

 BOSTIK		Page: 1
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoet™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

SECTION 1. IDENTIFICATION

Product identifier

Trade name : Isoet™ UX 160
ADHESIVE
™ Trademark, Bostik or its subsidiaries, registered in various countries

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

Recommended use : ADHESIVE

Details of the supplier of the safety data sheet Bostik Canada Ltd./Bostik Canada Ltee 655 Boul Alphonse-Deshales Becancour, Quebec, G9H 2Y8 Canada Tel: +1 (514) 593-0418 EHSproductsafety.US@bostik.com	Emergency telephone number Chemtrec 1-800-424-9300, outside US 1-703-527-3887 Regulatory information Rocky Mountain Poison center: 1-866-767-5089
--	--

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Acute toxicity (Inhalation) : Category 3

Skin irritation : Category 2

Eye irritation : Category 2A

Respiratory sensitisation : Sub-category 1A

Skin sensitisation : Sub-category 1A

Reproductive toxicity : Category 1B

Specific target organ toxicity : Category 3 (Respiratory system)
- single exposure

Specific target organ toxicity : Category 2 (Respiratory system, Respiratory Tract)

 BOSTIK		Page: 2
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

- repeated exposure
(Inhalation)

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H331 Toxic if inhaled.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H335 May cause respiratory irritation.
 H360 May damage fertility or the unborn child.
 H373 May cause damage to organs (Respiratory system, Respiratory Tract) through prolonged or repeated exposure if inhaled.

Precautionary statements

: **Prevention:**
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260 Do not breathe mist or vapours.
 P264 Wash skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P272 Contaminated work clothing should not be allowed out of the workplace.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P284 Wear respiratory protection.
Response:
 P302 + P352 IF ON SKIN: Wash with plenty of water.
 P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

 BOSTIK		Page: 3
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

P337 + P313 If eye irritation persists: Get medical advice/attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
Storage:
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
Disposal:
 P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
POLYMETHYLENE POLYPHENYL ISOCYANATE Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	Acute Tox. 2; H330 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 STOT RE 2; H373	28.38
4,4'-DIPHENYLMETHANE DIISOCYANATE 1,1'-Methylenebis(4- isocyanatobenzene)	101-68-8	Comb Dust 1; Acute Tox. 2; H330 Skin Irrit. 2; H315 Eye Irrit. 2A; H319	22.704



BOSTIK

Page: 4

SAFETY DATA SHEET

Revision Date: 09/09/2022

Print Date: 12/5/2023

SDS Number: 000000135162

Version: 2.1

IsoSet™ UX 160 ADHESIVE
™ Trademark, Bostik or its subsidiaries, registered in
various countries
692854

		Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 STOT RE 2; H373	
METHYLENE DIPHENYLISOCYANATE Benzene, 1,1'- methylenebis[isocyanato-	26447-40-5	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Resp. Sens. 1A; H334 Skin Sens. 1A; H317 STOT SE 3; H335 STOT RE 2; H373	14.19
DIBUTYLTIN DILAURATE Stannane, dibutylbis[(1- oxododecyl)oxy]-	77-58-7	Skin Corr. 1; H314 Eye Irrit. 2A; H319 Skin Sens. 1; H317 Repr. 1B; H360 STOT SE 1; H370 STOT RE 1; H372	0.10

SECTION 4. FIRST AID MEASURES

General advice

: Move out of dangerous area.
Call a POISON CENTRE or doctor/physician if exposed or
you feel unwell.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

 BOSTIK		Page: 5
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

If inhaled	: Move to fresh air. Call a physician or poison control centre immediately. Keep patient warm and at rest. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	: Remove contaminated clothing. If irritation develops, get medical attention. If on skin, rinse well with water. Wash contaminated clothing before re-use.
In case of eye contact	: Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye.
If swallowed	: Obtain medical attention. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways) Cough Headache chest pain lung edema (fluid buildup in the lung tissue) Difficulty in breathing Pulmonary edema may be delayed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure if inhaled.
Notes to physician	: No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

 BOSTIK		Page: 6
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
 Water spray
 Foam
 Carbon dioxide (CO₂)
 Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon dioxide (CO₂)
 Carbon monoxide
 Hydrocarbons
 Nitrogen oxides (NO_x)
 Hydrogen cyanide (hydrocyanic acid)
 Isocyanates
- Specific extinguishing methods :

 Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
 Ensure adequate ventilation.
 Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent product from entering drains.
 Prevent further leakage or spillage if safe to do so.
 If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
 Keep in suitable, closed containers for disposal.

