

# SAFETY DATA SHEET

**Azo-Grout™ 695**



## Section 1. Identification

**GHS product identifier** : Azo-Grout™ 695  
**Product code** : Not available.  
**Other means of identification** : Not available.  
**Product type** : Liquid.

### Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** : Waterstop.

**Manufacturer** : Azon USA Inc.  
2204 Ravine Road  
Kalamazoo, MI 49004-3516  
U.S.A.  
Tel: 269-385-5942

**Emergency telephone number (with hours of operation)** : CHEMTREC, U.S. : 1-800-424-9300  
International: +1-703-527-3887  
24/7

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : ACUTE TOXICITY (inhalation) - Category 4  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
RESPIRATORY SENSITIZATION - Category 1  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY - Category 2  
TOXIC TO REPRODUCTION (Fertility) - Category 1B  
TOXIC TO REPRODUCTION (Unborn child) - Category 1B  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system) - Category 2  
AQUATIC HAZARD (ACUTE) - Category 2

## Section 2. Hazards identification

AQUATIC HAZARD (LONG-TERM) - Category 2

### GHS label elements

#### Hazard pictograms

:



#### Signal word

: Danger

#### Hazard statements

: H332 - Harmful if inhaled.  
 H319 - Causes serious eye irritation.  
 H315 - Causes skin irritation.  
 H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H317 - May cause an allergic skin reaction.  
 H360 - May damage fertility or the unborn child.  
 H351 - Suspected of causing cancer.  
 H335 - May cause respiratory irritation.  
 H373 - May cause damage to organs through prolonged or repeated exposure.  
 (respiratory system)  
 H411 - Toxic to aquatic life with long lasting effects.

### Precautionary statements

#### Prevention

: P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
 P284 - Wear respiratory protection.  
 P271 - Use only outdoors or in a well-ventilated area.  
 P273 - Avoid release to the environment.  
 P260 - Do not breathe vapor.  
 P264 - Wash hands thoroughly after handling.  
 P272 (OSHA) - Contaminated work clothing must not be allowed out of the workplace.

#### Response

: P391 - Collect spillage.  
 P314 - Get medical attention if you feel unwell.  
 P308 + P313 - IF exposed or concerned: Get medical attention.  
 P304 + P341 (OSHA) + P312 - IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.  
 P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or physician.  
 P302 + P352 + P363 - IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse.  
 P333 + P313 - If skin irritation or rash occurs: Get medical attention.  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337 + P313 - If eye irritation persists: Get medical attention.

#### Storage

: P405 - Store locked up.

#### Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

#### Hazards not otherwise classified

: None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture  
**Other means of identification** : Not available.

| Ingredient name                                | %         | CAS number |
|--|-----------|------------|
| Diisobutyl phthalate                           | ≥10 - <25 | 84-69-5    |
| 4,4'-Methylenediphenyl Diisocyanate            | ≥5 - ≤10  | 101-68-8   |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | ≥1 - ≤3   | 25686-28-6 |
| m-Tolylidene diisocyanate                      | ≥1 - ≤3   | 26471-62-5 |
| Methylenediphenyl diisocyanate                 | ≥0.3 - <1 | 26447-40-5 |

**United States:** The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

**Canada:** The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with the amended HPR as of April 2018.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. In the event of any complaints or symptoms, avoid further exposure.
- Skin contact** : Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

## Section 4. First aid measures

**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** : No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
wheezing and breathing difficulties  
asthma  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

**Ingestion** : Adverse symptoms may include the following:  
reduced fetal weight  
increase in fetal deaths  
skeletal malformations

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** : No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

## Section 5. Fire-fighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### Methods and materials for containment and cleaning up

- Spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

## Section 7. Handling and storage

### Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

### Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

### Control parameters

#### United States

##### Occupational exposure limits

| Ingredient name  | Exposure limits  |
|--|--|
| Diisobutyl phthalate<br>4,4'-Methylenediphenyl Diisocyanate  | None.<br><b>ACGIH TLV (United States, 3/2017).</b><br>TWA: 0.005 ppm 8 hours.<br><b>NIOSH REL (United States, 10/2016).</b><br>TWA: 0.05 mg/m <sup>3</sup> 10 hours.<br>TWA: 0.005 ppm 10 hours.<br>CEIL: 0.2 mg/m <sup>3</sup> 10 minutes.<br>CEIL: 0.02 ppm 10 minutes.<br><b>OSHA PEL (United States, 6/2016).</b><br>CEIL: 0.02 ppm<br>CEIL: 0.2 mg/m <sup>3</sup> |
| 4,4'-Methylenediphenyl diisocyanate, oligomers<br>m-Tolyldene diisocyanate<br>Methylenediphenyl diisocyanate | None.<br>None.<br>None.  |

#### Canada

##### Occupational exposure limits

| Ingredient name                     | Exposure limits  |
|-------------------------------------|--|
| 4,4'-Methylenediphenyl Diisocyanate | <b>CA Alberta Provincial (Canada, 4/2009).</b><br>8 hrs OEL: 0.005 ppm 8 hours.<br>8 hrs OEL: 0.05 mg/m <sup>3</sup> 8 hours.<br><b>CA British Columbia Provincial (Canada, 7/2016). Absorbed through skin. Skin sensitizer.</b><br>TWA: 0.005 ppm 8 hours.<br>C: 0.01 ppm<br><b>CA Quebec Provincial (Canada, 1/2014). Skin sensitizer.</b><br>TWAEV: 0.005 ppm 8 hours.<br>TWAEV: 0.051 mg/m <sup>3</sup> 8 hours.<br><b>CA Ontario Provincial (Canada, 7/2015).</b><br>TWA: 0.005 ppm 8 hours.<br><b>CA Saskatchewan Provincial (Canada, 7/2013).</b><br>STEL: 0.015 ppm 15 minutes.<br>TWA: 0.005 ppm 8 hours. |
| m-Tolyldene diisocyanate            | <b>CA British Columbia Provincial (Canada, 7/2016).</b><br>TWA: 0.005 ppm 8 hours.<br>C: 0.01 ppm<br><b>CA Quebec Provincial (Canada, 1/2014). Skin sensitizer.</b><br>TWAEV: 0.005 ppm 8 hours.<br>TWAEV: 0.036 mg/m <sup>3</sup> 8 hours.<br>STEV: 0.02 ppm 15 minutes.<br>STEV: 0.14 mg/m <sup>3</sup> 15 minutes.<br><b>CA Ontario Provincial (Canada, 7/2015).</b>  |

## Section 8. Exposure controls/personal protection

Methylenediphenyl diisocyanate

C: 0.02 ppm  
TWA: 0.005 ppm 8 hours.

**CA British Columbia Provincial (Canada, 7/2016).**

TWA: 0.005 ppm 8 hours.

C: 0.01 ppm

**CA Ontario Provincial (Canada, 7/2015).**

C: 0.02 ppm

TWA: 0.005 ppm 8 hours.

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

**Physical state** : Liquid. [Clear.]

**Color** : Yellow to orange.

**Odor** : Slightly musty.

**Odor threshold** : Not available.

**pH** : Not available.



## Section 9. Physical and chemical properties

|   |  |
|---|--|
| <b>Melting point</b>                                | : Not available.   |
| <b>Boiling point</b>                                | : Not available.   |
| <b>Flash point</b>                                  | : Closed cup: >93.33°C (>200°F)  |
| <b>Evaporation rate</b>                             | : Not available.   |
| <b>Flammability (solid, gas)</b>                    | : Not available.   |
| <b>Lower and upper explosive (flammable) limits</b> | : Not available.   |
| <b>Vapor pressure</b>                               | : Not available.   |
| <b>Vapor density</b>                                | : Not available.   |
| <b>Relative density</b>                             | : Not available.   |
| <b>Solubility</b>                                   | : Insoluble in water. Reacts slowly with water to liberate carbon dioxide. |
| <b>Partition coefficient: n-octanol/water</b>       | : Not available.   |
| <b>Auto-ignition temperature</b>                    | : Not available.   |
| <b>Decomposition temperature</b>                    | : Not available.   |
| <b>Viscosity</b>                                    | : Not available.   |
| <b>Flow time (ISO 2431)</b>                         | : Not available.   |

