

1. Product and company identification

Product identifier

Trade name: 635L16 - Spray Lacquer, dark brown

Recommended use and restrictions on use

General use: Varnish.
For commercial user 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

E-mail: 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 phone number

COLLECT, Telephone: (613) 996-6666

Transport:

CONSULTANK Lutz Harder GmbH (Contract QUALI003)

Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)

2. Hazards identification

Emergency overview

Appearance: Physical state at 20 °C and 101.3 kPa: liquid

Form: Aerosol

Color: brown

Odor: Characteristic

Classification: Aerosol 1. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.

Hazard symbols:



Signal word: **Danger**

Hazard statements: Extremely flammable aerosol.
Pressurised container: May burst if heated.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary statements:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Avoid breathing spray.

Wear protective gloves/protective clothing/eye protection.

Call a POISON CENTER/doctor if you feel unwell.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Regulatory status

This material is considered hazardous by the WHMIS in Canada.

Hazards not otherwise classified

Potentially explosive mixtures may form if adequate ventilation is not provided.

Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Higher doses may lead to a narcotic effect.

The product is skin resorptive.

Endocrine disrupting properties:

Butanone, CAS 78-93-3: List II

see section 11: Toxicological information

3. Composition / Information on ingredients

Chemical characterisation: Blend of active ingredients with propellant.

Relevant ingredients:

CAS No.	Designation	Concentration	Classification
CAS 67-64-1	Acetone	25 - 50 %	Flammable Liquid 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 9004-70-0	Nitrocellulose	2.5 - 5 %	Explosive 1.1.
CAS 123-86-4	n-Butyl acetate	2.5 - 5 %	Flammable Liquid 3. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 108-65-6	2-Methoxy-1-methylethyl acetate	2.5 - 5 %	Flammable Liquid 3. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 1330-20-7	Xylene (isomeric mixture)	2.5 - 5 %	Flammable Liquid 3. Acute Toxicity 4 (dermal). Acute Toxicity 4 (inhalative). Skin Irritation 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3. Specific Target Organ Toxicity (Repeated Exposure) 2. Aspiration Toxicity 1. Aquatic toxicity - chronic 3.
CAS 64-17-5	Ethanol	2.5 - 5 %	Flammable Liquid 2. Eye Irritation 2A.
CAS 78-93-3	Butanone	1 - 2.5 %	Flammable Liquid 2. Eye Irritation 2A. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 100-41-4	Ethylbenzene	< 1 %	Flammable Liquid 2. Acute Toxicity 4 (inhalative). Specific Target Organ Toxicity (Repeated Exposure) 2. Aspiration Toxicity 1.
CAS 7397-62-8	Glycollic acid butyl ester	< 1 %	Eye Damage 1. Reproductive toxicity 2.
CAS 71-36-3	Butan-1-ol	< 1 %	Flammable Liquid 3. Acute Toxicity 4 (oral). Skin Irritation 2. Eye Damage 1. Specific Target Organ Toxicity (Single Exposure) 3.
CAS 74-98-6	Propane	10 - 25 %	Flammable Gas 1. Compressed Gas.
CAS 106-97-8	Butane, <0,1% Butadiene	5 - 10 %	Flammable Gas 1. Compressed Gas.
CAS 75-28-5	i-Butane, <0,1% Butadiene	5 - 10 %	Flammable Gas 1. Compressed Gas.

Additional information: Contains Titanium dioxide and Bentonite: The maximum workplace exposure limits are, where necessary, listed in section 8.

4. 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.
In case of inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.
Following skin contact:	Immediately clean with water and soap followed by thorough rinsing. In case of skin reactions, consult a physician.
After 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.

After swallowing: Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Seek medical attention.

Most important symptoms and effects, both acute and delayed

May cause drowsiness or dizziness.
Causes serious eye irritation.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

-44 °C

Auto-ignition temperature: Not self-igniting

Suitable extinguishing media:

Extinguishing powder, alcohol resistant foam, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

Extremely flammable aerosol. Pressurised container: May burst if heated.
May form dangerous gases and vapors in case of fire.
Furthermore, there may develop: nitrogen oxides (NOx), carbon monoxide and carbon dioxide.