 BOSTIK		Page: 7
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoet™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Avoid formation of aerosol.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Do not breathe vapours/dust.
 Do not smoke.
 Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
 Container hazardous when empty.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 Smoking, eating and drinking should be prohibited in the application area.
 For personal protection see section 8.
 Dispose of rinse water in accordance with local and national regulations.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
 Observe label precautions.
- Further information on storage stability : No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
POLYMETHYLENE POLYPHENYL ISOCYANATE	9016-87-9	TWA	0.005 ppm 0.07 mg/m ³	CA AB OEL
		TWA	0.005 ppm	CA BC OEL
		C	0.01 ppm	CA BC OEL
		TWA _{EV}	0.005 ppm	CA QC OEL



BOSTIK

SAFETY DATA SHEET

Revision Date: 09/09/2022

Print Date: 12/5/2023

SDS Number: 000000135162

Version: 2.1

IsoSet™ UX 160 ADHESIVE
™ Trademark, Bostik or its subsidiaries, registered in various countries
692854

			0.051 mg/m3	
4,4'-DIPHENYLMETHANE DIISOCYANATE	101-68-8	TWA	0.005 ppm	CA BC OEL
		C	0.01 ppm	CA BC OEL
		TWA	0.005 ppm	CA ON OEL
		C	0.02 ppm	CA ON OEL
METHYLENE DIPHENYLISOCYANATE	26447-40-5	TWA	0.005 ppm	CA BC OEL
		C	0.01 ppm	CA BC OEL
DIBUTYLTIN DILAUATE	77-58-7	TWA	0.1 mg/m3 (Tin)	CA AB OEL
		STEL	0.2 mg/m3 (Tin)	CA AB OEL
		TWAEV	0.1 mg/m3 (Tin)	CA QC OEL
		STEV	0.2 mg/m3 (Tin)	CA QC OEL
		TWA	0.1 mg/m3 (Tin)	CA BC OEL
		STEL	0.2 mg/m3 (Tin)	CA BC OEL
		TWA	0.1 mg/m3 (Tin)	CA ON OEL

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection : Wear a positive-pressure supplied-air respirator with full facepiece.

In the case of vapour formation use a respirator with an approved filter.

Filter type : Combined particulates and organic vapour type

Hand protection

Material : butyl-rubber
Break through time : 480 min
Glove thickness : > 0.5 mm

Remarks : The exact break through time can be obtained from the protective glove producer and this has to be observed. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

 BOSTIK		Page: 9
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

Eye protection	: Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.
Skin and body protection	: Wear as appropriate: Impervious clothing Safety shoes Choose body protection according to the amount and concentration of the dangerous substance at the work place. Discard gloves that show tears, pinholes, or signs of wear. Wear resistant gloves (consult your safety equipment supplier).
Hygiene measures	: Wash hands before breaks and at the end of workday. When using do not eat or drink. When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Physical state	: liquid
Colour	: brown
Odour	: slight
Odour Threshold	: Not applicable
pH	: No data available
Melting point/freezing point	: not determined
Boiling point/boiling range	: not determined
Flash point	: > 400 °F Method: Seta closed cup
Evaporation rate	: not determined
Flammability (solid, gas)	:
	not determined
Flammability (liquids)	: not determined

 BOSTIK		Page: 10
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

Flammability (liquids) :
 Upper explosion limit : Upper explosion limit not determined
 Lower explosion limit : Lower explosion limit not determined
 Vapour pressure : not determined
 Relative vapour density : not determined
 Relative density : 1.15 (25 °C)
 Density : 1.15 g/cm³ (25 °C)
 Solubility(ies)
 Water solubility : not determined
 Solubility in other solvents : No data available
 Partition coefficient: n-octanol/water : not determined
 Thermal decomposition : No data available
 Viscosity
 Viscosity, dynamic : 4,000 mPa.s
 Viscosity, kinematic : not determined
 Oxidizing properties : Not applicable
 Molecular weight : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.
 Chemical stability : Stable under recommended storage conditions.
 Possibility of hazardous reactions : Product will not undergo hazardous polymerization.
 Conditions to avoid : temperatures above 350 degrees F (177 degrees C)
 Freezing temperatures.
 Exposure to moisture

 BOSTIK		Page: 11
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

Incompatible materials : Acids
 Alcohols
 alkenes
 aluminum
 Amines
 Ammonia
 Bases
 Copper alloys
 Iron
 strong alkalis
 water
 Zinc

Hazardous decomposition products : Carbon monoxide
 Carbon dioxide (CO₂)
 Nitrogen oxides (NO_x)
 Hydrocarbons
 Acetone

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
 Skin contact
 Eye contact
 Ingestion

Acute toxicity

Toxic if inhaled.

