



13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 4/21/2025 Revision date: 6/12/2026 Supersedes: 4/21/2025 Version: 1.1

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : 13-302A Iso Component Part A

1.2. Other means of identification

Synonyms : Azo Nate 300, Azo Cast R0310
Other means of identification : Part No. TBA-13302A

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Thermal barrier polymer (Part A)

1.4. Supplier's details

Manufacturer

Azon USA Inc.
2204 Ravine Rd
Kalamazoo, Michigan 49004
USA
T 269-385-5942

1.5. Emergency phone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 2189
Back-up Emergency Number: +1 703-741-5970 (Washington, DC)

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (inhalation:vapor), Category 4	H332	Harmful if inhaled.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.
Respiratory sensitization, Category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitization, Category 1	H317	May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351	Suspected of causing cancer.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

Full text of H statements : see section 16

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

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 (respiratory system) through prolonged or repeated exposure (Inhalation)

Precautionary statements (GHS US)

: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe fume, vapors, spray.
Wash hands, forearms and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective clothing, eye and face protection, protective gloves.
Wear respiratory protection.
If on skin: Wash with plenty of soap and water.
If skin irritation or rash occurs: Get medical advice or attention.
Take off contaminated clothing and wash it before reuse.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms: Call a poison center or doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice or attention.
If exposed or concerned: Get medical advice/attention.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Diphenylmethane Diisocyanate, isomers and homologues	CAS-No.: 9016-87-9	90-100	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 STOT RE 2, H373
4,4'-Methylenediphenyl diisocyanate	CAS-No.: 101-68-8	27 – 50	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 STOT RE 2, H373
1,3-Bis(4-((4-isocyanatophenyl)methyl)phenyl)-1,3-diazetidone-2,4-dione	CAS-No.: 17589-24-1	<5	Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro-ω-hydroxypoly(oxy-1,2-ethanediy)	CAS-No.: 57636-09-6	<5	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1B, H317 Carc. 2, H351 STOT SE 3, H335

Comments : CAS [101-68-8] is an MDI isomer that is part of CAS [9016-87-9]

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

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but, not mouth-to-mouth.
First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim is unconscious: Lay in a stable manner on victim's side. Induce artificial respiration with mask fitted with one-way valve or other suitable device; not mouth-to-mouth. Call a physician immediately.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin areas with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged and frequent exposure through inhalation may cause cancer. May cause respiratory irritation.

Symptoms/effects after skin contact : May cause an allergic skin reaction. Irritation (itching, redness, blistering).

Symptoms/effects after eye contact : Causes serious eye irritation. Redness, itching, tears.

Symptoms/effects after ingestion : Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Most Important Symptoms/Effects : Causes skin and eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. May cause an allergy or asthma symptoms or breathing difficulties if inhaled. Harmful if inhaled.

Chronic symptoms : Prolonged and frequent exposure through inhalation may cause cancer. May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

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

Other medical advice or treatment : Call a physician immediately.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Carbon dioxide (CO₂), dry chemical powder, foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Reactivity in case of fire : The product is non-reactive under normal conditions of use, storage and transport.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Nitrogen oxides. Isocyanates.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Move containers from fire area if it can be done without personal risk. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all personal contact including breathing in the mist, spray, vapors. Do not take actions involving personal risks. Absorb spillage to prevent material-damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate the danger area. If possible without taking personal risks, remove ignition sources. If outdoors, move to an area upwind of the danger area. Prevent other non-emergency personnel from entering the danger area. Only qualified personnel equipped with suitable protective equipment may intervene.

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so. Prevent runoff from entering drains, sewers or waterways.
- Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

- For containment : Stop leak, if possible without risk. Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Take up in non-combustible inert absorbent and place into container for disposal. Contaminated absorbent material may pose the same hazard as the spilt product. Decontaminate surfaces and equipment with water and detergent. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations. Notify authorities if product enters sewers or public waters.

For further information refer to section 8: "Exposure controls/personal protection", For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe the mist, spray, vapors. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharge.
- Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including incompatibilities

- Storage conditions : Store in a cool, dry and well-ventilated area away from incompatible substances. Keep container tightly closed.
- Incompatible materials : Alcohols. Amines. Copper alloys. Strong oxidizers. Acids. Ammonia. Bases. Humid air, water.
- Packaging materials : Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

4,4'-Methylenediphenyl diisocyanate (101-68-8)

USA - ACGIH® - Threshold Limit Values

Local name	Methylene bisphenyl isocyanate (MDI)
ACGIH® TLV® TWA	0.051 mg/m ³ 0.005 ppm
Remark (ACGIH®)	TLV® Basis: Resp sens
Regulatory reference	ACGIH 2026

