



# SAFETY DATA SHEET

according to Hazardous Products Regulations (HPR) 2022

## 634A31 - Thinner for Special Lacquer 635L2

Material number 634A31

Revision date: 2/3/2026  
Version: 11.7  
Replaces version: 11.6  
Language: en-CA  
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### 1 Identification

#### Product identifier

Trade name: 634A31 - Thinner for Special Lacquer 635L2

#### Recommended use and restrictions on use

General use: Solvent for orthopedic procedures.  
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 2	Highly flammable liquid and vapour.
Skin Irritation 2	Causes skin irritation.
Eye Irritation 2A	Causes serious eye irritation.
Reproductive toxicity 2	Suspected of damaging the unborn child.
Specific Target Organ Toxicity (Single Exposure) 3	May cause drowsiness or dizziness.
Specific Target Organ Toxicity (Repeated Exposure) 2	May cause damage to organs through prolonged or repeated exposure.
Aspiration Toxicity 1	May be fatal if swallowed and enters airways.
Aquatic toxicity - chronic 2	Toxic to aquatic life with long lasting effects.

### Information elements

Symbols:



Signal word:

**Danger**

Hazard statements:

Highly flammable liquid and vapour.  
May be fatal if swallowed and enters airways.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.  
Suspected of damaging the unborn child.  
May cause damage to organs through prolonged or repeated exposure.  
Toxic to aquatic life with long lasting effects.

Precautionary statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Do not breathe vapours.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Call a POISON CENTER/doctor/.../if you feel unwell.  
Do NOT induce vomiting.  
Collect spillage.  
Store in a well-ventilated place. Keep container tightly closed.

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

## 3 Composition/Information on ingredients

### Mixture

Chemical name:

Mixture of the substances listed below with non-hazardous additions

Hazardous ingredients:

CAS No.	Designation	Content	Classification
CAS 67-64-1	Acetone	25 - 50 %	Flammable Liquid 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 142-82-5	n-Heptane	10 - 25 %	Flammable Liquid 2. Skin Irritation 2. Specific Target Organ Toxicity (Single Exposure) 3. Aspiration Toxicity 1. Aquatic toxicity - acute 1. Aquatic toxicity - chronic 1.
CAS 123-86-4	n-Butyl acetate	10 - 25 %	Flammable Liquid 3. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 108-88-3	Toluene	10 - 25 %	Flammable Liquid 2. Skin Irritation 2. Reproductive toxicity 2. Specific Target Organ Toxicity (Single Exposure) 3. Specific Target Organ Toxicity (Repeated Exposure) 2. Aspiration Toxicity 1.
CAS 67-63-0	Isopropyl alcohol	2.5 - 10 %	Flammable Liquid 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

In case of inhalation:	Provide fresh air. If victim is at risk of losing consciousness, position and transport on their side. Seek medical treatment in case of troubles.
In case of swallowing:	Do not induce vomiting. Keep victim calm and seek medical attention immediately.
In case of skin contact:	Immediately clean with water and soap followed by thorough rinsing. Seek medical treatment in case of troubles.
In case of eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

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

In case of inhalation:

Harmful: danger of serious damage to health by prolonged exposure through inhalation. Inhalation of vapours exceeding the allowable WEL/TLV-levels may pose a health hazard as well as lead to irritation of mucous membranes and respiratory system, cause kidney and liver damage as well as adversely affect the central nervous system.

symptoms:

Headache, dizziness, fatigue, muscle weakness, numbing effect and, in exceptional cases, unconsciousness.

In case of ingestion: Harmful: may cause lung damage if swallowed.

After contact with skin: irritant

Prolonged or repeated contact with the product affects the skin's natural oils and induces drying up.

The product can be absorbed through skin.

After eye contact: irritant

### 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:

In case of fire, use Carbon dioxide, sand or extinguishing powder. Never use water.

Unsuitable extinguishing media:

Full water jet

### Specific hazards arising from the product

Exposure to fire produces thick, black smoke that is hazardous to health.

### Special protective equipment and precautions for fire-fighters

Wear self-contained breathing apparatus.

## 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment. Keep unprotected people away.

Do not breathe vapours.

Provide adequate ventilation.

Environmental precautions:

Do not allow to enter soil, sewage, water bodies, lower level rooms or pits.

### Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Provide adequate ventilation.

Do not remove residual product with water and detergent.

## 7 Handling and storage

### Precautions for safe handling

Advices on safe handling: Provide good ventilation and/or an exhaust system in the work area.  
Avoid the formation of aerosol.  
Avoid contact with the substance.  
Do not breathe vapours.

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:

Store in well closed containers in a cool, dry, well-ventilated area.

Hints on joint storage:

Keep away from strong acids and bases as well as oxidizing agents.

