

## 1 Identification

### Product identifier

Trade name: 636K44 – Loctite 3090 Part A

### Other means of identification

This safety data sheet pertains to the following products:  
636K44 = Loctite 3090

### Recommended use and restrictions on use

General use: Instant adhesive (cyanoacrylate) for orthopedic procedures, Component A.  
Reserved for industrial and professional use.

### 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

Flammable Liquid 4	Combustible liquid.
Skin Irritation 2	Causes skin irritation.
Eye Irritation 2A	Causes serious eye irritation.
Specific Target Organ Toxicity (Single Exposure) 3	May cause respiratory irritation.

## Information elements

Symbols:



Signal word:

**Warning**

Hazard statements:

Combustible liquid.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.

Precautionary statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Avoid breathing vapours.  
Wash hands and face thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection.  
  
IF ON SKIN: Wash with plenty of water/soap.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Call a POISON CENTER/doctor if you feel unwell.  
Specific treatment (see 'First aid' on this label).  
If skin irritation occurs: Get medical advice/attention.  
If eye irritation persists: Get medical advice/attention.  
Take off contaminated clothing and wash it before reuse.  
In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction.  
  
Store in a well-ventilated place.  
Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.  
  
Dispose of contents/container to hazardous or special waste collection point.

## Other hazards known to the supplier with respect to the product

Special danger of slipping by leaking/spilling product.

## 3 Composition/Information on ingredients

### Mixture

Chemical name: Adhesive based on cyanoacrylic acid ester

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 7085-85-0	Ethyl 2-cyanoacrylate	50 - 100 %	Skin Irritation 2. Eye Irritation 2A. 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:	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children. Take off contaminated clothing and wash it before reuse. If medical advice is needed, have product container or label at hand.
In case of inhalation:	Move victim to fresh air, put at rest and loosen restrictive clothing. If breathing has stopped, give artificial respiration immediately. Seek medical attention.
In case of swallowing:	Seek medical advice immediately. Keep airway open. Saliva will cause a polymerization reaction in the mouth.
In case of skin contact:	Immediately clean with water and soap followed by thorough rinsing. If product comes into contact with lips, hold mouth open. Do not allow lips to contact one another. If lips are bonded together, use warm water to gently separate the lips apart. Do not peel solidified product off the skin. Immediately get medical attention.
In case of eye contact:	Keep eye wide open. Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Do not attempt to pull apart bonded eyelid. Subsequently seek the immediate attention of an ophthalmologist.

#### Most important symptoms and effects, whether acute or delayed

Causes serious eye irritation.  
Causes skin irritation.  
May cause respiratory irritation.

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

Treat symptomatically.

### 5 Fire-fighting measures

#### Suitable and unsuitable extinguishing media

Suitable extinguishing media:

Foam, extinguishing powder, carbon dioxide, water spray jet.

Unsuitable extinguishing media:

Full water jet

#### Specific hazards arising from the product

Combustible liquid.  
In case of fire may be liberated: Nitrogen oxides (NO<sub>x</sub>), 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:

Do not inhale explosion and combustion gases. Cool endangered containers with water spray jet. Do not allow fire water to penetrate into surface or ground water. 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

Cyanacrylate - Danger - skin and eyelids will stick together in seconds.  
 Avoid contact with skin and eyes. Do not breathe vapours.  
 Keep unprotected people away. Wear appropriate protective equipment.  
 If possible, eliminate leakage. Provide adequate ventilation.  
 Take off contaminated clothing and wash it before reuse.

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

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder.  
 Store in special closed containers and dispose of according to ordinance.  
 After contact with water: Product polymerized. Take up mechanically, placing in appropriate 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:

Cyanacrylate - Danger - skin and eyelids will stick together in seconds.  
 Provide adequate ventilation, and local exhaust as needed. Wear appropriate protective equipment.  
 Avoid contact with skin and eyes. Do not breathe vapours. Take off contaminated clothing and wash it before reuse.  
 Work place should be equipped with a shower and an eye rinsing apparatus.  
 Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking.  
 Take precautionary measures against static discharges.

### Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep only in the original container.  
 Keep container tightly closed in a cool place.  
 Protect from humidity and water. Store containers in upright position.  
 Protect from heat and direct sunlight.

Hints on joint storage:

Do not store together with alkalis, water, amines or alcohol.  
 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
7085-85-0	Ethyl 2-cyanoacrylate	Canada: Alberta, OEL 8 hour Canada: BC, OEL TWA	1 mg/m <sup>3</sup> ; 0.2 ppm 0.2 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:** In case of inadequate ventilation wear respiratory protection. Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded. Use filter type A (= against vapours of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

**Hand protection:** Protective gloves according to OSHA Standard - 29 CFR: 1910.138. By short-term hand contact: Glove material: Nitrile rubber - Layer thickness: ≥ 0.4 mm. Breakthrough time: > 480 min. Larger quantities: Glove material: Polyethylene, polypropylene Observe glove manufacturer's instructions concerning penetrability and breakthrough time. Unsuitable glove material: PVC, rubber, nylon.

**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:** Cyanacrylate - Danger - skin and eyelids will stick together in seconds. Avoid contact with skin and eyes. Do not breathe vapours. Take off contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Work place should be equipped with a shower and an eye rinsing apparatus.