USA - OSHA - Occupational Exposure Limits

Local name	Methylene bisphenyl isocyanate (MDI)
------------	--------------------------------------

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

4,4'-Methylenediphenyl diisocyanate (101-68-8)

OSHA PEL C	0.2 mg/m ³
	0.02 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - NIOSH - Occupational Exposure Limits	
Local name	Methylene bisphenylisocyanate (MDI) [Diphenylmethane diisocyanate]
NIOSH REL C	0.2 mg/m ³
	0.02 ppm
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Environmental exposure controls	: Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:

Wear protective gloves. PVC or other plastic material or natural rubber gloves

Eye protection:

Chemical goggles or face shield

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Color	: Brown
Odor	: Slight Musty
Odor threshold	: No data available

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: 208 °C / 406.4 °F
Flash point	: 198.89 °C / 390 °F
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: 1.24 @ 25 °C / 77 °F
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 150 – 270 cP
Explosion limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Alcohols. Copper alloys. Strong oxidizers. Acids. Ammonia. Bases. Humid air, water. Amines.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Nitrogen oxides.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Inhalation:vapor: Harmful if inhaled.

Diphenylmethane Diisocyanate, isomers and homologues

LD50 oral rat	49 g/kg
---------------	---------

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Diphenylmethane Diisocyanate, isomers and homologues	
LD50 dermal rabbit	> 9400 mg/kg
LC50 Inhalation - Rat	490 mg/m ³
4,4'-Methylenediphenyl diisocyanate	
LD50 oral rat	9200 mg/kg
LD50 oral	31600 mg/kg
LD50 dermal rabbit	> 9400 mg/kg
LC50 Inhalation - Rat	367.95 mg/m ³
LC50 Inhalation - Rat (Dust/Mist)	1.12 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Diphenylmethane Diisocyanate, isomers and homologues	
Serious eye damage/irritation, rabbit	Mildly irritating
Respiratory or skin sensitization	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Diphenylmethane Diisocyanate, isomers and homologues	
Additional information	Reexposure to extremely low isocyanate concentrations may cause allergic respiratory reactions in individuals already sensitized. Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Diphenylmethane Diisocyanate, isomers and homologues	
IARC group	3 - Not classifiable
4,4'-Methylenediphenyl diisocyanate	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
Diphenylmethane Diisocyanate, isomers and homologues	
STOT-single exposure	May cause respiratory irritation.
4,4'-Methylenediphenyl diisocyanate	
STOT-single exposure	May cause respiratory irritation.
1,3-Bis(4-((4-isocyanatophenyl)methyl)phenyl)-1,3-diazetidione-2,4-dione	
STOT-single exposure	May cause respiratory irritation.
Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro-ω-hydroxypoly(oxy-1,2-ethanediyl)	
STOT-single exposure	May cause respiratory irritation.

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

STOT-repeated exposure : May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

Diphenylmethane Diisocyanate, isomers and homologues

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

4,4'-Methylenediphenyl diisocyanate

NOAEC (inhalation, rat, 90 days) : 1.4 – 4.1 mg/m³

STOT-repeated exposure : May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

1,3-Bis(4-((4-isocyanatophenyl)methyl)phenyl)-1,3-diazetidone-2,4-dione

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

Aspiration hazard : Not classified

Symptoms/effects after inhalation : Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged and frequent exposure through inhalation may cause cancer. May cause respiratory irritation.

Symptoms/effects after skin contact : May cause an allergic skin reaction. Irritation (itching, redness, blistering).

Symptoms/effects after eye contact : Causes serious eye irritation. Redness, itching, tears.

Symptoms/effects after ingestion : Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Most Important Symptoms/Effects : Causes skin and eye irritation. May cause an allergic skin reaction. May cause respiratory irritation. May cause an allergy or asthma symptoms or breathing difficulties if inhaled. Harmful if inhaled.

Chronic symptoms : Prolonged and frequent exposure through inhalation may cause cancer. May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Hazardous ingredients: Methylenediphenyl diisocyanate (MDI).

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Diphenylmethane Diisocyanate, isomers and homologues

NOEC chronic algae : 1640

Additional information : MDI (methylene diphenyl diisocyanate) is considered a marine pollutant because it can react with water, forming hazardous mixtures of diisocyanates and amines, and ultimately producing inert, solid, insoluble polyurea.

