

SL=P070-A - Urethane Bonding Kit Part A

Material number SL=P070-A

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1 Identification

Product identifier

Trade name: SL=P070-A - Urethane Bonding Kit Part A

Recommended use and restrictions on use

General use: Adhesive, Component A, for orthopedic procedures.
For use in industrial installations and professional treatment only.

Initial supplier identifier

Company name: Otto Bock HealthCare Canada Ltd.
Street/POB-No.: 5470 Harvester Road
Postal code, city: Burlington, ON L7L 5N5, CA
Canada
WWW: www.ottobock.ca
Email: info.canada@ottobock.com
Telephone: (800) 665-3327
Telefax: (800) 463-3659
Department responsible for information:
Mark Agro, Telephone: (800) 665-3327 (9 am - 5 pm)
Additional information: Corporate headquarters:
Ottobock SE & Co. KGaA
Max-Näder-Straße 15
Duderstadt
Germany

Emergency telephone number

COLLECT, Telephone: (613) 996-6666
Transport:
CONSULTANK Lutz Harder GmbH (Contract QUALI003)
Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)

2 Hazard identification

Classification

Acute Toxicity 3 (inhalative)	Toxic if inhaled.
Skin Irritation 2	Causes skin irritation.
Eye Irritation 2A	Causes serious eye irritation.
Respiratory Sensitizer 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Sensitization - skin 1	May cause an allergic skin reaction.
Specific Target Organ Toxicity (Single Exposure) 3	May cause respiratory irritation.

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Information elements

Symbols:



Signal word:

Danger

Hazard statements:

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.

Precautionary statements:

Avoid breathing mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection.

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

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

Dispose of contents/container to hazardous or special waste collection point.

Other hazards known to the supplier with respect to the product

Heating causes rise in pressure with risk of bursting.
Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

3 Composition/Information on ingredients

Mixture

Chemical name: Modified polyol

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 5124-30-1	Dicyclohexylmethan- 4,4' diisocyanate	22 - 23 %	Acute Toxicity 3 (inhalative). Skin Irritation 2. Eye Irritation 2A. Respiratory Sensitizer 1. Sensitization - skin 1. Specific Target Organ Toxicity (Single Exposure) 3.

The actual concentration or concentration range is withheld as a trade secret.

4 First-aid measures

Description of necessary first-aid measures

General information: If medical advice is needed, have product container or label at hand.
Take off contaminated clothing and wash it before reuse.

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In case of inhalation:	Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Immediately get medical attention.
In case of swallowing:	Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Do not give milk or alcoholic beverages. Seek medical attention.
In case of skin contact:	Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.
In case of eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.

Most important symptoms and effects, whether acute or delayed

Toxic if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. Causes skin irritation. Causes serious eye irritation.

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

Treat symptomatically.
It can take hours before symptoms of poisoning show up following exposure.
Do not leave affected person unattended.

5 Fire-fighting measures

Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Full water jet

Specific hazards arising from the product

In case of fire may be liberated: Nitrogen oxides (NO_x), isocyanates, carbon monoxide and carbon dioxide.

Special protective equipment and precautions for fire-fighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Use fine water spray to cool endangered containers. Reacts with water, forming carbon monoxide, producing bursting hazard in closed containers due to build-up of pressure. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Do not allow water used to extinguish fire to enter drains, ground or waterways.
Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Do not breathe mist/vapours/spray. Avoid contact with the substance.
If possible, eliminate leakage. Provide adequate ventilation.
Wear appropriate protective equipment. Keep unprotected people away.
Take off contaminated clothing and wash it before reuse.

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Environmental precautions:

Do not allow to enter into ground-water, surface water or drains.
If necessary, notify appropriate authorities.

Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents) and place in closed containers for disposal.

Additional information:

Special danger of slipping by leaking/spilling product.

