

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

PRODUCT FORM: MIXTURE

PRODUCT NAME: ISOCYANATE

PRODUCT CODE: ISO

SYNONYMS: "A" COMPONENT, "A" SIDE, POLYMERIC MDI

1.2 INTENDED USE OF THE PRODUCT

Use of the Substance/Mixture: Substance for use in conjunction with Resin Component

1.3 NAME, ADDRESS, AND TELEPHONE OF THE RESPONSIBLE PARTY COMPANY

Creative Polymer Solutions, LLC.
2720 Southeastern Circle, Birmingham, AL 35215
205-440-4996
www.accufoam.com

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Number: Within USA and Canada: 1-800-424-9300 or +1-703-527-3887 (collect calls accepted) CHEMTREC

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE


GHS-US Classification

| |
|--|
| Acute toxicity, inhalation, Category 4 |
| Carcinogenicity, Category 2 |
| Sensitization, respiratory, Category 1 |
| Eye damage/irritation, Category 2A |
| Skin corrosion/irritation, Category 2 |
| Sensitization, skin, Category 1 |
| Specific target organ toxicity (repeated exposure), Category 2 |
| Specific target organ toxicity (single exposure), Category 3 |

Full text of hazard classes and H-statements: see section 16

2.2 LABEL ELEMENTS

GHS-US Labeling

| | |
|-----------------------------------|---|
| HAZARD PICTOGRAMS (GHS-US) |  |
| SIGNAL WORD (GHS-US) | Warning |

HAZARD STATEMENTS (GHS-US)

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H373 - May cause damage to organs(kidneys) through prolonged or repeated exposure(oral).

PRECAUTIONARY STATEMENTS (GHS-US)

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, and eye protection.
P284 - In case of inadequate ventilation wear respiratory protection.
P302+P352 - If on skin: Wash with plenty of water.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a POISON CENTER/doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see section 4 on this SDS).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3 OTHER HAZARDS

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4 UNKNOWN ACUTE TOXICITY (GHS-US)

No Available Data

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCE

Not Applicable

3.2 MIXTURE

| NAME | PRODUCT IDENTIFIER | % | GHS US CLASSIFICATION |
|--|----------------------|--------|---|
| Polymeric diphenylmethane diisocyanate | (CAS no.: 9016-87-9) | 60-100 | Acute toxicity, inhalation, Cat. 4; Skin corrosion/irritation, Cat. 2; Serious eye damage/eye irritation, Cat. 2; Sensitization, skin, Cat. 1; Sensitization, respiratory, Cat. 1; Specific target organ toxicity (single exposure), Cat. 3; Carcinogenicity, Cat. 2. |
| 4,4'-diphenylmethane diisocyanate | (CAS no.: 101-68-8) | 30-60 | Acute toxicity, inhalation, Cat. 4; Skin corrosion/irritation, Cat. 2; Serious eye damage/eye irritation, Cat. 2; Sensitization, skin, Cat. 1; Sensitization, respiratory, Cat. 1; Specific target organ toxicity (single exposure), Cat. 3; Specific target organ toxicity (repeated exposure), Cat. 2; Carcinogenicity, Cat. 2. |

Full text of H-phrases: see section 16

*The exact percentage of composition has been withheld as a trade secret [29 CFR 1910.1200].

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

First-aid measures General: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

First-aid Measures After Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Call a poison center/doctor or transport to a medical facility.

First-aid Measures After Skin Contact: Rinse with water for at least 15 minutes. Call a doctor if irritation develops or persists.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention without delay.

First-aid Measures After Ingestion: Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS BOTH ACUTE AND DELAYED

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 SUITABLE EXTINGUISHING MEDIA

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use direct water stream.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Combustion products may include and are not limited to: Nitrogen oxides, Isocyanates, Hydrogen cyanide, Carbon monoxide, Carbon dioxide.

Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of closed containers.

5.3 ADVICE FOR FIREFIGHTERS

Wear self-contained breathing apparatus for firefighting if necessary. Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus.

Further information

FURTHER INFORMATION

Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protective equipment as described in Section 8. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Evacuate personnel to safe areas. Spilled material may cause a slipping hazard.

6.2 ENVIRONMENTAL PRECAUTIONS

Prevent entry to sewers and public waters. Avoid release to the environment.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Contain spilled material if possible. Soak up with inert absorbent material and dispose of in accordance with local and national regulations. Keep in suitable containers for disposal. Do not place in sealed containers. Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of sealed containers. Wash the spill site with large quantities of water. Attempt to neutralize by adding suitable decontaminant solution. Reference to other sections For disposal see section 13.

6.4 REFERENCE TO OTHER SECTIONS

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Use personal protective equipment as described in Section 8. For precautions see section 2.2. Handle in accordance with good industrial hygiene and safety practice.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep container tightly closed in a dry and well-ventilated place. Protect from atmospheric moisture. Do not store product contaminated with water to prevent potential hazardous reaction.

7.3 SPECIFIC END USE(S)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

| METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS: 101-68-8) | | |
|--|----------|---|
| PEL-C | OSHA | 0.02 ppm (0.2 mg/m ³) |
| REL-TWA | NIOSH | 0.005 ppm (0.05 mg/m ³) |
| REL-C | NIOSH | 0.020 ppm (0.2 mg/m ³) [10 minutes] |
| TLV®-TWA | ACGIH | 0.005 ppm [1985] |
| PEL-TWA | CAL/OSHA | 0.005 ppm (0.051 mg/m ³) |

8.2 APPROPRIATE ENGINEERING CONTROLS

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

8.3 INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT (PPE)



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves (rubber, chemical resistant). Consult manufacturer specifications for further information.