Special protective equipment and precautions for fire-fighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

Additional information:

Heating will lead to pressure increase: Danger of bursting and explosion. Use fine water spray to cool endangered containers.
Move undamaged containers from immediate hazard area if it can be done safely.
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
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:

Do not breathe vapours and spray. Avoid contact with the substance.
Eliminate all ignition sources if safe to do so. Provide adequate ventilation.
Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Keep unprotected people away.
Cordon off downwind area at risk and warn inhabitants.

Environmental precautions:

Do not allow to enter into ground-water, surface water or drains. Danger of explosion!
In case of release, notify competent authorities.

Methods for clean-up: Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).
Thoroughly clean surrounding area.
In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Do not breathe vapours and 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.
Guarantee sufficient ventilation during and after use, in order to prevent vapour accumulation.
Have eye wash bottle or eye rinse ready at work place. When handling large quantities, supply emergency spray.

Precautions against fire and explosion:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.

Storage

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 sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Store containers in upright position.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
67-64-1	Acetone	Canada: OEL 15 min	1,800 mg/m ³ ; 750 ppm
		Canada: OEL 8 hour	1,200 mg/m ³ ; 500 ppm
		Canada: OEL STEL	500 ppm
		Canada: OEL TWA	250 ppm
		Canada: VECD	500 ppm
		Canada: VEMP	250 ppm
123-86-4	n-Butyl acetate	Canada: OEL 15 min	950 mg/m ³ ; 200 ppm
		Canada: OEL 8 hour	713 mg/m ³ ; 150 ppm
		Canada: OEL STEL	150 ppm
		Canada: OEL TWA	50 ppm
		Canada: VECD	150 ppm
		Canada: VEMP	50 ppm
108-65-6	2-Methoxy-1-methylethyl acetate	Canada: OEL STEL	75 ppm
		Canada: OEL TWA	270 mg/m ³ ; 50 ppm
		Canada: OEL TWA	50 ppm
1330-20-7	Xylene (isomeric mixture)	Canada: OEL 15 min	651 mg/m ³ ; 150 ppm
		Canada: OEL 8 hour	434 mg/m ³ ; 100 ppm
		Canada: OEL TWA	20 ppm
		Canada: VECD	651 mg/m ³ ; 150 ppm
		Canada: VEMP	434 mg/m ³ ; 100 ppm
64-17-5	Ethanol	Canada: OEL 8 hour	1,880 mg/m ³ ; 1,000 ppm
		Canada: OEL STEL	1,000 ppm
		Canada: VECD	1,000 ppm
78-93-3	Butanone	Canada: OEL 15 min	885 mg/m ³ ; 300 ppm
		Canada: OEL 8 hour	590 mg/m ³ ; 200 ppm
		Canada: OEL STEL	100 ppm
			(may be absorbed through the skin)
		Canada: OEL TWA	50 ppm
			(may be absorbed through the skin)
100-41-4	Ethylbenzene	Canada: VECD	300 mg/m ³ ; 100 ppm
		Canada: VEMP	150 mg/m ³ ; 50 ppm
		Canada: OEL 15 min	543 mg/m ³ ; 125 ppm
		Canada: OEL 8 hour	434 mg/m ³ ; 100 ppm
		Canada: OEL TWA	20 ppm
		Canada: VEMP	20 ppm
71-36-3	Butan-1-ol	Canada: OEL 8 hour	60 mg/m ³ ; 20 ppm
		Canada: OEL Ceiling	30 ppm
		Canada: OEL TWA	15 ppm
		Canada: VEMP	20 ppm
74-98-6	Propane	Canada: OEL 8 hour	1,000 ppm

CAS No.	Designation	Type	Limit value
106-97-8	Butane, <0,1% Butadiene	Canada: OEL 8 hour	1,000 ppm
		Canada: OEL STEL	1,000 ppm
		Canada: VEMP	1,900 mg/m ³ ; 800 ppm
75-28-5	i-Butane, <0,1% Butadiene	Canada: OEL STEL	1,000 ppm
		Canada: VECD	1,000 ppm
13463-67-7	Titanium dioxide	Canada: OEL 8 hour	10 mg/m ³
		Canada: OEL TWA	10 mg/m ³ (inhalable fraction)
		Canada: OEL TWA	3 mg/m ³ (respirable fraction)
		Canada: VEMP	10 mg/m ³ (total dust)

Engineering controls

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

See also information in chapter 7, section storage.