Components:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

Acute oral toxicity : LD₅₀ (Rat): > 10,000 mg/kg

Acute inhalation toxicity : LC₅₀ (Rat): 0.490 mg/l
 Exposure time: 4 h
 Test atmosphere: dust/mist

Acute dermal toxicity : LD₅₀ (Rabbit): > 10,000 mg/kg

4,4'-DIPHENYLMETHANE DIISOCYANATE:

Acute oral toxicity : LD₅₀ (Rat): 9,200 mg/kg

Acute inhalation toxicity : LC₅₀ (Rat): 0.369 mg/l

 BOSTIK		Page: 12
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

Exposure time: 4 h
 Test atmosphere: dust/mist
 Symptoms: Increased heart rate, Rapid respiration, Drowsiness, Headache, Nausea, Vomiting, Lethargy, seizures, Coma, Fatality
 Assessment: The component/mixture is classified as acute inhalation toxicity, category 2.

Acute dermal toxicity : LD50 (Rabbit): > 7,900 mg/kg
 Symptoms: Redness, Swelling of tissue, Itching, Blistering, Pain

METHYLENE DIPHENYLISOCYANATE:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
 Method: OECD Test Guideline 425
 GLP: yes
 Remarks: Information given is based on data obtained from similar substances.

Acute inhalation toxicity : Assessment: The component/mixture is classified as acute inhalation toxicity, category 4.

Acute dermal toxicity : LD50 (Rabbit): > 9,400 mg/kg
 Remarks: Information given is based on data obtained from similar substances.

DIBUTYL TIN DILAURATE:

Acute oral toxicity : LD50 (Rat): 2,071 mg/kg
 Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks: May cause skin irritation and/or dermatitis.

Components:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

Result: Irritating to skin.

4,4'-DIPHENYLMETHANE DIISOCYANATE:

Result: Irritating to skin.

 BOSTIK		Page: 13
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

METHYLENE DIPHENYLISOCYANATE:

Result: Irritating to skin.

Remarks: Information given is based on data obtained from similar substances.

DIBUTYLTIN DILAURATE:

Species: Rat

Method: OECD Test Guideline 402

Result: Corrosive to skin

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

Components:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

Result: Irritating to eyes.

4,4'-DIPHENYLMETHANE DIISOCYANATE:

Result: Irritating to eyes.

METHYLENE DIPHENYLISOCYANATE:

Result: No eye irritation

Remarks: Information given is based on data obtained from similar substances.

Result: Irritating to eyes.

DIBUTYLTIN DILAURATE:

Species: Rabbit

Result: Severe eye irritation

Method: OECD Test Guideline 405

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Components:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

Assessment: May cause sensitisation by skin contact.

Assessment: May cause sensitisation by inhalation.

 BOSTIK		Page: 14
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoet™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

4,4'-DIPHENYLMETHANE DIISOCYANATE:

Assessment: May cause sensitisation by inhalation.

Assessment: May cause sensitisation by skin contact.

METHYLENE DIPHENYLISOCYANATE:

Test Type: Maximisation Test

Species: Guinea pig

Assessment: May cause sensitisation by skin contact.

Result: The product is a skin sensitiser, sub-category 1A.

Assessment: May cause sensitisation by inhalation.

Result: The product is a respiratory sensitiser, sub-category 1A.

DIBUTYLTIN DILAURATE:

Assessment: May cause sensitisation by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Components:

METHYLENE DIPHENYLISOCYANATE:

Genotoxicity in vitro : Test Type: Ames test
 Result: negative
 Remarks: Information given is based on data obtained from similar substances.

Genotoxicity in vivo : Test Type: In vivo micronucleus test
 Test species: Rat
 Method: OECD Test Guideline 474
 Remarks: Information given is based on data obtained from similar substances.

DIBUTYLTIN DILAURATE:

Genotoxicity in vitro : Method: OECD Test Guideline 473
 Result: positive
 Remarks: Information given is based on data obtained from similar substances.

: Test Type: Ames test
 Result: negative
 Remarks: Information given is based on data obtained from similar substances.

Genotoxicity in vivo : Test Type: Chromosome aberration test in vitro
 Test species: Mouse

 BOSTIK		Page: 15
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoet™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

Application Route: Ingestion
 Method: OECD Test Guideline 474
 Result: positive
 Remarks: Information given is based on data obtained from similar substances.

