# SAFETY DATA SHEET
**THE DOW CHEMICAL COMPANY**

**Product name: PARALOID™ B-56 100% Resin**

**Issue Date:** 08/11/2018
**Print Date:** 09/18/2018

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-56 100% Resin

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

**COMPANY IDENTIFICATION**
THE DOW CHEMICAL COMPANY
2030 DOW CENTER
MIDLAND MI 48674-0000
UNITED STATES

**Customer Information Number:** 800-258-2436
SDSQuestion@dow.com

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

## 2. HAZARDS IDENTIFICATION

**Hazard classification**
GHS classification in accordance with 29 CFR 1910.1200
Combustible dust
Skin sensitisation - Category 1
Reproductive toxicity - Category 2
Specific target organ toxicity - repeated exposure - Category 2 - Inhalation

**Label elements**
**Hazard pictograms**

Signal word: **WARNING!**

**Hazards**
If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.
May cause an allergic skin reaction.
Suspected of damaging fertility or the unborn child.
May cause damage to organs (Nervous system) through prolonged or repeated exposure if inhaled.

**Precautionary statements**

**Prevention**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response**
IF ON SKIN: Wash with plenty of soap and water.
IF exposed or concerned: Get medical advice/ attention.
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.

**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

This product is a mixture.

| Component | CASRN | Concentration |
|---|---|---|
| Acrylic polymer(s) | Not hazardous | >= 98.0 - 100.0 % |
| Residual monomers | Not required | <= 6,500.0 PPM |
| Toluene | 108-88-3 | <= 2.0 % |
| Butyl methacrylate | 97-88-1 | < 0.65 % |

## 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. Wash contaminated clothing before reuse. Do not take clothing home to be laundered.

**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 should be directed at preventing absorption, administering to symptoms (if they occur), and providing supportive therapy.

## 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.

## 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.

## 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 anyother 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/PERSONAL PROTECTION

**Control parameters**
If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

| Component | Regulation | Type of listing | Value/Notation |
|---|---|---|---|
| Residual monomers | Dow IHG | TWA | 4 ppm |
| | Dow IHG | TWA | SKIN |
| | Dow IHG | STEL | 10 ppm |
| | Dow IHG | STEL | SKIN |
| | ACGIH | TWA | 20 ppm |
| Toluene | ACGIH | TWA | 20 ppm |
| | OSHA Z-2 | TWA | 200 ppm |
| | OSHA Z-2 | CEIL | 300 ppm |
| | OSHA Z-2 | Peak | 500 ppm |
| Butyl methacrylate | Dow IHG | TWA | 50 ppm |
| | Dow IHG | STEL | 75 ppm |

**Biological occupational exposure limits**

| Components | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|---|---|---|---|---|---|---|
| Toluene | 108-88-3 | Toluene | In blood | Prior to last shift of workweek | 0.02 mg/l | ACGIH BEI |
| | | Toluene | Urine | End of shift (As soon as possible after exposure ceases) | 0.03 mg/l | ACGIH BEI |
| | | o-Cresol | Urine | End of | 0.3 mg/g | ACGIH |

| | | |
|---|---|---|
| shift (As soon as possible after exposure ceases) | Creatinine | BEI |

**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:** Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**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:** Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Polyvinyl alcohol VITON Synthetic Rubber (registered Trademark of Dupont Dow Elastomers) Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.

**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 if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Up to 10 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Up to 1000 ppm organic vapor: Wear a properly fitted NIOSH approved (or equivalent) full-facepiece, air-purifying respirator, OR full-facepiece, airline respirator in the pressure demand mode. Above 1000 ppm organic vapor or Unknown: Wear a properly fitted NIOSH approved (or equivalent) self-contained breathing appartus in the pressure demand mode, OR full-facepiece, airline respirator in the pressure demand mode with emergency escape provision. 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 clear |
| **Color** | colorless to pale yellow |
| **Odor** | Acrylic odor |
| **Odor Threshold** | No data available |

| | |
|---|---|
| **pH** | Not Applicable |
| **Melting point/range** | > 50.00 °C ( > 122.00 °F) |
| **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)** | May form combustible dust concentrations in air during processing, handling or other means. |
| **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)** | 1.1000 |
| **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 |
| **Molecular weight** | 50,000.00 g/mol |
| **Percent volatility** | 2.000 % 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. Refer to component data.

**Skin corrosion/irritation**
slight irritation

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

**Sensitization**
Product test data not available. Refer to component data.

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

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

**Carcinogenicity**
Product test data not available. Refer to component data.

**Teratogenicity**
Product test data not available. Refer to component data.

**Reproductive toxicity**
Product test data not available. Refer to component data.

**Mutagenicity**
Product test data not available. Refer to component data.

**Aspiration Hazard**
Product test data not available. Refer to component data.

**Additional information**
No data are available for this material. The information shown is based on profiles of compositionally similar materials.