7 Handling and storage

Precautions for safe handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed. Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment.
Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.
Have eye wash bottle or eye rinse ready at work place.
Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

Precautions against fire and explosion:

Keep away from heat.
When handling larger quantities, take precautionary measures against electrostatic charging.

Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.
Keep container dry. Keep only in the original container.
Protect from heat and direct sunlight.
Store containers in upright position.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

8 Exposure controls/Personal protection

Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
5124-30-1	Dicyclohexylmethan-4,4'-diisocyanate	Canada: Alberta, OEL 8 hour	0.05 mg/m ³ ; 0.005 ppm
		Canada: BC, OEL Ceiling	0.01 ppm
		Canada: BC, OEL TWA	0.005 ppm
		Canada: Ontario, OEL Ceiling	0.02 ppm
		Canada: Ontario, OEL TWA	0.005 ppm
		Canada: Québec, VEMP	0.054 mg/m ³ ; 0.005 ppm

Appropriate engineering controls

Provide good ventilation and/or an exhaust system in the work area.

Individual protection measures, such as personal protective equipment

Respiratory protection:	Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. Recommended Use filter type A (= against vapours of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.
Hand protection:	Protective gloves according to OSHA Standard - 29 CFR: 1910.138. Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Eye protection:	Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.
Body protection:	Wear suitable protective clothing.
General hygiene considerations:	Do not breathe mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Take off contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Have eye wash bottle or eye rinse ready at work place. Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9 Physical and chemical properties

Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	liquid
Colour:	colourless
Odour:	No data available
Odour threshold:	No data available
Melting point and freezing point:	No data available
Boiling point or initial boiling point and boiling range:	No data available
Flammability:	No data available
Lower and upper explosion limit or lower and upper flammability limit:	No data available
Flash point/flash point range:	> 94 °C
Evaporation rate:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	No data available

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Kinematic viscosity:	at 40 °C: > 21 mm ² /s
Solubility:	No data available
Partition coefficient — n-octanol/water:	No data available
Vapour pressure:	negligible
Density and/or relative density	at 25 °C: 1.04 g/mL
Vapour density:	No data available
Particle characteristics:	Not applicable

Additional information

10 Stability and reactivity

Reactivity:	Refer to subsection "Possibility of hazardous reactions".
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Reacts with water, forming carbon monoxide, producing bursting hazard in closed containers due to build-up of pressure.
Conditions to avoid:	Protect from heat and direct sunlight. Protect from moisture contamination.
Incompatible materials:	Keep away from water.
Hazardous decomposition products:	No hazardous decomposition products when regulations for storage and handling are observed.

11 Toxicological information

Information on the likely routes of exposure

No data available

Health hazard information

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Acute Toxicity 3 (inhalative) = Toxic if inhaled.

ATEmix (calculated): 2.25 mg/L/4h (vapour)

Skin corrosion/irritation: Skin Irritation 2 = Causes skin irritation.

Serious eye damage/irritation: Eye Irritation 2A = Causes serious eye irritation.

Sensitisation to the respiratory tract: Respiratory Sensitizer 1 = May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitisation: Sensitization - skin 1 = May cause an allergic skin reaction.

Germ cell mutagenicity/Genotoxicity: Lack of data.

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

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) 3 = May cause respiratory irritation.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

Symptoms

After eye contact: Upon direct contact with eyes may cause burning, tearing, redness.

12 Ecological information

Ecotoxicity

Further details: No data available

Persistence and degradability

Further details: No data available

Bioaccumulative potential

Partition coefficient — n-octanol/water:

No data available

Mobility in soil

No data available

Other adverse effects

General information: Do not allow to penetrate into soil, waterbodies or drains.

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13 Disposal considerations

Waste treatment methods

Product

Recommendation: Incinerate as hazardous waste according to applicable local, state, and federal regulations.

Package

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.

