SAFETY DATA SHEET

In accordance with OSHA 29 CFR 1910.1200

BOSCODUR 24T
Revision Number 4

Revision date 26-Jun-2023
Supersedes Date: 16-Apr-2019

1. Identification

1.1. Product identifier

Product Name BOSCODUR 24T

Other means of identification
Other information Not applicable

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Adhesives
Restrictions on use Consumer use

1.3. Details of the supplier of the safety data sheet

Responsible Party
Bostik Inc.
11320 W. Watertown Plank Road
Wauwatosa, Wisconsin 53226 USA
Phone: +1 (800) 843-0844 (Domestic Toll Free)
Phone: +1 (414) 774-2250 (International)

E-mail msds@bostik.com

1.4. Emergency telephone number

Emergency Telephone CHEMTREC (Chemical Transportation Emergency Center)
Chemtrec: 1-800-424-9300 (US) , 1-703-527-3887 (Outside U.S.)
Rocky Mountain Poison Center: 1-866-767-5089

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration hazard	Category 1
Flammable liquids	Category 2

Hazards not otherwise classified (HNOC)
Not applicable

2.2. Label elements

EMERGENCY OVERVIEW

Danger

Hazard statements
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
Suspected of damaging fertility or the unborn child
May cause respiratory irritation
May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure
May be fatal if swallowed and enters airways
Highly flammable liquid and vapor

Appearance Liquid **Physical state** Liquid **Odor** Solvent

Precautionary Statements - Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing must not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ ventilating/ lighting/ equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool

Precautionary Statements - Response
IF exposed or concerned: Get medical advice/attention
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
If skin irritation or rash occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
Wash contaminated clothing 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 SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage
Store locked up

Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/ container to an approved waste disposal plant

Unknown acute toxicity

2.3. Other Information

In use, may form flammable/explosive vapor-air mixture.

3. Composition/information on ingredients

3.1. Substances

Not applicable.

Mixture

Chemical name	CAS No	Weight-%
Toluene	108-88-3	30 - 60
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	15 - 40
4,4'-Methylenediphenyl diisocyanate	101-68-8	10 - 30

**The exact percentage (concentration) of composition has been withheld as a trade secret*

4. First-aid measures

4.1. Description of first aid measures

General advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air. May cause allergic respiratory reaction. Get medical attention immediately if symptoms occur. If breathing is difficult, (trained personnel should) give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Aspiration into lungs can produce severe lung damage. Delayed pulmonary edema may occur.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. May produce an allergic reaction. Do NOT induce vomiting. Get immediate medical advice/attention. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid breathing vapors or mists.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms May cause allergy or asthma symptoms or breathing difficulties if inhaled. Coughing and/ or wheezing. Itching. Rashes. Hives. Difficulty in breathing. Dizziness. May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. May cause sensitization by inhalation and skin contact. Treat symptomatically. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam. Move containers from fire area if you can do it without risk.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Product is or contains a sensitizer. May cause sensitization by inhalation and skin contact.

Hazardous combustion products Carbon oxides. Carbon monoxide. Carbon dioxide (CO2). Hydrocarbons. Nitrogen oxides (NOx). Hydrogen cyanide. Isocyanates.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge Yes.

5.3. Advice for firefighters

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Take precautionary measures against static discharges. Pay

attention to flashback. All equipment used when handling the product must be grounded. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Do not breathe vapor or mist. Do not touch or walk through spilled material. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Use personal protective equipment as required. Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

Prevention of secondary hazards Eliminate all ignition sources if safe to do so.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Use personal protection equipment. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Use according to package label instructions. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Do not breathe vapor or mist. Use with local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. Wash thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep from freezing.

Recommended storage temperature Keep at temperatures between 41 and 77 °F / 5 and 25 °C. Do not freeze.