Eye and Face Protection: Safety glasses. If splash hazard, wear faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Ensure that eyewash stations and/or safety showers are close to the workstation location if working with concentrated product.

Skin and Body Protection: Wear protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls: Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------|----------------------|
| Physical State | Liquid |
| Appearance | Brown Liquid |
| Odor | Slight amine |
| Boiling Point | 245 °C |
| Flash Point | >150 °C (closed cup) |
| Auto-ignition Temperature | No Data Available |
| Viscosity | 200 mPa.s at 25 °C |

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY:

Isocyanates are reactive, the rate of reactions increases with temperature as well as increased contact; these reactions can become violent. Reaction with water will generate carbon dioxide.

10.2 CHEMICAL STABILITY:

Stable under normal storage conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS:

Exposure to elevated temperatures can cause product to decompose and generate gas. This can cause pressure build-up and/or rupturing of closed containers. Polymerization can be catalyzed by strong bases and water.

10.4 CONDITIONS TO AVOID:

Avoid exposure to elevated temperature and incompatible materials. Avoid exposure to moisture.

10.5 INCOMPATIBLE MATERIALS:

Acids, Alcohols, Amines, Water, Ammonia, Bases, Metal compounds, Strong oxidizers. Avoid contact with metals such as: Aluminum, Zinc, Brass, Tin, Copper, Galvanized metals.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS:

Nitrogen oxides, Isocyanates, Hydrogen cyanide, Carbon monoxide, Carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

Acute Toxicity

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion. Harmful if inhaled. At room temperature, vapors are minimal due to low volatility. Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs. May cause pulmonary edema. Effects may be delayed. Decreased lung function has been associated with overexposure to isocyanates.

| Polymeric diphenylmethane diisocyanate (CAS no.: 9016-87-9): | |
|--|---------------|
| LD50 Oral - Rat | > 49000 mg/kg |
| LD50 Dermal – Rabbit | > 9400 mg/kg |
| LC50 Inhalation Rat | 490mg/m3/4H |

Skin Corrosion/Irritation: Causes skin irritation. Signs/symptoms may include localized redness, swelling, and itching.

Serious Eye Damage/Irritation: Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Respiratory or Skin Sensitization: May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI. Tumors occurred concurrently with respiratory irritation and lung injury.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: No Data Available

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated exposure(oral)): May cause damage to organs through prolonged or repeated exposure. Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

Aspiration Hazard: No data available.

Additional Information: No data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 TOXICITY

No data available on product

12.2 PERSISTENCE AND DEGRADABILITY

No data available on product

12.3 BIOACCUMULATIVE POTENTIAL

No data available on product

12.4 MOBILITY IN SOIL

No additional information available

12.5 RESULTS OF PBT AND VPVB ASSESSMENT

PBT/vPvB assesment not available as chemical safety assessment not required/not conducted

12.6 OTHER ADVERSE EFFECTS

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Disposal of the product

Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Disposal of contaminated packaging

Dispose of any unused product

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1 IN ACCORDANCE WITH DOT (US)

Not regulated for shipping when shipped in quantities <8333 lb (based on maximum concentration of 4,4'-DIPHENYLMETHANE DIISOCYANATE with CERCLA RQ = 5000 lb)

Proper Shipping Name: Other regulated substances, liquid, n.o.s. (4,4'-DIPHENYLMETHANE DIISOCYANATE)

Hazard Class: 9 Identification Number: NA3082

Label codes: 9

Packing Group: III

ERG Number: 171

14.2 IN ACCORDANCE WITH IMDG

Not dangerous goods

14.3 IN ACCORDANCE WITH IATA

Not dangerous goods

SECTION 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS SPECIFIC FOR THE PRODUCT IN QUESTION

California Proposition 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts Right To Know Components

4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS no.: 101-68-8)

New Jersey Right To Know Components

Polymeric diphenylmethane diisocyanate (CAS no.: 9016-87-9)

4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS no.: 101-68-8)

Pennsylvania Right To Know Components

4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS no.: 101-68-8)

CERCLA

4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS no.: 101-68-8) (RQ = 5000 lb)

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

SARA 313 Components

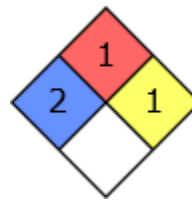
Polymeric diphenylmethane diisocyanate (CAS no.: 9016-87-9)

4,4'-DIPHENYLMETHANE DIISOCYANATE (CAS no.: 101-68-8)

HMIS Rating

| Isocyanate | |
|---------------------|---|
| Health | 2 |
| Flammability | 1 |
| Physical Hazard | 1 |
| Personal Protection | |

NFPA Rating



SECTION 16: OTHER INFORMATION

16.1 FURTHER INFORMATION/DISCLAIMER

Date of issue: July 30, 2019.

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. All materials may present unknown hazards and should be used with caution. In no event shall we be held liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if we have been advised of the possibility of such damages.