

Safety Data Sheet

acc. to OSHA HCS (29 CFR 1910.1200) and WHMIS 2015 regulations

Printing date: 09/09/2016

Revision: 09/09/2016

1 Identification

- **Product identifier**
- **Trade name:** 1007 PolyUrea Spray Part A
- **Product code:** 1007
- **Other means of identification:** Fast Set Polyurea Spray
- **Recommended use and restriction on use**
- **Recommended use:** Secondary Containment, Parking Structure, Tanks
- **Restrictions on use:** See Sections 8 and 10 for further information.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
ASTC Polymers, Inc
3207 West Warner Ave.
Santa Ana, CA 92704
Phone: 714.966.2893
FAX: 714.966.9105
Email: info@astcpolymers.com
- **Emergency telephone number:** 714.966.2893

2 Hazard(s) identification

- **Classification of the substance or mixture**
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1 H317 May cause an allergic skin reaction.
Carc. 2 H351 Suspected of causing cancer.
STOT SE 3 H335 May cause respiratory irritation.
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS07 GHS08

- **Signal word:** Danger

- **Hazard statements:**

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.

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H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe mist/vapors/spray.
- P284 In case of inadequate ventilation wear respiratory protection.
- P264 Wash thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection.
- P271 Use only outdoors or in a well-ventilated area.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P363 Wash contaminated clothing before reuse.
- P304+P341 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P405 Store locked up.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

0 % of the mixture consists of component(s) of unknown toxicity.
There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Components:

9048-57-1	polypropylene polyol diphenylmethanediisocyanate prepolymer ⚠ Resp. Sens. 1, H334 ⚠ Skin Sens. 1, H317	40-60%
101-68-8	4,4'-methylenediphenyl diisocyanate ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373 ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	40-60%
25686-28-6	4,4'-Methylenediphenyl diisocyanate, oligomers ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373 ⚠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335	5-10%
5873-54-1	o-(p-isocyanatobenzyl)phenyl isocyanate ⚠ Resp. Sens. 1, H334; Carc. 2, H351; STOT RE 2, H373 ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; STOT SE 3, H335	<5%

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Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret.
For the wording of the listed Hazard Statements refer to section 16.

4 First-aid measures

Description of first aid measures**After inhalation:**

Supply fresh air and to be sure to call for a doctor.
Provide oxygen treatment if affected person has difficulty breathing.
In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Do not pull solidified product away from the skin.
Immediately wash with water and soap and rinse thoroughly.
If skin irritation or rash occurs: Get medical advice/attention.

After eye contact:

Remove contact lenses if worn, if possible.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.

Most important symptoms and effects, both acute and delayed:

Asthma attacks
Headache
Breathing difficulty
Dizziness
Coughing
Allergic reactions
Irritant to skin and mucous membranes.
Irritant to eyes.
Gastric or intestinal disorders when ingested.
Nausea in case of ingestion.
Vomiting.
Diarrhea.
Disorientation

Danger:

Danger of impaired breathing.
Danger of disturbed cardiac rhythm.
Danger of convulsion.
May cause respiratory irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause damage to organs through prolonged or repeated exposure.
Suspected of causing cancer.
May be harmful if swallowed.

Indication of any immediate medical attention and special treatment needed:

Medical supervision for at least 48 hours.
Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.
If necessary oxygen respiration treatment.

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Later observation for pneumonia and pulmonary edema.

Contains polypropylene polyol diphenylmethanediisocyanate prepolymer, 4,4'-methylenediphenyl diisocyanate, 4,4'-Methylenediphenyl diisocyanate, oligomers, o-(p-isocyanatobenzyl)phenyl isocyanate. May produce an allergic reaction.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.

If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

- **For safety reasons unsuitable extinguishing agents:** None.

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

During heating or in case of fire poisonous gases are produced.

- **Advice for firefighters**

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**

Use respiratory protective device against the effects of fumes/dust/aerosol.

Use personal protective equipment as required.

Ensure adequate ventilation.

Keep people at a distance and stay upwind.

- **Environmental precautions:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Methods and material for containment and cleaning up:**

Allow to solidify. Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

- **Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- **Handling**

- **Precautions for safe handling:**

Use only in well ventilated areas.

Avoid breathing mist, vapors, or spray.

Avoid contact with the eyes and skin.

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- Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Avoid storage near extreme heat, ignition sources or open flame.
- **Information about storage in one common storage facility:**
Store away from foodstuffs.
Store away from oxidizing agents.
Do not store together with acids.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from humidity and water.
- **Specific end use(s):** No relevant information available.

8 Exposure controls/personal protection

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

101-68-8 4,4'-methylenediphenyl diisocyanate

PEL (USA)	Ceiling limit value: 0.2 mg/m ³ , 0.02 ppm
REL (USA)	Long-term value: 0.05 mg/m ³ , 0.005 ppm Ceiling limit value: 0.2* mg/m ³ , 0.02* ppm *10-min
TLV (USA)	Long-term value: 0.051 mg/m ³ , 0.005 ppm
EL (Canada)	Long-term value: 0.005 ppm Ceiling limit value: 0.01 ppm Skin; S
EV (Canada)	Long-term value: 0.005 ppm Ceiling limit value: 0.02 ppm
LMPE (Mexico)	Long-term value: 0.005 ppm

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
Be sure to clean skin thoroughly after work and before breaks.
- **Engineering controls:** Use only outdoors or in a well-ventilated area.