14 Transport information

UN number

TDG: UN2206
IMDG, IATA-DGR: UN 2206

UN proper shipping name

TDG: UN 2206, ISOCYANATE SOLUTION, TOXIC, N.O.S.; or ISOCYANATES, TOXIC, N.O.S.
(Dicyclohexylmethan-4,4' diisocyanate)
IMDG, IATA-DGR: UN 2206, ISOCYANATES, TOXIC, N.O.S. (Dicyclohexylmethan-4,4' diisocyanate)

Transport hazard class

TDG: 6.1
IMDG: Class 6.1, Subrisk -
IATA-DGR: Class 6.1



Packing group

TDG, IMDG, IATA-DGR: III

Environmental hazards

Marine pollutant: no

Special precautions in connection with transport or conveyance either within or outside the premises

Canada: Transportation of Dangerous Goods (TDG)

Special Provisions: 16
Explosive limit and limited quantity index: 5 L
Passenger carrying ship index: Forbidden
Passenger carrying road or rail index: 60 L

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Sea transport (IMDG)

EmS:	F-A, S-A
Special Provisions:	223 274
Limited quantities:	5 L
Excepted quantities:	E1
Package - Instructions:	P001, LP01
Package - Provisions:	-
IBC - Instructions:	IBC03
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T7
Tank instructions - Provisions:	TP1, TP13, TP28
Stowage and handling:	Category E. SW1 SW2
Properties and observations:	Liquids with a pungent odour. Immiscible with water but reacts with it to form carbon dioxide. Toxic if swallowed, by skin contact or by inhalation. If under deck, with mechanical ventilation, six air changes per hour, except when carried in closed containers, when two air changes per hour are required. Irritating to skin, eyes and mucous membranes.
Marine pollutant:	no
Segregation group:	none

Air transport (IATA)

Proper shipping name:	UN 2206, ISOCYANATES, TOXIC, N.O.S. (Dicyclohexylmethan-4,4' diisocyanate)
Hazard label:	Toxic
Excepted Quantity Code:	E1
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y642 - Max. Net Qty/Pkg. 2 L
Passenger and Cargo Aircraft:	Pack.Instr. 655 - Max. Net Qty/Pkg. 60 L
Cargo Aircraft only:	Pack.Instr. 663 - Max. Net Qty/Pkg. 220 L
Special Provisions:	A3
Emergency Response Guide-Code (ERG):	6L

15 Regulatory information

National regulations - Canada

Product: DSL: Components of this product have been reported to Environment Canada in accordance with subsection 25 of the Canadian Environmental Protection Act and are included on the Domestic Substances List. All ingredients are listed or exempt from listing.

Dicyclohexylmethan-4,4' diisocyanate: DSL: listed

Further regulations, limitations and legal requirements

No data available

16 Other information

Text for labelling: Contains Dicyclohexylmethan-4,4' diisocyanate.
As from 24 August 2023 adequate training is required before industrial or professional use.

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Revision date: 17/12/2025
Date of first version: 15/1/2015
Reason of change: General revision: Safety Data Sheet according to Hazardous Products Regulations (HPR) 2022

Abbreviations and acronyms:

Acute Toxicity: Acute toxicity
AS/NZS: Australian Standards/New Zealand Standards
ATEmix: Acute Toxicity Estimate of mixture
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
DSL: Domestic Substances List
EC: European Community
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
EN: European Standard
EQ: Excepted quantities
Eye Irritation: Eye irritation
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
IMO: International Maritime Organization
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
MFSU: Manufacture, formulation, supply and use
OEL: Occupational Exposure Limit Value
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
Respiratory Sensitizer: Sensitisation to the respiratory tract
Sensitization - skin: Skin sensitisation
Skin Irritation: Skin irritation
STOT SE: Specific target organ toxicity - single exposure
TDG: Transportation of Dangerous Goods Regulation in Canada
TLV: Threshold Limit Value
TRGS: Technical Rules for Hazardous Substances
UN: United Nations
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit

Department issuing data sheet

Contact person: see section 1: Department responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.