Personal protection equipment (PPE)

Eye/face protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Skin protection: Flame retardant, antistatic and chemical resistant protective clothing.
Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
Glove material: Butyl caoutchouc (butyl rubber) (0.7 mm)
Permanent contact: 15 min
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Respiratory protection: Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
Recommendation: wear a half mask respirator with type A1/P2 filter or better
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.

General hygiene considerations:
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source.
Do not breathe vapours and spray. Do not get in eyes, on skin, or on clothing. When using do not eat or drink. 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. When handling large quantities, supply emergency spray.

Environmental exposure controls

Refer to 6.: Section "Environmental precautions".

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance: Physical state at 20 °C and 101.3 kPa: liquid
Form: Aerosol
Color: brown

Odor:	Characteristic
Odor threshold:	Not determined
pH:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flash point/flash point range:	-44 °C
Evaporation rate:	Not applicable
Flammability:	Extremely flammable aerosol.
Explosion limits:	LEL (Lower Explosion Limit): 1.70 Vol-% UEL (Upper Explosive Limit): 13.00 Vol-%
Vapor pressure:	at 20 °C: 3,600 hPa at 50 °C: 800 hPa
Vapor density:	Not determined
Density:	0.833 g/mL
Water solubility:	Slightly miscible
Partition coefficient: n-octanol/water:	Not determined
Auto-ignition temperature:	Not self-igniting
Thermal decomposition:	Not determined
Viscosity, dynamic:	Not determined
Viscosity, kinematic:	Not determined
Explosive properties:	Vapors may form explosive mixtures with air.
Ignition temperature:	365 °C (Butane)
Solvent content:	85.6 % (liquid and propellant)
Solid content:	12.0 %
Water content:	0.1 %

10. Stability and reactivity

Reactivity:	Extremely flammable aerosol Vapors may form explosive mixtures with air.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	Pressurised container: May burst if heated.
Conditions to avoid:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Incompatible materials:	No data available
Hazardous decomposition products:	No decomposition when used properly.
Thermal decomposition:	Not determined

11. Toxicological information

Toxicological tests

Acute toxicity: LC50 Rat: 536 - 1,072 mg/l/4h (inhalative)

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Based on available data, the classification criteria are not met.

Acute toxicity (dermal): Based on available data, the classification criteria are not met.

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Repeated exposure may cause skin dryness or cracking.

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

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

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

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

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

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

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

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

Symptoms

Inhaling can lead to irritations of the respiratory tract and mucous membrane.

Higher doses may lead to a narcotic effect.

After contact with skin: Repeated exposure may cause skin dryness or cracking.

The product is skin resorptive.

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

12. Ecological information

Ecotoxicity

Further details: No data available

Mobility in soil

No data available

Persistence and degradability

Further details: No data available

Additional ecological information

Volatile organic compounds (VOC):

85.58 % by weight

General information:

Do not allow to enter into ground-water, surface water or drains.

13. Disposal considerations

Product

Recommendation:

Do not pierce or burn, even after use.

Special waste. Dispose of waste according to applicable legislation.

Do not dispose of with household waste.

Package

Recommendation:

Dispose of waste according to applicable legislation.

Empty carefully and completely, if possible. Handle empty containers with care.

Incineration may cause explosion.

