in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

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1. Product and company identification

Product identifier

Trade name: 640F18 - Donning spray for silicone liners and prosthetic gloves (silicone, PVC)

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

General use: Pump spray: Solvent for orthopedic procedures

Details of the supplier of the safety data sheet

Company name:	Otto Bock Health Care
Street/POB-No.:	3820 W. Great Lakes Drive
Postal Code, city:	Salt Lake City, UT 84120
	USA
WWW:	www.ottobockus.com
Telephone:	+1 (801) 956-2400
Telefax:	+1 (801) 956-2401
Dept. responsible for info	rmation:
	Quality Department,
	Telephone: +1 (801) 954-2304 (7 AM – 3 PM, Mountain Time),
	Email: USRegulatory@ottobock.com

Additional information: Corporate headquarters: Ottobock SE & Co. KGaA Max-Näder-Straße 15 Duderstadt Germany

Emergency phone number

CHEMTREC, Telephone: +1 (800) 424-9300 Transport: CONSULTANK Lutz Harder GmbH (Contract QUALI003) Telephone: +49 (0)178-4337434 (from USA: 01149 178 4337434)

2. Hazards identification

Emergency overview

Appearance:	Form: liquid Color: colorless, clear
Odor:	alcoholic
Classification:	Flammable Liquid - Category 3; Eye Irritation - Category 2A; Specific Target Organ Toxicity (Single Exposure) - Category 3;
Hazard symbols:	
Signal word:	Warning
Hazard statements:	Flammable liquid and vapor.
	Causes serious eye irritation.
	May cause drowsiness or dizziness.

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Precautionary statements:

If medical advice is needed, have product container or label at hand. Keep out of reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Binse cautiously with water for several minutes. Remove contact lenses, if

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

Hazards not otherwise classified

see section 11: Toxicological information

3. Composition / Information on ingredients

Relevant	ingredients:
Relevant	ingreulents.

CAS No.	Designation	Content	Classification
CAS 67-63-0	Isopropyl alcohol	30 - 60 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A. Specific Target Organ Toxicity (Single Exposure) - Category 3.

	4. First aid measures
In case of inhalation:	Move victim to fresh air. Do not allow victim to become chilled. Keep victim warm. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen. Seek medical attention.
Following skin contact:	Change contaminated clothing. Thoroughly wash skin with soap and water.
After eye contact:	Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.
After swallowing:	Do not induce vomiting. Rinse mouth immediately and drink plenty of water. Immediately get medical attention.
Most importan	t symptoms/effects, acute and delayed
	May cause drowsiness or dizziness. High concentrations of vapors irritate the eyes and mucous membranes.

High concentrations of vapors irritate the eyes and mucous membranes. After resorption: Headache, dizziness, inebriation, unconsciousness. Prolonged/repetitive skin contact may cause skin defattening or dermatitis.

Information to physician

Treat symptomatically.

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5. Fire fighting measures

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Flash point/flash point ra	nge:
	75.2 °F (DIN 51755)
Auto-ignition temperature	x No data available
Suitable extinguishing m	edia:
	Carbon dioxide, dry chemical powder, water spray jet In case of large fires water spray jet or alcohol resistant foam.
Extinguishing media whi	ch must not be used for safety reasons: Strong water jet
Specific hazar	ds arising from the chemical
	Flammable. Liquid evaporates quickly. Vapors are heavier than air and will travel at floor level. Vapors may form explosive mixtures with air. Beware of reignition. In case of fire may be liberated: Carbon monoxide and carbon dioxide.
Protective equipment an	d precautions for firefighters: Wear self-contained breathing apparatus.
Additional information:	Cool exposed containers with water spray.

	6. Accidental release measures		
Personal precautions:	Remove all sources of ignition. Remove persons not involved upwind. Wear suitable protective clothing. Do not breathe vapors. Provide adequate ventilation.		
Environmental precaution	ons:		
	Do not allow to penetrate into soil, waterbodies or drains.		
	Risk of explosion if the liquid enters the sewage system.		
	If necessary notify appropriate authorities.		
Methods for clean-up:	Soak up with absorbent materials such as sand, siliceus earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance.		
	Keep away from sources of ignition - No smoking.		

7. Handling and storage

Handling

Advices on safe handling	 Provide adequate ventilation, and local exhaust as needed. Wear appropriate protective equipment. Do not allow containers to stand open. Store product in a quantity adequate for 1 work-shift only. Do not spray in the eyes.
Precautions against fire a	and explosion: Take precautionary measures against static discharges. Keep away from sources of ignition - No smoking. Avoid sparks. Do not use any spark discharging tools/utensils. Air combined with vapors may form potentially explosive mixtures that are heavier than air.
Specific use(s)	Pump spray: Solvent for orthopedic procedures.

