Component</th>
<th>Regulation</th>
<th>Type of listing</th>
<th>Value/Notation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene</td>
<td>ACGIH</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-2</td>
<td>TWA</td>
<td>200 ppm</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>TWA</td>
<td>BEI</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-2</td>
<td>CEIL</td>
<td>300 ppm</td>
</tr>
<tr>
<td></td>
<td>OSHA Z-2</td>
<td>Peak</td>
<td>500 ppm</td>
</tr>
</tbody>
</table>

Exposure controls
Engineering controls: Use local exhaust ventilation with a minimum capture velocity of 150 ft/min. (0.75 m/sec.) at the point of dust or mist evolution. Refer to the current edition of "Industrial Ventilation: A Manual of Recommended Practice" published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Protective measures: Facilities storing or utilizing this material should be equipped with an eyewash facility.

Individual protection measures
Eye/face protection: Use safety glasses with side shields (ANSI Z87.1or approved equivalent). Eye protection worn must be compatible with respiratory protection system employed.
Skin protection
Hand protection: Cotton or canvas gloves.
Respiratory protection: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator’s use. None required under normal operating conditions. When dusty conditions are encountered, wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) organic vapor cartridges and N95 filters. If oil mist is present, use R95 or P95 filters.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
   Physical state  Granular solid
   Color           clear
   Odor            Acrylic odor
   Odor Threshold  no data available
   pH              Not Applicable
   Melting point/range  no data available
   Freezing point  no data available
Boiling point (760 mmHg)  Not applicable
Flash point  Not applicable
Evaporation Rate (Butyl Acetate = 1)  Not Applicable
Flammability (solid, gas)  Not expected to form explosive dust-air mixtures.
Lower explosion limit  Not Applicable
Upper explosion limit  Not Applicable
Vapor Pressure  Not Applicable
Relative Vapor Density (air = 1)  Not Applicable
Relative Density (water = 1)  no data available
Water solubility  practically insoluble
Partition coefficient: n-octanol/water  no data available
Auto-ignition temperature  393.00 °C (739.40 °F) estimated
Decomposition temperature  no data available
Dynamic Viscosity  Not Applicable
Kinematic Viscosity  no data available
Explosive properties  no data available
Oxidizing properties  no data available
Liquid Density  0.66 g/cm3Bulk density
Molecular weight  no data available
Percent volatility  1.00 % maximum

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: no data available

Chemical stability: no data available

Possibility of hazardous reactions: None known.
Product will not undergo polymerization.
This material is considered stable.

Conditions to avoid: no data available

Incompatible materials: There are no known materials which are incompatible with this product.

Hazardous decomposition products: Thermal decomposition may yield acrylic monomers.

11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.
Acute toxicity

**Acute oral toxicity**
LD50, Rat, > 5,000 mg/kg

**Acute dermal toxicity**
LD50, Rabbit, > 3,000 mg/kg

**Acute inhalation toxicity**
Product test data not available.

**Skin corrosion/irritation**
slight irritation

**Serious eye damage/eye irritation**
slight irritation

**Sensitization**
Product test data not available.

**Specific Target Organ Systemic Toxicity (Single Exposure)**
Product test data not available.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**
Product test data not available.

**Carcinogenicity**
Product test data not available.

**Teratogenicity**
Product test data not available.

**Reproductive toxicity**
Product test data not available.

**Mutagenicity**
Product test data not available.

**Aspiration Hazard**
Product test data not available.

**COMPONENTS INFLUENCING TOXICOLOGY:**

**Acrylic polymer(s)**
**Acute inhalation toxicity**
The LC50 has not been determined.

**Toluene**
**Acute inhalation toxicity**
LC50, Rat, male and female, 4 Hour, vapour, > 20 mg/l

**Sensitization**
Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:
No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**
May cause drowsiness or dizziness.
Route of Exposure: Inhalation
Target Organs: Central nervous system

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**
In animals, effects have been reported on the following organs:
central nervous system (CNS) effects
Excessive exposure may cause neurologic signs and symptoms.
Toluene has caused hearing loss in laboratory animals upon exposure to high concentrations.
Intentional misuse by deliberately inhaling toluene may cause nervous system damage,
hearing loss, liver and kidney effects and death.

**Carcinogenicity**
Did not cause cancer in laboratory animals.

**Teratogenicity**
In laboratory animals, toluene has been toxic to the fetus at doses toxic to the mother; it has
cause birth defects in mice when administered orally, but not by inhalation.