4,4'-Methylenediphenyl diisocyanate

LC50 - Fish [1] : > 1000 mg/l

EC50 - Crustacea [1] : > 1000 mg/l

EC50 72h - Algae [1] : > 1640 mg/l

NOEC (chronic) : ≥ 10 mg/l

NOEC chronic crustacea : ≥ 10 mg/l

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

12.2. Persistence and degradability

13-302A Iso Component Part A

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

Diphenylmethane Diisocyanate, isomers and homologues

Persistence and degradability	0 % biodegradation Not readily biodegradable.
-------------------------------	---

4,4'-Methylenediphenyl diisocyanate

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

1,3-Bis(4-((4-isocyanatophenyl)methyl)phenyl)-1,3-diazetidione-2,4-dione

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro- ω -hydroxypoly(oxy-1,2-ethanediyl)

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

12.3. Bioaccumulative potential

Diphenylmethane Diisocyanate, isomers and homologues

BCF - Fish [1]	92 28 days
----------------	------------

Partition coefficient n-octanol/water (Log Pow)	< 3
---	-----

4,4'-Methylenediphenyl diisocyanate

BCF - Fish [1]	200 l/kg
----------------	----------

Partition coefficient n-octanol/water (Log Pow)	< 3
---	-----

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

SECTION 13 Disposal considerations

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations. Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Additional information	: Do not re-use empty containers.
Ecological waste information	: Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / TDG / IMDG / IATA

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

DOT	TDG	IMDG	IATA
14.1. UN number			
UN3082	UN3082	3082	3082
14.2. Proper Shipping Name			
Environmentally hazardous substances, liquid, n.o.s. (MDI)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (MDI)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4,4'-methylenediphenyl diisocyanate)	Environmentally hazardous substance, liquid, n.o.s. (4,4'-methylenediphenyl diisocyanate)
14.3. Transport hazard class(es)			
9	9	9	9
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
		Dangerous for the environment: Yes Marine pollutant: Yes	
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 8333.3 lbs / 3783.3 kg [806.01 gal / 3051.1 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.			

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
UN-No. (DOT) : UN3082
DOT Packaging Exceptions (49 CFR 173.xxx) : 155
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : No Limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : No Limit
DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

TDG
UN-No. (TDG) : UN3082

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

TDG Special Provisions	: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the danger or dangers posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS, 99 - (1) Mixtures of solids that are not dangerous goods and liquids or solids that are UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, may be offered for transport, handled or transported as UN3077 if there is no visible liquid when the dangerous goods are loaded into a means of containment and during transport. (2) These Regulations, except for Parts 1 and 2, do not apply to the offering for transport, handling or transport of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no release of the dangerous goods that could endanger public safety.
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E1
Emergency Response Guide (ERG) Number	: 171
IMDG	
Special provision (IMDG)	: 274, 335, 375, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A
IATA	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L
ERG code (IATA)	: 9L

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Diphenylmethane Diisocyanate, isomers and homologues	CAS-No. 9016-87-9	90-100%
4,4'-Methylenediphenyl diisocyanate	CAS-No. 101-68-8	27 – 50%

4,4'-Methylenediphenyl diisocyanate (101-68-8)

Listed on EPA Hazardous Air Pollutant (HAPS)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	5000 lb
-----------	---------

15.2. International regulations

CANADA

Diphenylmethane Diisocyanate, isomers and homologues (9016-87-9)

Listed on the Canadian DSL (Domestic Substances List)

4,4'-Methylenediphenyl diisocyanate (101-68-8)

Listed on the Canadian DSL (Domestic Substances List)

1,3-Bis(4-((4-isocyanatophenyl)methyl)phenyl)-1,3-diazetidione-2,4-dione (17589-24-1)

Listed on the Canadian DSL (Domestic Substances List)

Isocyanic acid, polymethylenepolyphenylene ester, polymer with a-hydro- ω -hydroxypoly(oxy-1,2-ethanediyl) (57636-09-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Diphenylmethane Diisocyanate, isomers and homologues (9016-87-9)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

4,4'-Methylenediphenyl diisocyanate (101-68-8)

Listed on INSQ (Mexican National Inventory of Chemical Substances)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

13-302A Iso Component Part A

Safety Data Sheet

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Diphenylmethane Diisocyanate, isomers and homologues(9016-87-9)	U.S. - New Jersey - Right to Know Hazardous Substance List
4,4'-Methylenediphenyl diisocyanate (101-68-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

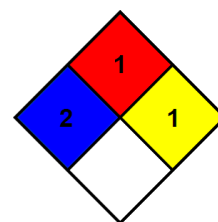
SECTION 16 Other information

According to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date : 6/12/2026
Issue date : 4/21/2025
Data sources : SDS prepared by CHEMTREC.

Full text of hazard classes and H-statements	
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes 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 through prolonged or repeated exposure

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



Indication of changes:

Section	Changed item	Comments
8.1	Occupational exposure limits	Added

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.