7.3 References to other sections

Reference to other sections

See Section 12: ECOLOGICAL INFORMATION
Section 7: HANDLING AND STORAGE
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8. Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Toluene 108-88-3	Ototoxicant - potential to cause hearing disorders TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m³ (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m³ Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m³ STEL: 150 ppm STEL: 560 mg/m³
4,4'-Methylenediphenyl diisocyanate 101-68-8	TWA: 0.005 ppm	(vacated) Ceiling: 0.02 ppm regulated under Methylene bisphenyl isocyanate (vacated) Ceiling: 0.2 mg/m³ regulated under Methylene bisphenyl isocyanate Ceiling: 0.02 ppm Ceiling: 0.2 mg/m³	IDLH: 75 mg/m³ Ceiling: 0.020 ppm 10 min Ceiling: 0.2 mg/m³ 10 min TWA: 0.005 ppm TWA: 0.05 mg/m³

Chemical name	Argentina	Brazil	Chile	Colombia
Toluene 108-88-3	TWA: 50 ppm Skin	TWA: 78 ppm TWA: 290 mg/m³ Skin	LPP: 87 ppm LPP: 328 mg/m³ S* LPT: 150 ppm LPT: 560 mg/m³	TWA: 20ppm
4,4'-Methylenediphenyl diisocyanate 101-68-8	TWA: 0.005 ppm	TWA: 0.005 ppm	LPP: 0.004 ppm LPP: 0.05 mg/m³	TWA: 0.005ppm

Chemical name	Costa Rica	Peru	Uruguay	Venezuela
Toluene 108-88-3	TWA: 20ppm	TWA: 50ppm TWA: 188mg/m³	20 ppm TWA	Skin TWA: 20 ppm
4,4'-Methylenediphenyl diisocyanate 101-68-8	TWA: 0.005ppm	TWA: 0.005ppm TWA: 0.051mg/m³	0.005 ppm TWA (listed under Methylene bisphenyl isocyanate (MDI))	TWA: 0.005 ppm

8.2. Exposure controls

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles. Avoid contact with eyes. If splashes are likely to occur:. Face protection shield.
Hand protection	Wear suitable gloves. Impervious gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
General hygiene considerations	Wear suitable gloves and eye/face protection. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Do not breathe vapor or mist. Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Color	Brown
Odor	Solvent
Odor threshold	No information available

Property	**Values**	**Remarks • Method**
pH	No data available	Not applicable Insoluble in water
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	> 111 °C / 231.8 °F	
Flash point	5 °C / 41 °F	
Evaporation rate	No data available	None known
Flammability	Not applicable for liquids .	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	110	hPa
Relative vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	Insoluble in water Reacts with water	

Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	480 °C / 896 °F	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

9.2. Other information

Explosive properties	No information available
Oxidizing properties	No information available
Solvent content (%)	No information available
Solid content (%)	approx 56.0
Softening Point	No information available
Molecular weight	No information available
VOC content	43 % / 451 g/L No information available
Density	1.04 g/cm³
Bulk density	No information available

10. Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Chemical stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization Hazardous polymerization may occur.

10.4. Conditions to avoid

Conditions to avoid Heat, flames and sparks. Excessive heat. Do not freeze.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Carbon monoxide Carbon dioxide (CO2) Nitrogen oxides (NOx) Hydrogen cyanide Thermal decomposition can lead to release of irritating and toxic gases and vapors Carbon oxides

11. Toxicological information

11.1. Information on toxicological effects

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause sensitization in susceptible persons. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May cause drowsiness or dizziness. Harmful by inhalation. (based on components).

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May cause sensitization by skin contact. Causes skin irritation. (based on components). Repeated exposure may cause skin dryness or cracking.

Ingestion Specific test data for the substance or mixture is not available. May cause additional affects as listed under "Inhalation". Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Coughing and/ or wheezing. Itching. Rashes. Hives. Difficulty in breathing. Dizziness. Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity
Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	>5000 mg/kg
ATEmix (dermal)	>5000 mg/kg
ATEmix (inhalation-gas)	>20000 ppm
ATEmix (inhalation-dust/mist)	2.63 mg/l
ATEmix (inhalation-vapor)	>20 mg/l

Unknown acute toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Toluene 108-88-3	=5580 mg/kg (Rattus)	= 12000 mg/kg (Oryctolagus cuniculus)	>20 mg/L (Rattus) 4 h
Diphenylmethane-diisocyanate, isomers and homologues 9016-87-9	LD50 > 10000 mg/kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus cuniculus)	1.5 mg/L (Rattus) 4 h
4,4'-Methylenediphenyl diisocyanate 101-68-8	=31600 mg/kg (Rattus) = 9200 mg/kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus cuniculus) OECD 402	1.5 mg/L (Rattus) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Irritating to skin.

