



SAFETY DATA SHEET

In accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

ISOSET™ MAX1017 ADHESIVE
Revision Number 2

Revision date 29-Oct-2024
Supersedes date 25-Jul-2024

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product Name ISOSET™ MAX1017 ADHESIVE

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Adhesive

Restrictions on use No information available

Details of the supplier of the safety data sheet

Responsible Party

Bostik Canada Limited
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Manufacturer Address

Bostik Inc.
11320 W. Watertown Plank Road
Wauwatosa, Wisconsin 53226 USA
Phone: +1(800) 726-7845 (Domestic Toll Free)
Phone: +1 (414) 774-2250 (International)

Emergency telephone number

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. Hazards Identification

Classification

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

Label elements

Danger

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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 damage to organs through prolonged or repeated exposure



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 and 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 should not be allowed out of the workplace
Do not breathe dust, fume, gas, mist, vapors and spray

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Eyes

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 and attention

Skin

IF ON SKIN: Wash with plenty of water and soap
Take off contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice and attention

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing
If experiencing respiratory symptoms: Call a POISON CENTER or doctor

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant

Other information

No data available.

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Unknown acute toxicity 48 % of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Diphenylmethane-diisocyanate, isomers and homologues	9016-87-9	10 - <30	-	-
4,4'-Methylenediphenyl diisocyanate	101-68-8	10 - <30	-	-
o-(p-isocyanatobenzyl)phenyl isocyanate	5873-54-1	1 - <5	-	-
Hexaboron dizinc undecaoxide	12767-90-7	1 - <5	-	-
2,2'-methylenediphenyl diisocyanate	2536-05-2	0.1 - <1	-	-

4. First Aid Measures

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air. If symptoms persist, call a physician. May cause allergic respiratory reaction. 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. Get immediate medical advice/attention.

Eye contact

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

Skin contact

Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. May produce an allergic reaction. Get immediate medical advice/attention.

Self-protection of the first aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. See section 8 for more information. Avoid breathing vapors or mists.

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. May cause redness and tearing of the eyes. Burning

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sensation. Difficulty in breathing.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. Fire-Fighting Measures

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray. Foam. Carbon dioxide (CO ₂). Dry chemical.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by inhalation and skin contact.
Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO ₂). Nitrogen oxides (NO _x). Hydrogen cyanide. Isocyanates. Formaldehyde. Thermal decomposition can lead to release of irritating and toxic gases and vapors.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid breathing vapors or mists. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling.

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

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow to enter into soil/subsoil. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

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Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Do not breathe vapor or mist. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Take off contaminated clothing and wash before reuse.

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. Protect from moisture.

Recommended storage temperature Keep at temperatures between 50 and 95 °F / 10 and 35 °C.

Reference to other sections Section 10: STABILITY AND REACTIVITY

8. Exposure Controls/Personal Protection

Control parameters

Exposure Limits

Chemical name	Alberta	British Columbia	Ontario TWA	Quebec
Diphenylmethane-diisocyanate, isomers and homologues 9016-87-9	TWA: 0.005 ppm TWA: 0.07 mg/m ³	TWA: 0.005 ppm Ceiling: 0.01 ppm		
4,4'-Methylenediphenyl diisocyanate 101-68-8	TWA: 0.005 ppm TWA: 0.05 mg/m ³	TWA: 0.005 ppm Ceiling: 0.01 ppm Respiratory Sensitizer	TWA: 0.005 ppm CEV: 0.02 ppm	TWA: 0.005 ppm TWA: 0.051 mg/m ³
o-(p-isocyanatobenzyl)phenyl isocyanate 5873-54-1		TWA: 0.005 ppm Ceiling: 0.01 ppm		
2,2'-methylenediphenyl diisocyanate 2536-05-2		TWA: 0.005 ppm Ceiling: 0.01 ppm		

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Wear suitable gloves. Impervious gloves.

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Skin and body protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
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. Do not breathe vapor or mist. Avoid contact with skin, eyes or clothing. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Viscous
Color	light brown
Odor	Slight
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
pH (as aqueous solution)	No data available	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	No data available	
Flash point	> 140 °C / 284 °F	
Evaporation rate	No data available	
Flammability	No data available	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	
Relative vapor density	No data available	
Relative density	No data available	
Water solubility	Reacts with water	
Solubility in other solvents	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature		
Kinematic viscosity	No data available	
Dynamic viscosity	15000 - 35000 mPa s	Spindle 6 @ 20 rpm @ 25 °C
Explosive properties	No information available.	
Oxidizing properties	No information available.	