## Section 10. Stability and reactivity

|   |  |
|---|--|
| <b>Reactivity</b>                         | : No specific test data related to reactivity available for this product or its ingredients.   |
| <b>Chemical stability</b>                 | : The product is stable.   |
| <b>Possibility of hazardous reactions</b> | : Temperatures above 350° F may cause polymerization.  |
| <b>Conditions to avoid</b>                | : Avoid extreme heat, direct sunlight, and moisture.   |
| <b>Incompatible materials</b>             | : Water, amines, strong bases, alcohols, copper alloys, aluminum.  |
| <b>Hazardous decomposition products</b>   | : By high heat and fire: carbon monoxide, oxides of nitrogen, hydrogen cyanide, carbon dioxide, dense black smoke, isocyanate, isocyanic acid, other undetermined compounds. |

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

| Product/ingredient name             | Result    | Species | Dose       | Exposure |
|-------------------------------------|-----------|---------|------------|----------|
| Diisobutyl phthalate                | LD50 Oral | Rat     | 15 g/kg    | -        |
| 4,4'-Methylenediphenyl Diisocyanate | LD50 Oral | Rat     | 9200 mg/kg | -        |

#### Irritation/Corrosion

| Product/ingredient name             | Result                   | Species | Score | Exposure | Observation |
|-------------------------------------|--------------------------|---------|-------|----------|-------------|
| 4,4'-Methylenediphenyl Diisocyanate | Eyes - Moderate irritant | Rabbit  | -     | 100 mg   | -           |
| m-Tolylidene diisocyanate           | Skin - Severe irritant   | Rabbit  | -     | 500 mg   | -           |

#### Sensitization



## Section 11. Toxicological information

There is no data available.

### Mutagenicity

There is no data available.

### Carcinogenicity

#### Classification

| Product/ingredient name  | OSHA   | IARC    | NTP   |
|--|--------|---------|---|
| 4,4'-Methylenediphenyl Diisocyanate<br>m-Tolylidene diisocyanate | -<br>- | 3<br>2B | -<br>Reasonably anticipated to be a human carcinogen. |

### Reproductive toxicity

There is no data available.

### Teratogenicity

There is no data available.

### Specific target organ toxicity (single exposure)

| Name   | Category   | Route of exposure | Target organs                |
|--|------------|-------------------|------------------------------|
| 4,4'-Methylenediphenyl Diisocyanate            | Category 3 | Not applicable.   | Respiratory tract irritation |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Category 3 | Not applicable.   | Respiratory tract irritation |
| m-Tolylidene diisocyanate                      | Category 3 | Not applicable.   | Respiratory tract irritation |
| Methylenediphenyl diisocyanate                 | Category 3 | Not applicable.   | Respiratory tract irritation |

### Specific target organ toxicity (repeated exposure)

| Name   | Category   | Route of exposure | Target organs      |
|--|------------|-------------------|--------------------|
| 4,4'-Methylenediphenyl Diisocyanate            | Category 2 | Not determined    | Not determined     |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | Category 2 | Inhalation        | respiratory system |
| Methylenediphenyl diisocyanate                 | Category 2 | Not determined    | Not determined     |

### Aspiration hazard

There is no data available.

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Harmful if inhaled. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
wheezing and breathing difficulties  
asthma  
reduced fetal weight  
increase in fetal deaths

## Section 11. Toxicological information

- Skin contact** : skeletal malformations  
 : Adverse symptoms may include the following:  
 irritation  
 redness  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations
- Ingestion** : Adverse symptoms may include the following:  
 reduced fetal weight  
 increase in fetal deaths  
 skeletal malformations

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

#### Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

#### Potential chronic health effects

- General** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : May damage the unborn child.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : May damage fertility.