**COMPONENTS INFLUENCING TOXICOLOGY:**

**Acrylic polymer(s)**

**Acute inhalation toxicity**
The LC50 has not been determined.

**Sensitization**
For skin sensitization:
No relevant data found.

For respiratory sensitization:
No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**
The substance or mixture is not classified as specific target organ toxicant, single exposure.

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**
No relevant data found.

**Carcinogenicity**
No relevant data found.

**Teratogenicity**
No relevant data found.

**Reproductive toxicity**
No relevant data found.

**Mutagenicity**
No relevant data found.

**Aspiration Hazard**
No aspiration toxicity classification

**Residual monomers**

**Acute inhalation toxicity**
The LC50 has not been determined.

LC50, Rat, 4 Hour, dust/mist, > 1 mg/l OECD Test Guideline 403

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

For respiratory sensitization:
No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**
May cause respiratory irritation.
Route of Exposure: Inhalation
Target Organs: Respiratory Tract

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**

Repeated excessive exposures may cause
Respiratory effects.

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

**Teratogenicity**
Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

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

**Mutagenicity**
In vitro genetic toxicity studies were negative in some cases and positive in other cases.
Animal genetic toxicity studies were negative.

**Aspiration Hazard**
Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

**Toluene**

**Acute inhalation toxicity**
Symptoms may include headache, dizziness and drowsiness, progressing to incoordination and unconsciousness. Alcohol consumption and exertion may increase the adverse effects of toluene. LC50, Rat, male, 4 Hour, vapour, 25.7 mg/l

LC50, Rat, female, 4 Hour, vapour, 30 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 caused birth defects in mice when administered orally, but not by inhalation. Based on Structure-Activity Relationship (SAR), this material is predicted to interfere with fertility or cause birth defects.

**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.

**Butyl methacrylate**

**Acute inhalation toxicity**
No adverse effects are anticipated from single exposure to mist.

LC50, Rat, 4 Hour, dust/mist, 29 mg/l OECD Test Guideline 403

**Sensitization**
Skin contact may cause an allergic skin reaction.

For respiratory sensitization:
No relevant data found.

**Specific Target Organ Systemic Toxicity (Single Exposure)**
May cause respiratory irritation.
Route of Exposure: Inhalation
Target Organs: Respiratory Tract

**Specific Target Organ Systemic Toxicity (Repeated Exposure)**
Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

**Carcinogenicity**
Animal testing did not show any carcinogenic effects.

**Teratogenicity**
Has caused birth defects in laboratory animals. Has been toxic to the fetus in laboratory animal tests.

**Reproductive toxicity**
In animal studies, a similar material has been shown not to interfere with reproduction.

**Mutagenicity**
In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Aspiration Hazard**
Based on physical properties, not likely to be an aspiration hazard.

## 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.

**Residual monomers**

**Acute toxicity to fish**
No relevant data found.
Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).
LC50, Oncorhynchus mykiss (rainbow trout), flow-through test, 96 Hour, 85 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**
EC50, Daphnia magna (Water flea), flow-through test, 48 Hour, > 130 mg/l

**Acute toxicity to algae/aquatic plants**
ErC50, Scenedesmus capricornutum (fresh water algae), static test, 72 Hour, Growth rate, 45 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**
EC50, Pseudomonas putida, static test, 17 Hour, Respiration rates., 100 mg/l

**Chronic toxicity to fish**
NOEC, Danio rerio (zebra fish), flow-through test, 35 d, number of offspring, 10 mg/l

**Chronic toxicity to aquatic invertebrates**
NOEC, Daphnia magna (Water flea), flow-through test, 21 d, number of offspring, 53 mg/l

**Toluene**

**Acute toxicity to fish**
Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).
LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, 5.8 mg/l

**Acute toxicity to aquatic invertebrates**
LC50, water flea Ceriodaphnia dubia, semi-static test, 48 Hour, 3.78 mg/l

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

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

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

**Chronic toxicity to aquatic invertebrates**
NOEC, Ceriodaphnia 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

**Butyl methacrylate**

**Acute toxicity to fish**
Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).
Material is toxic to aquatic organisms (LC50/EC50/IC50 between 1 and 10 mg/L in the most sensitive species).
LC50, Oryzias latipes (Orange-red killifish), semi-static test, 96 Hour, 5.57 mg/l

**Acute toxicity to aquatic invertebrates**
EC50, Daphnia magna (Water flea), static test, 48 Hour, 25.4 mg/l

**Acute toxicity to algae/aquatic plants**
EC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate inhibition, 31.2 mg/l

**Toxicity to bacteria**
EC10, Pseudomonas putida, 18 Hour, 253.6 mg/l

**Chronic toxicity to aquatic invertebrates**
NOEC, Daphnia (water flea), semi-static test, 21 d, 1.1 mg/l
LOEC, Daphnia (water flea), semi-static test, 21 d, 3.35 mg/l
NOEC, Daphnia (water flea), flow-through test, 21 d, 2.6 mg/l
LOEC, Daphnia (water flea), flow-through test, 21 d, 4.9 mg/l