**Reproductive toxicity**
In animal studies, did not interfere with reproduction.

**Mutagenicity**
The majority and most reliable of the many genetic toxicity studies on toluene, both in vitro
and in animals, indicate that it is not genetically toxic.

**Aspiration Hazard**
May be fatal if swallowed and enters airways.

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12. ECOLOGICAL INFORMATION

*Ecotoxicological information appears in this section when such data is available.*

**General Information**
There is no data available for this product.

**Toxicity**

**Acrylic polymer(s)**
Acute toxicity to fish
No relevant data found.

**Toluene**
Acute toxicity to fish
Material is moderately toxic to fish on an acute basis (LC50 between 1 and 10 mg/L).
LC50, Rainbow trout (Oncorhynchus mykiss), semi-static test, 96 Hour, 5.8 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
EC50, Daphnia magna (Water flea), static test, 24 Hour, 7 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**
EbC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth inhibition, 12.5 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**
IC50, Bacteria, 16 Hour, 29 mg/l

**Chronic toxicity to fish**
NOEC, Fish., flow-through, 40 day, growth, 1.4 mg/l

**Chronic toxicity to aquatic invertebrates**
NOEC, Daphnia magna (Water flea), 21 day, number of offspring, 2 mg/l
NOEC, Coretharchus dubia (water flea), 7 d, number of offspring, 0.74 mg/l

**Toxicity to soil-dwelling organisms**
LC50, Eisenia fetida (earthworms), 150 - 280 mg/kg

**Persistence and degradability**

**Acrylic polymer(s)**

**Biodegradability:** No relevant data found.

**Toluene**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

**Biodegradation:** 100%
**Exposure time:** 14 d
**Method:** OECD Test Guideline 301C or Equivalent

**Theoretical Oxygen Demand:** 3.13 mg/mg Calculated.

**Bioaccumulative potential**

**Acrylic polymer(s)**

**Bioaccumulation:** No relevant data found.

**Toluene**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient:** n-octanol/water (log Pow): 2.73 Measured
**Bioconcentration factor (BCF):** 13.2 - 90 Freshwater fish Measured

**Mobility in soil**

**Toluene**

Potential for mobility in soil is very high (Koc between 0 and 50).
**Partition coefficient (Koc):** 37 - 178 Estimated.
13. DISPOSAL CONSIDERATIONS

Disposal methods: For disposal, incinerate this material at a facility that complies with local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT
Not regulated for transport

Classification for SEA transport (IMO-IMDG):
Transport in bulk
Not regulated for transport
according to Annex I or II
Consult IMO regulations before transporting ocean bulk
of MARPOL 73/78 and the
IBC or IGC Code

Classification for AIR transport (IATA/ICAO):
Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard
This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
Chronic Health Hazard

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Product name: PARALOID™ B-72 100% Resin

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)
Section 103
Calculated RQ exceeds reasonably attainable upper limit.

**Components** | **CASRN** | **RQ**
--- | --- | ---
Toluene | 108-88-3 | 1000 lbs RQ

Pennsylvania
Any material listed as "Not Hazardous" in the CAS REG NO. column of SECTION 2, Composition/Information On Ingredients, of this MSDS is a trade secret under the provisions of the Pennsylvania Worker and Community Right-to-Know Act.

California (Proposition 65)
This product contains a component or components known to the state of California to cause birth defects or other reproductive harm:

**Components** | **CASRN**
--- | ---
Toluene | 108-88-3

United States TSCA Inventory (TSCA)
All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. OTHER INFORMATION

**Hazard Rating System**

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Revision**
Identification Number: 101083238 / 1001 / Issue Date: 05/28/2015 / Version: 3.0
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td>BEI</td>
<td>Biological Exposure Indices</td>
</tr>
<tr>
<td>CEIL</td>
<td>Acceptable ceiling concentration</td>
</tr>
<tr>
<td>OSHA Z-2</td>
<td>USA. Occupational Exposure Limits (OSHA) - Table Z-2</td>
</tr>
<tr>
<td>Peak</td>
<td>Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift</td>
</tr>
<tr>
<td>TWA</td>
<td>8-hour, time-weighted average</td>
</tr>
</tbody>
</table>

**Information Source and References**
This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.
THE DOW CHEMICAL COMPANY* urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.