## 8 Exposure controls/Personal protection

### Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
67-64-1	Acetone	Canada: Alberta, OEL 15 min	1,800 mg/m <sup>3</sup> ; 750 ppm
		Canada: Alberta, OEL 8 hour	1,200 mg/m <sup>3</sup> ; 500 ppm
		Canada: BC, OEL STEL	500 ppm
		Canada: BC, OEL TWA	250 ppm
		Canada: Québec, VECD	500 ppm
		Canada: Québec, VEMP	250 ppm
142-82-5	n-Heptane	Canada: Alberta, OEL 15 min	2,050 mg/m <sup>3</sup> ; 500 ppm
		Canada: Alberta, OEL 8 hour	1,640 mg/m <sup>3</sup> ; 400 ppm
123-86-4	n-Butyl acetate	Canada: Alberta, OEL 15 min	950 mg/m <sup>3</sup> ; 200 ppm
		Canada: Alberta, OEL 8 hour	713 mg/m <sup>3</sup> ; 150 ppm
		Canada: BC, OEL STEL	150 ppm
		Canada: BC, OEL TWA	50 ppm
		Canada: Québec, VECD	150 ppm
		Canada: Québec, VEMP	50 ppm
108-88-3	Toluene	Canada: Alberta, OEL 8 hour	188 mg/m <sup>3</sup> ; 50 ppm (may be absorbed through the skin)
		Canada: BC, OEL TWA	20 ppm
		Canada: Québec, VEMP	20 ppm
67-63-0	Isopropyl alcohol	Canada: Alberta, OEL 15 min	984 mg/m <sup>3</sup> ; 400 ppm
		Canada: Alberta, OEL 8 hour	492 mg/m <sup>3</sup> ; 200 ppm
		Canada: BC, OEL STEL	400 ppm
		Canada: BC, OEL TWA	200 ppm
		Canada: Québec, VECD	400 ppm
		Canada: Québec, VEMP	200 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
67-64-1	Acetone	USA: ACGIH-BEI, urine	25 mg/L	acetone	end of exposure or end of shift
142-82-5	n-Heptane	USA: ACGIH-BEI, urine	140 µg/L	2,5 Heptanedione	end of exposure or end of shift
108-88-3	Toluene	USA: ACGIH-BEI, blood	0.02 mg/L	Toluene in blood	Prior to last shift of workweek
		USA: ACGIH-BEI, urine	0.03 mg/L	Toluene in urine	end of exposure or end of shift
		USA: ACGIH-BEI, urine	0.3 mg/g creatinine	o-Cresol in urine	end of exposure or end of shift
67-63-0	Isopropyl alcohol	USA: ACGIH-BEI, urine	40 mg/L	Acetone in urine	end of shift at end of work week

### Appropriate engineering controls

Use only explosion-protected equipment/instruments.  
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. Use filter type AX (= against vapours of low boiling 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.  
Glove material: Neoprene or nitrile rubber-breakthrough time: > 480 min.  
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

**General hygiene considerations:**  
Keep away from food, drink and animal feedingstuffs.  
Take off immediately all contaminated clothing.  
Wash hands before breaks and after work.  
Avoid contact with skin and eyes.  
Do not breathe vapours.

### 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: characteristic  
Odour threshold: No data available

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Melting point and freezing point:	No data available
Boiling point or initial boiling point and boiling range:	55 °C
Flammability:	No data available
Lower and upper explosion limit or lower and upper flammability limit:	LEL (Lower Explosion Limit): 1.10 Vol-% UEL (Upper Explosive Limit): 13.00 Vol-%
Flash point/flash point range:	-19 °C
Evaporation rate:	No data available
Auto-ignition temperature:	not self-igniting
Decomposition temperature:	No data available
pH:	No data available
Kinematic viscosity:	at 20 °C: kinematic 11 s (DIN 53211/4)
Water solubility:	at 20 °C: slightly miscible
Partition coefficient — n-octanol/water:	No data available
Vapour pressure:	at 20 °C: 233 hPa at 50 °C: (Acetone) 800 hPa
Density and/or relative density	at 20 °C: 0.797 g/mL
Vapour density:	No data available
Particle characteristics:	Not applicable

### Additional information

Explosive properties:	Product is not explosive. Potentially explosive vapour/air mixtures may form.
Ignition temperature:	215 °C
Solvent content:	100 %

## 10 Stability and reactivity

Reactivity:	Highly flammable liquid and vapour.
Chemical stability:	Product is stable under normal storage conditions.
Possibility of hazardous reactions:	vapours may form explosive mixtures with air.
Conditions to avoid:	Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.
Incompatible materials:	Strong acid or bases as well as oxidizing agents.
Hazardous decomposition products:	In case of fire may be liberated: carbon monoxide and carbon dioxide.