### Numerical measures of toxicity

#### Acute toxicity estimates

| Route                        | ATE value  |
|------------------------------|------------|
| Inhalation (vapors)          | 419 mg/L   |
| Inhalation (dusts and mists) | 2.674 mg/L |

## Section 12. Ecological information

### Toxicity

| Product/ingredient name | Result                          | Species                    | Exposure |
|-------------------------|---------------------------------|----------------------------|----------|
| Diisobutyl phthalate    | Acute LC50 900 µg/L Fresh water | Fish - Pimephales promelas | 96 hours |

### Persistence and degradability

There is no data available.

## Section 12. Ecological information

### Bioaccumulative potential

| Product/ingredient name                        | LogP <sub>ow</sub> | BCF | Potential |
|--|--------------------|-----|-----------|
| Diisobutyl phthalate                           | 4.11               | 622 | high      |
| 4,4'-Methylenediphenyl Diisocyanate            | 4.51               | 200 | low       |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | 8.56               | 200 | low       |
| m-Tolyldiene diisocyanate                      | 3.43               | -   | low       |
| Methylenediphenyl diisocyanate                 | 4.51               | 200 | low       |

### Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.









## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### United States - RCRA Toxic hazardous waste "U" List

| Ingredient                | CAS #      | Status | Reference number |
|---------------------------|------------|--------|------------------|
| m-Tolyldiene diisocyanate | 26471-62-5 | Listed | U223             |

## Section 14. Transport information

|                            | DOT Classification   | TDG Classification   | IMDG  | IATA   |
|----------------------------|--|--|---|--|
| UN number                  | UN3082   | UN3082   | UN3082  | UN3082   |
| UN proper shipping name    | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisobutyl phthalate). Marine pollutant (Diisobutyl phthalate) RQ (m-Tolyldiene diisocyanate)                           | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisobutyl phthalate). Marine pollutant (Diisobutyl phthalate)  | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisobutyl phthalate). Marine pollutant (Diisobutyl phthalate)   | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisobutyl phthalate)   |
| Transport hazard class(es) | 9<br>  | 9<br>  | 9<br>  | 9<br>  |
| Packing group              | III  | III  | III   | III  |
|                            |  |  |   |  |

## Section 14. Transport information

|                       |      |      |      |      |
|-----------------------|------|------|------|------|
| Environmental hazards | Yes. | Yes. | Yes. | Yes. |
|-----------------------|------|------|------|------|

AERG : 171

- DOT-RQ Details** : m-Tolylidene diisocyanate 100 lbs / 45.4 kg
- Additional information**
- DOT Classification** : Non-bulk packages of this product are not regulated as hazardous materials in package sizes less than the product reportable quantity, unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of ≤5 L or ≤5 kg.  
**Reportable quantity** 6172.8 lbs / 2802.5 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
- TDG Classification** : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark).  
Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.
- IMDG** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.  
**Emergency schedules** F-A, S-F
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.
- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

- U.S. Federal regulations** : **TSCA 8(a) PAIR:** 4,4'-Methylenediphenyl Diisocyanate; Methylenediphenyl diisocyanate; Diisobutyl phthalate  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**TSCA 8(c) calls for record of SAR:** m-Tolylidene diisocyanate; 4,4'-Methylenediphenyl Diisocyanate; Methylenediphenyl diisocyanate  
**TSCA 12(b) one-time export:** m-Tolylidene diisocyanate  
**Clean Water Act (CWA) 307:** 4,4'-Methylenediphenyl Diisocyanate; Diisobutyl phthalate  
**Clean Air Act (CAA) 112 regulated toxic substances:** m-Tolylidene diisocyanate
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed

## Section 15. Regulatory information

DEA List II Chemicals (Essential Chemicals) : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

### SARA 311/312

**Classification** : ACUTE TOXICITY (inhalation) - Category 4  
 SKIN CORROSION/IRRITATION - Category 2  
 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
 RESPIRATORY SENSITIZATION - Category 1  
 SKIN SENSITIZATION - Category 1  
 CARCINOGENICITY - Category 2  
 TOXIC TO REPRODUCTION (Fertility) - Category 1B  
 TOXIC TO REPRODUCTION (Unborn child) - Category 1B  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3  
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system) - Category 2