Carcinogenicity

Not classified based on available information.

Product:

Carcinogenicity - Assessment : Methylene bisphenylisocyanate (MDI) aerosol has been reported to be irritating to lungs at a concentration of 1 mg/m³ with no effect observed at 0.2 mg/m³. Although MDI has been reported to cause an increase in non-carcinogenic lung tumors and a single carcinogenic lung tumor at very high concentrations (6 mg/m³), it is not classified as a carcinogen by IARC, NTP or OSHA.

Reproductive toxicity

May damage fertility or the unborn child.

Components:

DIBUTYLTIN DILAURATE:

Reproductive toxicity - Assessment : Clear evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments, Clear evidence of adverse effects on development, based on animal experiments., May damage fertility. May damage the unborn child.

STOT - single exposure

May cause respiratory irritation.

Components:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

Exposure routes: Inhalation

Target Organs: Respiratory system

Assessment: May cause respiratory irritation.

4,4'-DIPHENYLMETHANE DIISOCYANATE:

Exposure routes: Inhalation

Target Organs: Respiratory system

Assessment: May cause respiratory irritation.

METHYLENE DIPHENYLISOCYANATE:

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Assessment: May cause respiratory irritation.

 BOSTIK		Page: 16
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

DIBUTYLTIN DILAURATE:
 Exposure routes: Ingestion
 Target Organs: thymus gland
 Assessment: Causes damage to organs.

STOT - repeated exposure

May cause damage to organs (Respiratory system, Respiratory Tract) through prolonged or repeated exposure if inhaled.

Components:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

Exposure routes: Inhalation
 Target Organs: Respiratory system
 Assessment: May cause damage to organs through prolonged or repeated exposure.

4,4'-DIPHENYLMETHANE DIISOCYANATE:

Exposure routes: Inhalation
 Target Organs: Respiratory system
 Assessment: May cause damage to organs through prolonged or repeated exposure.

METHYLENE DIPHENYLISOCYANATE:

Exposure routes: Inhalation
 Target Organs: Respiratory Tract
 Assessment: May cause damage to organs through prolonged or repeated exposure.

DIBUTYLTIN DILAURATE:

Exposure routes: Ingestion
 Target Organs: thymus gland
 Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Ecotoxicology Assessment

Short-term (acute) aquatic hazard : Not classified based on available information.

 BOSTIK		Page: 17
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

Long-term (chronic) aquatic hazard : Not classified based on available information.

Components:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

Toxicity to fish : LC50 (*Oryzias latipes* (Orange-red killifish)): > 3,000 mg/l
 Exposure time: 96 h
 Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): > 100 mg/l
 Exposure time: 24 h
 Test Type: static test
 Method: OECD Test Guideline 202

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia magna* (Water flea)): > 10 mg/l
 Exposure time: 21 d
 End point: Reproduction Test
 Test Type: semi-static test
 Method: OECD Test Guideline 211

4,4'-DIPHENYLMETHANE DIISOCYANATE:

Toxicity to fish : LC50 (*Oryzias latipes* (Orange-red killifish)): > 3,000 mg/l
 Exposure time: 96 h
 Test Type: semi-static test
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): > 100 mg/l
 Exposure time: 24 h
 Test Type: static test
 Method: OECD Test Guideline 202
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia magna* (Water flea)): > 10 mg/l
 Exposure time: 21 d
 End point: Reproduction Test
 Test Type: semi-static test
 Method: OECD Test Guideline 211
 Remarks: Information given is based on data obtained from similar substances.

METHYLENE DIPHENYLISOCYANATE:

Toxicity to fish : LC50 (*Oryzias latipes* (Japanese medaka)): > 3,000 mg/l
 Exposure time: 96 h
 Test Type: semi-static test
 Remarks: Information given is based on data obtained from

 BOSTIK		Page: 18
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

similar substances.