14. Transport information

UN number

ADR/RID, IMDG, IATA-DGR:

UN 1950

UN proper shipping name

ADR/RID, IMDG:

UN 1950, AEROSOLS

IATA-DGR:

UN 1950, AEROSOLS, FLAMMABLE

Transport hazard class(es)

ADR/RID:

Class 2, Code: 5F

IMDG:

Class 2.1, Subrisk -

IATA-DGR:

Class 2.1



Packing group

ADR/RID, IATA-DGR:

not applicable

IMDG:

-

Environmental hazards

Marine pollutant:

no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

Canada: Transportation of Dangerous Goods (TDG)

UN Number:

UN1950

Shipping name:

UN 1950, AEROSOLS

TDG class:

2.1

Special provisions:

80, 107

Explosive limit and limited quantity index:

1 L

Passenger carrying road or rail index:

75 L

Sea transport (IMDG)

UN number:	UN 1950
Proper shipping name::	UN 1950, AEROSOLS
Class or division, Subsidiary risk:	Class 2.1, Subrisk -
Packing Group:	-
EmS:	F-D, S-U
Special Provisions:	63 190 277 327 344 381 959
Limited quantities:	1000 mL
Excepted quantities:	E0
Package - Instructions:	P207, LP200
Package - Provisions:	PP87, L2
IBC - Instructions:	-
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	-
Tank instructions - Provisions:	-
Stowage and handling:	SW1 SW22
Segregation:	SG69
Properties and observations:	-
Marine pollutant:	no
Segregation group:	none

Air transport (IATA)

UN/ID number:	UN 1950
Proper shipping name::	UN 1950, AEROSOLS, FLAMMABLE
Class or division, Subsidiary risk:	Class 2.1
Hazard label:	Flamm. gas
Excepted Quantity Code:	E0
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y203 - Max. Net Qty/Pkg. 30 kg G
Passenger and Cargo Aircraft:	Pack.Instr. 203 - Max. Net Qty/Pkg. 75 kg
Cargo Aircraft only:	Pack.Instr. 203 - Max. Net Qty/Pkg. 150 kg
Special Provisions:	A145 A167 A802
Emergency Response Guide-Code (ERG):	10L

15. Regulatory information

National regulations - Canada

Acetone:	DSL: listed
Nitrocellulose:	DSL: listed
n-Butyl acetate:	DSL: listed
2-Methoxy-1-methylethyl acetate:	DSL: listed
Xylene (isomeric mixture):	DSL: listed
Ethanol:	DSL: listed
Butanone:	DSL: listed
Ethylbenzene:	DSL: listed
Glycolic acid butyl ester:	DSL: listed
Butan-1-ol:	DSL: listed
Propane:	DSL: listed
Butane, <0,1% Butadiene:	DSL: listed
i-Butane, <0,1% Butadiene:	DSL: listed
Titanium dioxide:	DSL: listed
Bentonite:	DSL: listed

16. Other information

Text for labeling:

Contains 25 - 50 % Acetone, 2.5 - 5 % Nitrocellulose, 2.5 - 5 % n-Butyl acetate, 2.5 - 5 % 2-Methoxy-1-methylethyl acetate, 2.5 - 5 % Xylene (isomeric mixture), 2.5 - 5 % Ethanol, 1 - 2.5 % Butanone, < 1 % Ethylbenzene, < 1 % Glycolic acid butyl ester, < 1 % Butan-1-ol, 10 - 25 % Propane, 5 - 10 % Butane, <0,1% Butadiene, 5 - 10 % i-Butane, <0,1% Butadiene.

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)
Fire: 4 (Severe)
Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)
Flammability: 4 (Severe)
Physical Hazard: 0 (Minimal)
Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	4
PHYSICAL HAZARD	0
	X

Abbreviations and acronyms:

Acute Toxicity: Acute toxicity
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
Aerosol: Aerosol
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
EC: European Community
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
EN: European Standard
EQ: Excepted quantities

Explosive: Explosives
 Eye Damage: Eye damage
 Eye Irritation: Eye irritation
 Flammable Gas: Flammable gases
 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
 Reproductive toxicity: Reproductive toxicity
 RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
 Skin Irritation: Skin irritation
 STOT RE: Specific target organ toxicity - repeated exposure
 STOT SE: Specific target organ toxicity - single exposure
 TLV: Threshold Limit Value
 TRGS: Technical Rules for Hazardous Substances
 UN: United Nations
 vPvB: Very persistent and very bioaccumulative
 WEL: Workplace Exposure Limit
 WHMIS: Workplace Hazardous Materials Information System

Reason of change: Changes in section 8: Occupational exposure limit values

Changes in section 8: Occupational exposure limit values

Date of first version: 7/10/1994

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.