Toluene (108-88-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
Regulation (EC) No. 440/2008, Annex, B.4	Rabbit	Dermal			Irritant

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

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion	Rabbit				Mild skin irritant

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

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

Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	Eye	0.1 mL	24 hours	Non-irritant

Respiratory or skin sensitization May cause sensitization by inhalation. May cause sensitization by skin contact.

Toluene (108-88-3)

Method	Species	Exposure route	Results
Regulation (EC) No. 440/2008, Annex, B.6 (Maximization test)	Guinea pig		No sensitization responses were observed

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

Method	Species	Exposure route	Results
OECD Test No. 429: Skin Sensitisation: Local Lymph Node Assay	Mouse		sensitizing

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

Method	Species	Exposure route	Results
OECD GD 39	Rat	Inhalation	Sensitizing

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

Toluene (108-88-3)

Method	Species	Results
Regulation (EC) No. 440/2008, Annex, B.13/14 (Ames test)	Salmonella typhimurium	Not mutagenic
OECD Test No. 476: In vitro Mammalian Cell Gene Mutation Test	Mouse	Not mutagenic

Carcinogenicity Based on available data, the classification criteria are not met.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Toluene 108-88-3	-	Group 3	-	-
Diphenylmethane-diisocyanate, isomers and homologues 9016-87-9	-	Group 3	-	-
4,4'-Methylenediphenyl diisocyanate 101-68-8	-	Group 3	-	-

Legend

IARC (International Agency for Research on Cancer)
Group 3 - Not Classifiable as to Carcinogenicity in Humans
Diphenylmethane-diisocyanate, isomers and homologues (9016-87-9)

Method	Species	Results
OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies	Rat	Carcinogenic

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

Method	Species	Results
OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies	Rat	Limited evidence of a carcinogenic effect

Reproductive toxicity Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child.

Toluene (108-88-3)

Method	Species	Results
OECD 407	in vivo	Reproductive toxicant

STOT - single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

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

Toluene (108-88-3)

Method	Species	Exposure route	Effective dose	Exposure time	Results
Regulation (EC) No. 440/2008, Annex, B.26	Rat, male, female	Oral		91 days	NOAEL: 625 mg/kg
OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies	Rat, male, female	Inhalation, vapor			NOAEL: 1.131 mg/l

Target organ effects Heart, Eyes, Skin, Central nervous system, Kidney, Liver, Cardiovascular system, Respiratory system.

Aspiration hazard May be fatal if swallowed and enters airways.

Other adverse effects No information available.

Interactive effects No information available.

12. Ecological information

12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Toluene 108-88-3	EC50 72 h = 12.5 mg/L (Pseudokirchneriella subcapitata)	LC50 96 h 5.89 - 7.81 mg/L (Oncorhynchus mykiss flow-through) LC50 96 h = 5.8 mg/L	EC50 = 19.7 mg/L 30 min	EC50: =11.5mg/L (48h, Daphnia magna) EC50: 5.46 - 9.83mg/L (48h, Daphnia magna)

		(Oncorhynchus mykiss semi-static)		
Diphenylmethane-diisocyanate, isomers and homologues 9016-87-9	ErC50 (72h) >1640 mg/L Algae (scenedesmus subspicatus) (OECD 201)	CL50 (96h) >1000 mg/L Danio rerio	-	EC50 (24H) >1000 mg/L Daphnia magna
4,4'-Methylenediphenyl diisocyanate 101-68-8	ErC50 (72h) >1640 mg/L Algae (scenedesmus subspicatus) (OECD 201)	>1000 mg/l Danio rerio	-	EC50 (24H) >1000 mg/L Daphnia magna

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Toluene 108-88-3	3.93
4,4'-Methylenediphenyl diisocyanate 101-68-8	4.51

12.4. Mobility in soil

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

13. Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Should not be released into the environment. Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