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Storage

Requirements for storero	poms and containers:
	Keep container tightly closed in a cool, well-ventilated place.
	Keep away from heat sources, sparks and open flames.
	Protect against direct sunlight.
Hints on joint storage:	Do not store together with combustible or self-igniting materials or any highly flammable solids.
	Avoid contact with strong oxidizing agents.
Further details:	Air combined with vapors may form potentially explosive mixtures that are heavier than air.

8. Exposure controls / personal protection

Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Туре	Limit value
67-63-0	Isopropyl alcohol	USA: ACGIH: STEL USA: ACGIH: TWA USA: NIOSH: STEL USA: NIOSH: TWA USA: OSHA: TWA	984 mg/m ³ ; 400 ppm 492 mg/m ³ ; 200 ppm 1225 mg/m ³ ; 500 ppm 980 mg/m ³ ; 400 ppm 980 mg/m ³ ; 400 ppm

Biological limit values:

CAS No. Designation	п Туре	Limit value	Parameter	Sampling	
67-63-0 Isopropyl alcohol	USA: ACGIH-BE urine	El, 40 mg/L	Acetone in urine	end of shift at end of workweek	

Engineering controls

Provide good ventilation and/or an exhaust system in the work area. Take precautionary measures against static discharges. Keep away from sources of ignition. Avoid sparks. 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	Wear suitable protective clothing. If necessary: Flame retardant protective clothing.
	 protective gloves according to OSHA Standard - 29 CFR: 1910.138. Glove material: Butyl caoutchouc (butyl rubber), thickness >=0,5 mm, breakthrough time 8 h Fluororubber (Viton), thickness > =0,4 mm, breakthrough time 8 h Nitrile rubber, thickness > =0,35 mm, breakthrough time 8 h Polychloroprene, thickness > =0,5 mm, breakthrough time 4 h Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

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Respiratory protection:	When vapors form, use respiratory protection. Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
	Use filter type A (= against vapors of organic substances) according to OSHA Standard -
	29 CFR: 1910.134 or ANSI Z88.2.
	When vapors form < 0.5%: Filter A2
	When vapors form > 0.5% - < 1%: Filter A3
	When vapors form > 1%: Respiratory protective device.
General hygiene conside	rations:
	When using do not eat, drink or smoke.
	Keep away from food and drinks.

Do not spray in the eyes. Provide a conveniently located eye rinse station.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance:	Form: liquid Color: colorless, clear
Odor:	alcoholic
Odor threshold:	No data available
pH value:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	75.2 °F (DIN 51755)
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	LEL (Lower Explosion Limit): (Isopropyl alcohol) 2.00 Vol-% UEL (Upper Explosive Limit): (Isopropyl alcohol) 12.00 Vol-%
Vapor pressure:	at 68 °F: (Isopropyl alcohol) 44 hPa at 122 °F: (Isopropyl alcohol) 225 hPa
Vapor density:	No data available
Density:	at 68 °F: 0.908 g/mL
Water solubility:	at 68 °F: soluble
Partition coefficient: n-octanol/water:	(Isopropyl alcohol) -0.16 log P(o/w) Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Ignition temperature:	797 °F (DIN 51794)

10. Stability and reactivity

Highly flammable liquid and vapor. Reactivity:

Chemical stability: Product is stable under normal storage conditions.

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Possibility of hazardous reactions		
	Liquid evaporates quickly.	
	Vapors are heavier than air and will travel at floor level. Vapors may form explosive mixtures with air. Beware of reignition.	
	vapors may form explosive mixtures with all. Deware of reignition.	
Conditions to avoid:	Keep away from heat sources, sparks and open flames.	
	Take precautionary measures against static discharges.	
	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
Incompatible materials:	Do not store together with combustible or self-igniting materials or any highly flammable	
	solids.	
Hazardous decomposition products:		
Thermal decomposition:	In case of fire may be liberated: Carbon monoxide and carbon dioxide. No data available	

11. Toxicological information

Toxicological tests

LD50 Rat, oral: 9140 mg/kg	
Acute toxicity (oral): Lack of data.	
Acute toxicity (dermal): Lack of data.	
Acute toxicity (inhalative): Lack of data.	
Skin corrosion/irritation: Lack of data.	
Serious eye damage/irritation: Eye Irritation - Category 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: Lack of data.	
Effects on or via lactation: Lack of data.	
Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) - Category 3 = May cause drowsiness or dizziness.	
Specific target organ toxicity (repeated exposure): Lack of data.	
Aspiration hazard: Lack of data.	
High concentrations of vapors irritate the eyes and mucous membranes. After resorption: Headache, dizziness, inebriation, unconsciousness. After contact with skin: Prolonged/repetitive skin contact may cause skin defattening or dermatitis.	