### 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:	Form: Gel colourless
Odour:	Irritant
Odour threshold:	1-2 ppm

Melting point and freezing point:	Not applicable
Boiling point or initial boiling point and boiling range:	> 149 °C
Flammability:	Combustible liquid.
Lower and upper explosion limit or lower and upper flammability limit:	No data available
Flash point/flash point range:	80 - 93 °C
Evaporation rate:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH:	Not applicable
Kinematic viscosity:	at 40 °C: > 20.5 mm <sup>2</sup> /s
Dynamic viscosity:	18,000 - 40,000 mPa*s (Brookfield)
Water solubility:	Insoluble, Polymerizes when in contact with: water
Partition coefficient — n-octanol/water:	at 22 °C: 0.776 log P(o/w) (Ethyl 2-cyanoacrylate) Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
Vapour pressure:	at 20 °C: ≤ 0.67 hPa at 50 °C: ≤ 700 hPa
Density and/or relative density	at 20 °C: 1.05 g/mL
Vapour density:	at 20 °C: ≥ 1
Particle characteristics:	Not applicable

### Additional information

Additional information: Solidifying temperature: < -25 °C

## 10 Stability and reactivity

Reactivity:	Refer to subsection "Possibility of hazardous reactions".
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Exothermic reactions with water, amines, alcohol, alkalis. Polymerization along with heat production.
Conditions to avoid:	Keep away from heat sources, sparks and open flames. Protect from direct sunlight. Protect from humidity and water.
Incompatible materials:	Water, alkalis, alcohol and amines
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): Based on available data, the classification criteria are not met.

ATEmix (calculated): > 5,000 mg/kg

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

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: Lack of data.

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

Information about Ethyl 2-cyanoacrylate: Not known to cause sensitization.

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

Information about Ethyl 2-cyanoacrylate according to examination report (OECD 471, 476, 473): negative

Carcinogenicity: Lack of data.

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.

Other information:

Information about Ethyl 2-cyanoacrylate (CAS 7085-85-0):

LD50 Rat, oral: > 5,000 mg/kg (OECD 423)

LD50 Rabbit, dermal: > 2,000 mg/kg (OECD 402)

### Symptoms

In case of inhalation:

Cough, shortness of breath, shortage of breath, cramp feeling in breast.

After contact with skin: Reddening, Ignition

After eye contact: Irritation, conjunctivitis

## 12 Ecological information

### Ecotoxicity

Aquatic toxicity:

After contact with water: Polymerisation.

### Persistence and degradability

Further details:

Information about Ethyl 2-cyanoacrylate (CAS 7085-85-0):

Degradation aerobic: 57 %/28 d (OECD 301 D)

Not easily bio-degradable.

## Bioaccumulative potential

Partition coefficient — n-octanol/water:

at 22 °C: 0.776 log P(o/w) (Ethyl 2-cyanoacrylate)

Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

## Mobility in soil

No data available

## Other adverse effects

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

# 13 Disposal considerations

## Waste treatment methods

### Product

Recommendation: Product, cured: Dispose of waste according to applicable legislation.  
Do not dispose of with household waste.

### Package

Recommendation: Incinerate as hazardous waste according to applicable local, state, and federal regulations.  
Handle contaminated packages in the same way as the substance itself.

# 14 Transport information

## UN number

TDG: UN1133  
IATA-DGR: UN 3334

## UN proper shipping name

TDG: UN 1133, adhesives  
IMDG: Not restricted  
IATA-DGR: UN 3334, AVIATION REGULATED LIQUID, N.O.S. (Ethyl 2-cyanoacrylate)

## Transport hazard class

TDG: 3  
IATA-DGR: Class 9

## Packing group

TDG, 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)

Explosive limit and limited quantity index: 5L  
Passenger carrying road or rail index: 60L

#### Sea transport (IMDG)

Proper shipping name: Not restricted  
Marine pollutant: no

#### Air transport (IATA)

Proper shipping name: UN 3334, AVIATION REGULATED LIQUID, N.O.S. (Ethyl 2-cyanoacrylate)  
Hazard label: Miscellaneous  
Excepted Quantity Code: E1  
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y964 - Max. Net Qty/Pkg. 30 kg G  
Passenger and Cargo Aircraft: Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L  
Cargo Aircraft only: Pack.Instr. 964 - Max. Net Qty/Pkg. 450 L  
Special Provisions: A27  
Emergency Response Guide-Code (ERG): 9A

## 15 Regulatory information

### National regulations - Canada

Ethyl 2-cyanoacrylate: DSL: listed

### Further regulations, limitations and legal requirements

No data available

## 16 Other information

Text for labelling: Contains Ethyl 2-cyanoacrylate  
Revision date: 17/12/2025  
Date of first version: 23/6/2017  
Reason of change: Changes in section 2: classification, labelling  
General revision: Safety Data Sheet according to Hazardous Products Regulations (HPR) 2022  
General revision  
Classification procedure: Physical hazards: on basis of test data  
Health hazards, environmental hazards: calculation method

### Abbreviations and acronyms:

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  
 Flammable Liquid: Flammable liquid  
 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  
 LD50: Lethal dose 50%  
 log P(o/w): Partition coefficient: octanol/water  
 MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships  
 OECD: Organisation for Economic Co-operation and Development  
 OEL: Occupational Exposure Limit Value  
 OSHA: Occupational Safety and Health Administration  
 PBT: Persistent, bioaccumulative and toxic  
 PNEC: Predicted no-effect concentration  
 PVC: Polyvinyl chloride  
 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.