### 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): 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: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Reproductive toxicity 2 = Suspected of damaging the unborn child.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) 3 = May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure): Specific Target Organ Toxicity (Repeated Exposure) 2 = May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: Aspiration Toxicity 1 = May be fatal if swallowed and enters airways.

Possible risk of harm to the unborn child.

Other information:

#### Symptoms

In case of inhalation:

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Inhalation of vapours exceeding the allowable WEL/TLV-levels may pose a health hazard as well as lead to irritation of mucous membranes and respiratory system, cause kidney and liver damage as well as adversely affect the central nervous system.

symptoms:

Headache, dizziness, fatigue, muscle weakness, numbing effect and, in exceptional cases, unconsciousness.

In case of ingestion: Harmful: may cause lung damage if swallowed.

After contact with skin: irritant

Prolonged or repeated contact with the product affects the skin's natural oils and induces drying up.

The product can be absorbed through skin.

After eye contact: irritant

## 12 Ecological information

### Ecotoxicity

Aquatic toxicity: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Avoid spills and leaks. Very small amounts contaminates drinking water.

### 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 enter into ground-water, surface water or drains.

## 13 Disposal considerations

### Waste treatment methods

#### Product

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

#### Package

Recommendation: Dispose of waste according to applicable legislation.

## 14 Transport information

### UN number

TDG: UN1993  
IMDG, IATA-DGR: UN 1993

### UN proper shipping name

TDG: UN 1993, Flammable liquid, n.o.s. (Acetone, Heptane, Toluene, Isopropyl alcohol)  
IMDG, IATA-DGR: UN 1993, FLAMMABLE LIQUID, N.O.S. (Acetone, Heptane, Toluene, Isopropyl alcohol)

### Transport hazard class

TDG: 3  
IMDG: Class 3, Subrisk -  
IATA-DGR: Class 3

### Packing group

TDG, IMDG, IATA-DGR: II

### Environmental hazards

Marine pollutant: yes



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

#### Canada: Transportation of Dangerous Goods (TDG)

Special Provisions: 16, 150  
Explosive limit and limited quantity index: 1 L  
Passenger carrying road or rail index: 5 L  
Marine pollutant: P

#### Sea transport (IMDG)

EmS: F-E, S-E  
Special Provisions: 274  
Limited quantities: 1 L  
Excepted quantities: E2  
Package - Instructions: P001  
Package - Provisions: -  
IBC - Instructions: IBC02  
IBC - Provisions: -  
Tank instructions - IMO: -  
Tank instructions - UN: T7  
Tank instructions - Provisions: TP1, TP8, TP28  
Stowage and handling: Category B.  
Properties and observations: -  
Marine pollutant: yes  
Segregation group: none

#### Air transport (IATA)

Proper shipping name: UN 1993, FLAMMABLE LIQUID, N.O.S.  
(Acetone, Heptane, Toluene, Isopropyl alcohol)  
Hazard label: Flamm. liquid  
Excepted Quantity Code: E2  
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y341 - Max. Net Qty/Pkg. 1 L  
Passenger and Cargo Aircraft: Pack.Instr. 353 - Max. Net Qty/Pkg. 5 L  
Cargo Aircraft only: Pack.Instr. 364 - Max. Net Qty/Pkg. 60 L  
Special Provisions: A3  
Emergency Response Guide-Code (ERG): 3H

### 15 Regulatory information

#### National regulations - Canada

Acetone:	DSL: listed
n-Heptane:	DSL: listed
n-Butyl acetate:	DSL: listed
Toluene:	DSL: listed
	Priority Substances List: listed (PSL 1)
Isopropyl alcohol:	DSL: listed

#### Further regulations, limitations and legal requirements

No data available

### 16 Other information

Text for labelling:	Hazard components for labelling: contains Acetone, Heptane, n-Butyl acetate, Toluene, Isopropyl alcohol,
Revision date:	2/3/2026
Date of first version:	8/10/1994
Reason of change:	Changes in section 8: Biological Limit Value

### Abbreviations and acronyms:

Aquatic toxicity - acute: Hazardous to the aquatic environment - acute  
Aquatic toxicity - chronic: Hazardous to the aquatic environment - chronic  
AS/NZS: Australian Standards/New Zealand Standards  
Aspiration Toxicity: Aspiration toxicity  
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  
LEL: Lower Explosion Limit  
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships  
OEL: Occupational Exposure Limit Value  
OSHA: Occupational Safety and Health Administration  
PBT: Persistent, bioaccumulative and toxic  
PNEC: Predicted no-effect concentration  
PSL: Priority Substances List  
Reproductive toxicity: Reproductive toxicity  
Skin Irritation: Skin irritation  
STOT RE: Specific target organ toxicity - repeated exposure  
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

Literature: ;

### 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.