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· **Breathing equipment:**



Combined Organic Vapor and Particulate Respirator is recommended for use during all processing activities.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:**



Safety glasses

· **Body protection:** Protective work clothing

· **Limitation and supervision of exposure into the environment**

Avoid release to the environment.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

Form: Liquid
Color: Light yellow

· **Odor:** Mild

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Melting point/Melting range:** Not determined.

· **Boiling point/Boiling range:** Not determined.

· **Flash point:** >110 °C (>230 °F) (Closed Cup)

· **Flammability (solid, gaseous):** Not applicable.

· **Auto-ignition temperature:** >600 °C (>1112 °F)

· **Decomposition temperature:** >300 °C (>572 °F)

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits**

Lower: Not determined.

Upper: Not determined.

· **Oxidizing properties:** Not determined.

· **Vapor pressure:** Not determined.

· **Density:**

Relative density: Not determined.

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Vapor density:	Not determined.
Evaporation rate:	Not determined.
· Solubility in / Miscibility with Water:	Slowly reacts with water. Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not determined.
Kinematic at 24 °C (75 °F):	800-1200 cps
· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions:**
Reacts with oxidizing agents.
Reacts with strong acids and alkali.
Contact with acids releases toxic gases.
Reacts with water.
- **Conditions to avoid:**
Store away from oxidizing agents.
Avoid acids.
Protect from humidity and water.
- **Incompatible materials:** Oxidizers, strong bases, strong acids
- **Hazardous decomposition products:**
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Hydrogen cyanide (prussic acid)

11 Toxicological information

- **Information on toxicological effects**
 - **Acute toxicity:**
- | | | |
|---|------|--------------------|
| · LD/LC50 values that are relevant for classification: | | |
| 101-68-8 4,4'-methylenediphenyl diisocyanate | | |
| Oral | LD50 | 2200 mg/kg (mouse) |
- **Primary irritant effect:**
 - **On the skin:** Irritant to skin and mucous membranes.
 - **On the eye:** Irritating effect.

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- **Sensitization:** May cause sensitisation by inhalation and skin contact.

- **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

- **NTP (National Toxicology Program):**

None of the ingredients are listed.

- **OSHA-Ca (Occupational Safety & Health Administration):**

None of the ingredients are listed.

- **Probable route(s) of exposure:**

Ingestion.
Inhalation.
Eye contact.
Skin contact.

- **Acute effects (acute toxicity, irritation and corrosivity):** Irritating to eyes, respiratory system and skin.

- **Repeated dose toxicity:** Repeated exposures may result in skin and/or respiratory sensitivity.

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Carc. 2

- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.

- **Carcinogenicity:** Suspected of causing cancer.

- **Reproductive toxicity:** Based on available data, the classification criteria are not met.

- **STOT-single exposure:** May cause respiratory irritation.

- **STOT-repeated exposure:** May cause damage to organs through prolonged or repeated exposure.

- **Aspiration hazard:** Based on available data, the classification criteria are not met.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity** No relevant information available.

- **Persistence and degradability** No relevant information available.

- **Bioaccumulative potential:** No relevant information available.

- **Mobility in soil:** No relevant information available.

- **Additional ecological information**

- **General notes:**

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects:** No relevant information available.

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13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· **Uncleaned packagings**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**

· DOT, ADR, IMDG, IATA Not regulated.

· **UN proper shipping name**

· DOT, ADR, IMDG, IATA Not regulated.

· **Transport hazard class(es)**

· DOT, ADR, IMDG, IATA

· **Class** Not regulated.

· **Packing group**

· DOT, ADR, IMDG, IATA Not regulated.

· **Environmental hazards**

· **Marine pollutant:** No

· **Special precautions for user**

Not applicable.

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **United States (USA)**

· **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

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· **Section 313 (Specific toxic chemical listings):**

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· **TSCA (Toxic Substances Control Act)**

All ingredients are listed.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency):**

101-68-8	4,4'-methylenediphenyl diisocyanate	D, CBD
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· **IARC (International Agency for Research on Cancer):**

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

· **Canadian Domestic Substances List (DSL):**

All ingredients are listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Date of preparation / last revision** 09/09/2016 / -

· **Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
 IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety
 OSHA: Occupational Safety & Health
 LDLo: Lowest Lethal Dose Observed
 Acute Tox. 4: Acute toxicity – Category 4
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Carc. 2: Carcinogenicity – Category 2
Carc. 2: Carcinogenicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Sources

Website, European Chemicals Agency (echa.europa.eu)
Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)
Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)
Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6
Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.
Safety Data Sheets, Individual Manufacturers

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