**Persistence and degradability**

**Acrylic polymer(s)**
**Biodegradability:** No relevant data found.

**Residual monomers**
**Biodegradability:** No relevant data found.
Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
10-day Window: Pass
**Biodegradation:** 86 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 301D or Equivalent

**Photodegradation**
**Test Type:** Half-life (indirect photolysis)
**Sensitization:** OH radicals
**Atmospheric half-life:** 6.884 Hour
**Method:** Estimated.
**Photodegradation**

**Test Type:** Half-life (indirect photolysis)
**Sensitization:** Ozone.
**Atmospheric half-life:** 1.007 d
**Method:** Estimated.

**Toluene**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
10-day Window: Not applicable
**Biodegradation:** 100 %
**Exposure time:** 14 d
**Method:** OECD Test Guideline 301C or Equivalent

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

**Photodegradation**
**Test Type:** Half-life (indirect photolysis)
**Sensitization:** OH radicals
**Atmospheric half-life:** 2 d
**Method:** Estimated.

**Butyl methacrylate**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
10-day Window: Not applicable
**Biodegradation:** 88 %
**Exposure time:** 28 d
**Method:** OECD Test Guideline 301C or Equivalent

**Bioaccumulative potential**

**Acrylic polymer(s)**

**Bioaccumulation:** No relevant data found.

**Residual monomers**

**Bioaccumulation:** No relevant data found. No bioconcentration is expected because of the relatively high water solubility.
**Partition coefficient: n-octanol/water(log Pow):** 0.93 Measured
**Bioconcentration factor (BCF):** 3.16 Fish Estimated.

**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 Fish Measured

**Butyl methacrylate**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).
**Partition coefficient: n-octanol/water(log Pow):** 2.88 Estimated.
**Bioconcentration factor (BCF):** 70 Fish Calculated.

**Mobility in soil**

**Acrylic polymer(s)**

No relevant data found.

**Residual monomers**

No relevant data found.
Potential for mobility in soil is very high (Koc between 0 and 50).
**Partition coefficient (Koc):** 15

**Toluene**

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

**Butyl methacrylate**

Potential for mobility in soil is low (Koc between 500 and 2000).
**Partition coefficient (Koc):** 878 Estimated.

## 13. DISPOSAL CONSIDERATIONS

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

**Contaminated packaging:** Empty containers retain product residues. Follow label warnings even after container is emptied. Improper disposal or reuse of this container may be dangerous and illegal. Refer to applicable federal, state and local regulations.

## 14. TRANSPORT INFORMATION

**DOT**

Not regulated for transport

**Classification for SEA transport (IMO-IMDG):**

Not regulated for transport

| | |
|---|---|
| **Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code** | Consult IMO regulations before transporting ocean bulk |

**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

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312**
Combustible dust
Respiratory or skin sensitisation
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)

**Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313**

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

**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 Prop. 65**
WARNING: This product can expose you to chemicals including Benzene, which is/are known to the State of California to cause cancer, and Toluene, Benzene, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**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**
**HMIS**

| Health | Flammability | Physical Hazard |
|---|---|---|
| 1* | 1 | 0 |

* = Chronic Effects (See Hazards Identification)

**Revision**
Identification Number: 11035835 / A001 / Issue Date: 08/11/2018 / Version: 2.1
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

| | |
|---|---|
| ACGIH | USA. ACGIH Threshold Limit Values (TLV) |
| ACGIH BEI | ACGIH - Biological Exposure Indices (BEI) |
| CEIL | Acceptable ceiling concentration |
| Dow IHG | Dow Industrial Hygiene Guideline |
| OSHA Z-2 | USA. Occupational Exposure Limits (OSHA) - Table Z-2 |

| | |
|---|---|
| Peak | Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift |
| SKIN | Absorbed via skin |
| STEL | Short term exposure limit |
| TWA | Time weighted average |

**Full text of other abbreviations**
AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**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.
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**WARNING**
**Contains**: Acrylic polymer(s) / Trade Secret; Residual monomers / Not required; Toluene / 108-88-3; Butyl methacrylate / 97-88-1
**Hazards:** If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. May cause damage to organs (Nervous system) through prolonged or repeated exposure if inhaled. **Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection. **Response:** IF ON SKIN: Wash with plenty of soap and water. IF exposed or concerned: Get medical advice/ attention. If skin irritation or rash occurs: Get medical advice/ attention. Wash contaminated clothing before reuse. **Storage:** Store locked up. **Disposal:** Dispose of contents/ container to an approved waste disposal plant. **Supplemental information** If converted to small particles during further handling, processing, or by other means, may form combustible dust concentrations in air.

**Refer to the Safety Data Sheet before use.**

**COMPANY IDENTIFICATION**
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