- Toxicity to daphnia and other aquatic invertebrates : (Daphnia magna (Water flea)): > 1,000 mg/l
 Exposure time: 24 h
 Test Type: static test
 Method: OECD Test Guideline 202
 Remarks: Information given is based on data obtained from similar substances.
- Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): 1,640 mg/l
 End point: Growth inhibition
 Exposure time: 72 h
 Test Type: static test
 Method: OECD Test Guideline 201
 Remarks: Information given is based on data obtained from similar substances.
- DIBUTYLTIN DILAURATE:
 Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 3.1 mg/l
 Exposure time: 96 h
 Test Type: static test
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): < 1 mg/l
 Exposure time: 48 h
 Test Type: static test
 Method: OECD Test Guideline 202
- M-Factor (Short-term (acute) aquatic hazard) : 1
- M-Factor (Long-term (chronic) aquatic hazard) : 1
- Ecotoxicology Assessment
 Short-term (acute) aquatic hazard : Very toxic to aquatic life.
- Long-term (chronic) aquatic hazard : Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

POLYMETHYLENE POLYPHENYL ISOCYANATE:

- Biodegradability : Result: Not biodegradable
 Biodegradation: 0 %
 Exposure time: 28 d
 Method: OECD Test Guideline 302C
 Remarks: Information given is based on data obtained from

 BOSTIK		Page: 19
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

similar substances.

4,4'-DIPHENYLMETHANE DIISOCYANATE:

Biodegradability : Result: Not biodegradable
 Biodegradation: 0 %
 Exposure time: 28 d
 Method: OECD Test Guideline 302C
 Remarks: Information given is based on data obtained from similar substances.

METHYLENE DIPHENYLISOCYANATE:

Biodegradability : Result: Not readily biodegradable.
 Remarks: Information given is based on data obtained from similar substances.

DIBUTYLTIN DILAURATE:

Biodegradability : Result: Not readily biodegradable.
 Biodegradation: 23 %
 Exposure time: 39 d
 Method: OECD Test Guideline 301F

No data available

Bioaccumulative potential

Components:

DIBUTYLTIN DILAURATE:

Partition coefficient: n-octanol/water : log Pow: 3.12

No data available

Mobility in soil

Components:

No data available

Other adverse effects

No data available

Product:

Additional ecological information : No data available

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : Do not dispose of waste into sewer.
 Do not contaminate ponds, waterways or ditches with chemical or used container.
 Send to a licensed waste management company.

 BOSTIK		Page: 20
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoet™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.
 Dispose of as unused product.
 Empty containers should be taken to an approved waste handling site for recycling or disposal.
 Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
-----------	----------------------	---------------	--------------------	---------------	------------------------------

U.S. DOT - ROAD

Not dangerous goods

CFR_RAIL_C

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TDG_ROAD_C

Not dangerous goods

TDG_RAIL_C

Not dangerous goods

TDG_INWT_C

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

		Page: 21
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MX_DG

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
------------------	----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

Canadian PBT Chemicals	: This product does not contain any components on the DSL that are classified as Persistent, Bioaccumulative and Toxic (PBT) under CEPA.
-------------------------------	--

The components of this product are reported in the following inventories:

TCSI	: Not in compliance with the inventory
TSCA	: All substances listed as active on the TSCA inventory
AIIC	: Not in compliance with the inventory
DSL	: All components of this product are on the Canadian DSL
ENCS	: Not in compliance with the inventory
ISHL	: Not in compliance with the inventory
KECI	: On the inventory, or in compliance with the inventory

 BOSTIK		Page: 22
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

PICCS : On the inventory, or in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

NZIoC : Not in compliance with the inventory

Inventories

AIIC (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TECI (Thailand), TSCA (USA)

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Full text of H-Statements

H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H330 Fatal if inhaled.
 H332 Harmful if inhaled.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H335 May cause respiratory irritation.
 H360 May damage fertility or the unborn child.
 H370 Causes damage to organs if swallowed.
 H372 Causes damage to organs through prolonged or repeated exposure if swallowed.
 H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer;

 BOSTIK		Page: 23
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoet™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECL - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

This sds has been prepared by Bostik. (<http://www.Bostik.com>)

Sources of key data used to compile the Safety Data Sheet : Bostik internal data including own and sponsored test reports
European Union Law with content from the Official Journal of the European Union.
European Chemicals Agency; the EU authority implementing the EU's chemicals legislation for companies.
The German Water Hazard Classes.
ReachCentrum; a series of support services to help comply with REACH regulations.
The European Commission; proposing legislation, administering and implementing EU policies, and enforcing EU law.
The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.
Cefic, the European Chemical Industry Council.
ESIS European Chemical Substances Information System

Revision Date : 09/09/2022
Date format : mm/dd/yyyy

 BOSTIK		Page: 24
SAFETY DATA SHEET		Revision Date: 09/09/2022
		Print Date: 12/5/2023
		SDS Number: 000000135162
Isoset™ UX 160 ADHESIVE ™ Trademark, Bostik or its subsidiaries, registered in various countries 692854		Version: 2.1

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

CA / EN