

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS) Issue date: 4/21/2025 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture

Trade name : Azo-Cast R0310

1.2. Other means of identification

Other means of identification : Part No. SPA-R0310

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Polyurethane (Part A)

1.4. Supplier's details

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.
, , , , , ,	11332	
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.
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Specific target organ toxicity – Single exposure, Category 3, May cause respiratory irritation. H335 Respiratory tract irritation

H373 Specific target organ toxicity — Repeated exposure, Category 2 May cause damage to organs (respiratory system) through

prolonged or repeated exposure (Inhalation).

Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)





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Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: Causes skin irritation

May cause an allergic skin reaction Causes serious eye irritation

Harmful if inhaled

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause respiratory irritation Suspected of causing cancer.

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

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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-diazetidine-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-ethanediyl)	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.

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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 in irritation. May cause at

 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 or poison control center 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.

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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

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 - Occupational Exposure Limits

Local name	Methylene bisphenyl isocyanate (MDI)
ACGIH OEL TWA	0.005 ppm
Remark (ACGIH)	TLV® Basis: Resp sens
Regulatory reference	ACGIH 2025

USA - OSHA - Occupational Exposure Limits

USA - USHA - Occupational Exposure Limits	
Local name	Methylene bisphenyl isocyanate (MDI)
OSHA PEL C	0.2 mg/m³

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4,4'-Methylenediphenyl diisocyanate (101-68-8)	
	0.02 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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. Protective gloves made of : Neoprene or nitrile rubber 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 : Brown Color Odor : Slight Musty Odor threshold : No data available рΗ : No data available Melting point : Not applicable Freezing point : No data available : 208 °C / 406.4 °F Boiling point : 198.89 °C / 390 °F Flash point Flammability (solid, gas) : Not applicable. Vapor pressure No data available Relative vapor density at 20°C : No data available

Relative density : 1.24

Solubility : No data available

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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

Diphenylmethane Diisocyanate, isomers and homologues

Particle characteristics No data available

4,4'-Methylenediphenyl diisocyanate

Particle characteristics No data available

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

Particle characteristics No data available

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

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

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

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Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Inhalation:vapor: Harmful if inhaled.

AZO	-Cast	RU31	10

ATE US (vapors) 11 mg/l/4h

Diphenylmethane Diisocyanate, isomers and homologues

LD50 oral rat	49 g/kg
LD50 dermal rabbit	> 9400 mg/kg body weight
LC50 Inhalation - Rat	490 mg/m³

4,4'-Methylenediphenyl diisocyanate

, , , ,	
LD50 oral rat	9200 mg/kg body weight
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-diazetidine-2,4-dione

STOT-single exposure May cause respiratory irritation.

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Isocyanic acid, polymethylenepolyph	enylene ester, polymer with a-hydro-ω-hydroxypoly(oxy-1,2-ethanediyl)
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).
Diphenylmethane Diisocyanate, isom	ers and homologues
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
4,4'-Methylenediphenyl diisocyanate	
STOT-repeated exposure	May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).
1,3-Bis(4-((4-isocyanatophenyl)methy	/l)phenyl)-1,3-diazetidine-2,4-dione
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Azo-Cast R0310	
Viscosity, kinematic	No data available
Diphenylmethane Diisocyanate, isom	ers and homologues
Viscosity, kinematic	No data available
4,4'-Methylenediphenyl diisocyanate	
Viscosity, kinematic	No data available
1,3-Bis(4-((4-isocyanatophenyl)methy	/l)phenyl)-1,3-diazetidine-2,4-dione
Viscosity, kinematic	No data available
Isocyanic acid, polymethylenepolyph	enylene ester, polymer with a-hydro-ω-hydroxypoly(oxy-1,2-ethanediyl)
Viscosity, kinematic	No data available
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 Symptoms/effects after ingestion	Causes serious eye irritation. Redness, itching, tears.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 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 : Not classified

(acute)

ng-term : Not classified

Hazardous to the aquatic environment, long-term

(chronic)

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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		
NOEC (chronic)	≥ 10 mg/l	

12.2. Persistence and degradability

Azo-Cast R0310		
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-diazetidine-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	
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.

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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

DOT	TDG	IMDG	IATA		
14.1. UN number					
UN3082	UN3082	3082	3082		
14.2. Proper Shipping Name	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. (MDI)	Environmentally hazardous substance, liquid, n.o.s. (MDI)		
14.3. Transport hazard class(es)					
9	9	9	9		
14.4. Packing group					
III	III	III	III		
14.5. Environmental hazards					
		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 : No Limit CFR 173.27)

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

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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 964 CAO packing instructions (IATA) : 450L CAO max net quantity (IATA) ERG code (IATA) : 9L

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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-diazetidine-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

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 Delaware - Pollutant Discharge Requirements - Reportable Quantities
4,4'-Methylenediphenyl diisocyanate (101-68-8)	U.S Delaware - Pollutant Discharge Requirements - Reportable Quantities

SECTION 16 Other information

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

: 4/21/2025 Issue date

: SDS prepared by DGF based on prior ChemTrec edition of 13-302A Component Part A Version 1.0. Data sources

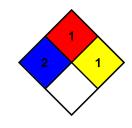
Full text of hazard classes and H-statements	
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory 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.



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.