#### Composition/information on ingredients

| Name   | Classification  |
|--|---|
| Diisobutyl phthalate                           | TOXIC TO REPRODUCTION (Fertility) - Category 1B<br>TOXIC TO REPRODUCTION (Unborn child) - Category 1B   |
| 4,4'-Methylenediphenyl Diisocyanate            | ACUTE TOXICITY (inhalation) - Category 4<br>SKIN CORROSION/IRRITATION - Category 2<br>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A<br>RESPIRATORY SENSITIZATION - Category 1<br>SKIN SENSITIZATION - Category 1<br>CARCINOGENICITY - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  |
| 4,4'-Methylenediphenyl diisocyanate, oligomers | ACUTE TOXICITY (inhalation) - Category 4<br>SKIN CORROSION/IRRITATION - Category 2<br>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A<br>RESPIRATORY SENSITIZATION - Category 1<br>SKIN SENSITIZATION - Category 1<br>CARCINOGENICITY - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system) (inhalation) - Category 2 |
| m-Tolylidene diisocyanate                      | ACUTE TOXICITY (inhalation) - Category 2<br>SKIN CORROSION/IRRITATION - Category 2<br>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A<br>RESPIRATORY SENSITIZATION - Category 1<br>SKIN SENSITIZATION - Category 1<br>CARCINOGENICITY - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3   |
| Methylenediphenyl diisocyanate                 | ACUTE TOXICITY (inhalation) - Category 4<br>SKIN CORROSION/IRRITATION - Category 2<br>SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A<br>RESPIRATORY SENSITIZATION - Category 1<br>SKIN SENSITIZATION - Category 1<br>CARCINOGENICITY - Category 2<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  |

### SARA 313

## Section 15. Regulatory information


|                                 | Product name   | CAS number             |
|---------------------------------|--|------------------------|
| Form R - Reporting requirements | 4,4'-Methylenediphenyl Diisocyanate<br>m-Tolylidene diisocyanate | 101-68-8<br>26471-62-5 |
| Supplier notification           | 4,4'-Methylenediphenyl Diisocyanate<br>m-Tolylidene diisocyanate | 101-68-8<br>26471-62-5 |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- Massachusetts** : The following components are listed: m-Tolylidene diisocyanate; 4,4'-Methylenediphenyl Diisocyanate
- New York** : The following components are listed: m-Tolylidene diisocyanate; 4,4'-Methylenediphenyl Diisocyanate
- New Jersey** : The following components are listed: m-Tolylidene diisocyanate; 4,4'-Methylenediphenyl Diisocyanate
- Pennsylvania** : The following components are listed: m-Tolylidene diisocyanate; 4,4'-Methylenediphenyl Diisocyanate

### California Prop. 65

 **WARNING:** This product can expose you to Toluene diisocyanate, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

### Canada

#### Canadian lists

- Canadian NPRI** : The following components are listed: m-Tolylidene diisocyanate; 4,4'-Methylenediphenyl Diisocyanate
- CEPA Toxic substances** : The following components are listed: m-Tolylidene diisocyanate
- Canada inventory (DSL NDSL)** : All components are listed or exempted.

## Section 16. Other information

### Procedure used to derive the classification

| Classification   | Justification      |
|--|--------------------|
| ACUTE TOXICITY (inhalation) - Category 4   | Calculation method |
| SKIN CORROSION/IRRITATION - Category 2   | Calculation method |
| SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A   | Calculation method |
| RESPIRATORY SENSITIZATION - Category 1   | Calculation method |
| SKIN SENSITIZATION - Category 1  | Calculation method |
| CARCINOGENICITY - Category 2   | Calculation method |
| TOXIC TO REPRODUCTION (Fertility) - Category 1B  | Calculation method |
| TOXIC TO REPRODUCTION (Unborn child) - Category 1B   | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system) - Category 2         | Calculation method |
| AQUATIC HAZARD (ACUTE) - Category 2  | Calculation method |
| AQUATIC HAZARD (LONG-TERM) - Category 2  | Calculation method |

### History

- Date of issue mm/dd/yyyy** : 07/30/2018
- Date of previous issue** : Not applicable
- Version** : 1

## Section 16. Other information

**Prepared by** : KMK Regulatory Services Inc.

**Notice to reader**

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.