Other information

Softening point	No information available
Molecular weight	No information available
Density	1.18 g/cm ³

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Bulk density	No information available	
Solid content (%)	No information available	
VOC content	No information available	No information available

10. Stability and Reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing
Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition. Extremes of temperature and direct sunlight. Excessive heat. Do not freeze. Protect from moisture.
Incompatible materials	Acids. Alcohols. Aluminum. Amines. Ammonia. Bases. Copper. Iron. Alkali. Strong oxidizing agents. Water. Zinc.
Hazardous decomposition products	Carbon monoxide. Carbon dioxide (CO ₂). Nitrogen oxides (NO _x). Hydrocarbons.

11. Toxicological Information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause sensitization in susceptible persons. May cause irritation of respiratory tract. 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).
Ingestion	Specific test data for the substance or mixture is not available. May cause additional affects as listed under "Inhalation". 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. Redness. May cause redness and tearing of the eyes.
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Numerical measures of toxicity

Acute 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

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mg/l

ATEmix (inhalation-dust/mist) 1.76 mg/l
ATEmix (inhalation-vapor) >20 mg/l

Unknown acute toxicity

48 % of the mixture consists of ingredient(s) of unknown toxicity

43 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
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
o-(p-isocyanatobenzyl)phenyl isocyanate 5873-54-1	LD50 >2000 mg/Kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus cuniculus) OECD 402	1.5 mg/L (4h) Rat
Hexaboron dizinc undecaoxide 12767-90-7	>5000 mg/Kg (Rattus)	>5000 mg/Kg (Oryctolagus cuniculus)	-
2,2'-methylenediphenyl diisocyanate 2536-05-2	LD50 > 2000 mg/kg (Rattus)	LD 50 > 9400 mg/kg (Oryctolagus cuniculus) OECD 402	1.5 mg/L (4h) Rat

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.

Serious eye damage/eye irritation

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

Respiratory or skin sensitization

May cause sensitization by inhalation and skin contact.

Germ cell mutagenicity

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

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
Diphenylmethane-diisocyanate, isomers and homologues 9016-87-9	-	Group 3	-	-
4,4'-Methylenediphenyl diisocyanate 101-68-8	-	Group 3	-	-

IARC (International Agency for Research on Cancer)

Group 3 - Not Classifiable as to Carcinogenicity in Humans

Reproductive toxicity

Contains a known or suspected reproductive toxin. Classification based on data available for ingredients.

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STOT - single exposure	May cause respiratory irritation.
STOT - repeated exposure	May cause damage to organs. See section 2 for classified hazards based on component information.
Target organ effects	Eyes, Skin, Respiratory system.
Subchronic toxicity	No information available.
Neurological effects	No information available.
Other adverse effects	No information available.
Aspiration hazard	Based on available data, the classification criteria are not met.

12. Ecological Information

Ecotoxicity Harmful to aquatic life.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
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
o-(p-isocyanatobenzyl)phenyl isocyanate 5873-54-1	ErC50 (72h) >1640 mg/L Algae (scenedesmus subspicatus) (OECD 201)	LC50 (96 h) > 1000 mg/l Danio rerio (OECD 203)	-	EC50 (24H) >1000 mg/L Daphnia magna
Hexaboron dizinc undecaoxide 12767-90-7	IC50 Selenastrum capricornutum: 0,136 mg Zn/L/72 h	LC50 Oncorhynchus mykiss: 0,169 mg Zn/L/96h	-	LC50 Ceriodaphnia dubia: 142 mg/L/48h
2,2'-methylenediphenyl diisocyanate 2536-05-2	-	LC50 (96 h) > 1000 mg/l Danio rerio (OECD 203)	-	-

Persistence and degradability No information available.

Component Information			
Diphenylmethane-diisocyanate, isomers and homologues (9016-87-9)			
Method	Exposure time	Value	Results
OECD Test No. 302C: Inherent Biodegradability: Modified MITI Test (II)	28 days	0% biodegradation	Not readily biodegradable

4,4'-Methylenediphenyl diisocyanate (101-68-8)			
Method	Exposure time	Value	Results
OECD Test No. 302C: Inherent Biodegradability: Modified MITI Test (II)	28 days	0% biodegradation	Not readily biodegradable

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Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
4,4'-Methylenediphenyl diisocyanate 101-68-8	4.51

Mobility in soil No information available

Other adverse effects No information available.

13. Disposal Considerations

Disposal 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. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. Should not be released into the environment.

Contaminated packaging Do not reuse empty containers.

14. Transport Information

TDG Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory Information

NPRI - National Pollutant Release Inventory
No component is listed on the NPRI above the threshold

International Inventories

TSCA	Complies
DSL	Not Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

Complies - The components of this product are either listed or exempt from listing on inventory. Active

Not Listed - One or more components of this product are not listed on inventory.

16. Other information, including date of preparation of the last revision

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

Legend

SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Revision date 29-Oct-2024

Revision Note SDS sections updated. 2. 3. 4. 5. 6. 7. 8. 10. 11. 13.

Prepared By Product Stewardship and Regulatory Affairs

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End of Safety Data Sheet