14. Transport information

Note: The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments made in non-bulk packages (see regulatory definition) The information shown here, may not always agree with the bill of lading shipping description for the material Keep

from freezing

DOT

UN number or ID number	UN1294
UN proper shipping name	Toluene solution
Transport hazard class(es)	3
Packing group	II
Reportable quantity - lbs	4,4'-Methylenediphenyl diisocyanate: RQ (lb)= 5000.00, Toluene: RQ (lb)= 1000.00
Reportable Quantity (RQ)	(4,4'-Methylenediphenyl diisocyanate: RQ (kg)= 2270.00, Toluene: RQ (kg)= 454.00)
Special Provisions	IB2, T4, TP1
Marine Pollutant	Np
Description	UN1294, Toluene solution, 3, II
Emergency Response Guide Number	130

IATA

UN number or ID number	UN1294
UN proper shipping name	Toluene solution
Transport hazard class(es)	3
Packing group	II
Description	UN1294, Toluene solution, 3, II

IMDG

UN number or ID number	UN1294
UN proper shipping name	Toluene solution
Transport hazard class(es)	3
Packing group	II
EmS-No.	F-E, S-D
Marine pollutant	NP
Description	UN1294, Toluene solution, 3, II, (5°C c.c.)

15. Regulatory information

International Inventories

TSCA	Listed
DSL	Listed

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL - Canadian Domestic Substances List
Listed - The components of this product are either listed or exempt from listing on inventory.
Not Listed - One or more components of this product are not listed on inventory.

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	CAS No	SARA 313 - Threshold Values %
Toluene	108-88-3	1.0
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	1.0
4,4'-Methylenediphenyl diisocyanate	101-68-8	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU

This product does not contain Lead, Cadmium, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-Ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) above the regulated limit mentioned in this regulation. This document is based on the information given to us by our own suppliers at the date of this document.

SVHC: Substances of Very High Concern for Authorization:
This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

16. Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Prepared By Product Safety & Regulatory Affairs.

Revision date 26-Jun-2023

Revision Note SDS sections updated. 1. 4. 5. 6. 7. 8. 10. 11. 12. 15.

Disclaimer

All information contained herein is believed to be accurate as of the date of publication, is provided "as-is" and is subject to change without notice. This is not a warranty, an agreement, or substitute for expert or professional advice. Bostik Inc. ("Company") expressly disclaims and assumes no liability for the use of the products or reliance on this information. It is the sole responsibility of the user to determine the suitability of any products for user's application(s). NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED (INCLUDING SUITABILITY FOR USE IN ANY MEDICAL DEVICE OR MEDICAL APPLICATION), IS MADE CONCERNING THE PRODUCTS OR THE INFORMATION PROVIDED HEREIN. The information provided relates only to the specific products designated herein and may not be valid where such products are used in combination with other materials or in any process. The performance of the product, its shelf life, and application characteristics depends on many variables, and changes in these variables can impact product performance. You are responsible to test the suitability of any product in advance for any intended use or application and before commercialization. Nothing herein shall be construed as a license for the use of any product in a manner that might infringe any patent and it should not be construed as an inducement to infringe any patent. Please carefully review the Safety Data Sheet for the product.

The Company adheres to a strict policy that applies to the use of any of its products in medical device applications. This policy can be found at https://www.arkema.com/global/en/social-responsibility/innovation-and-sustainable-solutions/responsible-product-management/medical-device-policy/ which is incorporated herein by reference and made a part hereof. Except as expressly authorized, the Company (i) has designated specific medical grade compositions for products used in medical device applications and Company products not so designated are not authorized for use in medical device applications and (ii) strictly prohibits the use of any of its products in medical device applications that are implanted in the body or in contact with bodily fluids or tissues for greater than 30 days. The Company does not design, manufacture and/or directly sell any medical devices. The Company does not co-design, or offer assistance to any purchaser of its products, in their design,

manufacture and/or sale of products for medical devices. It is the sole responsibility of the manufacturer of medical devices to determine the suitability of all raw material, products and components, including any medical grade products, in order to ensure that the medical device is safe for end-use and complies with all applicable legal and regulatory requirements and to conduct all necessary tests and inspections.

End of Safety Data Sheet