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12. Ecological information

Ecotoxicity

Aquatic toxicity:

Isopropyl alcohol: LC50 Leuciscus idus test: 8970 mg/l/48h LC50 Goldfish: > 5000 mg/l/24h EC50 Daphnia magna: 9740 mg/l/24h

Mobility in soil

No data available

Persistence and degradability

Product is readily biodegradable. Further details:

Additional ecological information

Volatile organic compounds (VOC):

50 % by weight = 454 g/LGeneral information: Do not allow to penetrate into soil, waterbodies or drains.

13. Disposal considerations

Product

Recommendation: Recycling or special waste incineration.

Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation. Non-contaminated packages may be recycled. Cleaning agent (recommendation): water

14. Transport information

USA: Department of Transportation (DOT)

Identification number:	UN1993
Proper shipping name:	UN 1993, UN 1993, flammable liquids, n.o.s. (Isopropyl alcohol)
Hazard class or Division:	3
Packing Group:	
Labels:	3
Symbols:	G
Special provisions:	B1, B52, IB3, T4, TP1, TP29
Packaging – Exceptions:	150
Packaging – Non-bulk:	203
Packaging – Bulk:	242
Quantity limitations – Passenger aircraft / ra	ail:
	60 L
Quantity limitations – Cargo only:	220 L
Vessel stowage – Location:	A

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Sea transport (IMDG)	
UN number:	UN 1993
Proper shipping name:	UN 1993, FLAMMABLE LIQUID, N.O.S. (Isopropyl alcohol)
Class or division, Subsidary risk:	Class 3, Subrisk -
Packing Group:	
EmS:	F-E, S-E
Special provisions:	223, 274, 955
Limited quantities:	5 L
Excepted quantities:	E1
Contaminated packaging - Instructions:	P001, LP01
Contaminated packaging - Provisions:	-
IBC - Instructions:	IBC03
IBC - Provisions:	-
Tank instructions - IMO:	-
Tank instructions - UN:	T4
Tank instructions - Provisions:	TP1, TP29
Stowage and handling:	Category A.
Properties and observations:	-
Marine pollutant:	no
Segregation group:	none
Air transport (IATA)	
UN/ID number:	UN 1993
Proper shipping name:	UN 1993, FLAMMABLE LIQUID, N.O.S. (Isopropyl alcohol)
Class or division, Subsidary risk:	Class 3
Packing Group:	
Hazard label:	Flamm. liquid
Excepted Quantity Code:	E1
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y344 - Max. Net Qty/Pkg. 10 L
Passenger and Cargo Aircraft:	Pack.Instr. 355 - Max. Net Qty/Pkg. 60 L
Cargo Aircraft only:	Pack.Instr. 366 - Max. Net Qty/Pkg. 220 L
Special provisions:	A3
Emergency Response Guide-Code (ERG):	3L

15. Regulatory information

National regulations - U.S. Federal Regulations

Isopropyl alcohol:	TSCA Inventory: listed TSCA HPVC: not listed Carcinogen Status: IARC Rating: Group 3 OSHA Carcinogen: not listed NTP Rating: not listed NIOSH Recommendations: Occupational Health Guideline: 0359
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National regulations - U.S. State Regulations

Isopropyl alcohol: Idaho Air Pollutant List: Title 585: AAC: 49 -- EL: 65.3 -- WEL: 980 -Title 586: -Massachusetts Haz. Substance codes: 2,4,5,6 F9 Minnesota Haz. Substance: Codes: ANO -- Ratings: 7.84 -- Status: Title III. TRI. New Jersey RTK Hazardous Substance: DOT: 1219 - Sub No.: 1076 - TPQ: -Pennsylvania Haz. Substance code: E Washington Air Contaminant: TWA: 400 ppm - 980 mg -- STEL: 500 ppm - 1225 mg

National regulations - Great Britain

•3Y

Hazchem-Code:

16. Other information Contains 30 - 60 % Isopropyl alcohol. Safety data sheet available on request. Text for labeling: Hazard rating systems: NFPA Hazard Rating: Health: 1 (Slight) Fire: 2 (Moderate) Reactivity: 0 (Minimal) HEALTH HMIS Version III Rating: 1 Health: 1 (Slight) FLAMMABILITY 2 Flammability: 2 (Moderate) PHYSICAL HAZARD 0 Physical Hazard: 0 (Minimal) κ Personal Protection: K Reason of change: Changes in section 1.3: Corporate headquarters Date of first version: 4/23/2005 Department issuing data sheet

Contact person: see section 1: Dept. 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.