

**1. Product and company identification**

**Product identifier**

Trade name: 636W80 - Primer

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

General use: Adhesive for bonding of rubber and elastomers to various materials.  
For orthopedic procedures. For commercial user only.

**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 information:  
 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, volatile  
 Color: colorless up to yellow  
 Odor: characteristic  
 Classification: Flammable Liquid - Category 2; Eye Irritation - Category 2A;  
 Specific Target Organ Toxicity (Single Exposure) - Category 3;

Hazard symbols:



Signal word: **Danger**  
 Hazard statements: Highly flammable liquid and vapor.  
 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.  
 Avoid breathing vapors.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 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.  
 Store in a well-ventilated place. Keep container tightly closed.  
 Dispose of contents/container to hazardous or special waste collection point.

**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**

Danger of cutaneous absorption.  
 see section 11: Toxicological information

**3. Composition / Information on ingredients**

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 78-93-3	Butanone	70 - 85 %	Flammable Liquid - Category 2. Eye Irritation - Category 2A. Specific Target Organ Toxicity (Single Exposure) - Category 3.

**4. First aid measures**

General information: Keep away from sources of ignition - No smoking.

In case of inhalation: Provide fresh air. Put victim at rest and keep warm. Immediately get medical attention. If breathing becomes irregular or ceases, apply rescue breathing or artificial respiration immediately, where required supply oxygen.

Following skin contact: After contact with skin, wash immediately with soap and plenty of water. Seek medical attention if problems persist.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After swallowing: Rinse mouth immediately and drink plenty of water. Do not induce vomiting. Provide fresh air. Immediately get medical attention.

**Most important symptoms/effects, acute and delayed**

fatigue, drowsiness, shortage of breath.  
 Other symptoms: Headache, nausea and inebriation.  
 May cause irritations.

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**Information to physician**

Treat symptomatically.

After ingestion of high quantities:

As a laxative, affected person should drink sodium sulfate (1 tablespoon in 1/4 L water).

**5. Fire fighting measures**

Flash point/flash point range:

17.6 °F (c.c.)

Auto-ignition temperature: &lt;= 180.5 °F

Suitable extinguishing media:

In case of fire, use carbon dioxide, sand or dry chemical powder. Never use water.

Extinguishing media which must not be used for safety reasons:

Water

**Specific hazards arising from the chemical**

Highly flammable liquid and vapor. Vapors are heavier than air and will travel at floor level.

Explosive mixtures with air may even form at room temperature.

Hazardous vapors may form during fires.

In case of fire may be liberated: Carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

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

Additional information:

Move container away or cool with water from a protected position.

Do not allow water used to extinguish fire to enter drains, ground or waterways.

**6. Accidental release measures**

Personal precautions:

Keep away from sources of ignition.

Do not breathe vapors. Avoid contact with the substance.

Provide adequate ventilation. Wear protective equipment.

When using do not smoke. Avoid sparks.

Keep unprotected people away.

Environmental precautions:

Do not empty into drains.

Methods for clean-up:

Plug leak if safely possible.

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.

Additional information:

Use explosion-proof equipment and non-sparking tools/utensils.

**7. Handling and storage****Handling**

Advices on safe handling: Avoid generation of vapors/aerosols.

Provide adequate ventilation, and local exhaust as needed.

recommendation: Execute works under fume hood.

Do not inhale substance. Avoid contact with skin and eyes.

Precautions against fire and explosion:

- Keep away from sources of ignition - No smoking.
- Take precautionary measures against static discharges.
- Use only explosion-proof equipment.
- Release of highly flammable gas/vapor.

Specific use(s)

Adhesive for bonding of rubber and elastomers to various materials.  
For orthopedic procedures.

**Storage**

Requirements for storerooms and containers:

- Keep only in the original container.
- Keep container tightly closed in a cool, well-ventilated place.
- Keep container dry. Protect from sunlight.

Hints on joint storage:

Avoid contact with oxidizing agents, reducing agents, strong acids and strong alkalis.  
Do not store together with combustible or self-igniting materials or any highly flammable solids.

Further details:

- Keep away from food, drink and animal feedingstuffs.
- Restrict general access to the store.

**8. Exposure controls / personal protection**

**Exposure guidelines**

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
78-93-3	Butanone	USA: ACGIH: STEL	885 mg/m <sup>3</sup> ; 300 ppm
		USA: ACGIH: TWA	590 mg/m <sup>3</sup> ; 200 ppm
		USA: NIOSH: STEL	885 mg/m <sup>3</sup> ; 300 ppm
		USA: NIOSH: TWA	590 mg/m <sup>3</sup> ; 200 ppm
		USA: OSHA: TWA	590 mg/m <sup>3</sup> ; 200 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
78-93-3	Butanone	USA: ACGIH-BEI, urine	2 mg/L	MEK	end of exposure or end of shift

**Engineering controls**

- Provide adequate ventilation.
- recommendation: Execute works under fume hood.
- Use only explosion-proof equipment.
- 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-resistant antistatic protective clothing
- Protective gloves according to OSHA Standard - 29 CFR: 1910.138.
- Glove material: Butyl caoutchouc (butyl rubber)-Layer thickness: 0,7 mm.
- Breakthrough time: >240 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. Use filter type A (= against vapors of organic substances) according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2.

General hygiene considerations:

Avoid contact with skin and eyes. Do not inhale substance.  
 When using do not eat, drink or smoke.  
 Take off immediately all contaminated clothing.  
 Wash hands before breaks and after work.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance:	Form: liquid, volatile Color: colorless up to yellow
Odor:	characteristic
Odor threshold:	No data available
pH value:	at 100%: 7
Melting point/freezing point:	<= -58 °F
Initial boiling point and boiling range:	> 172.4 °F
Flash point/flash point range:	17.6 °F (c.c.)
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	LEL (Lower Explosion Limit): 1.80 Vol-% UEL (Upper Explosive Limit): 11.50 Vol-%
Vapor pressure:	at 77 °F: 13.33 hPa
Vapor density:	No data available
Density:	at 77 °F: 0.84 g/mL
Solubility:	at 68 °F: in organic solvents: miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	<= 180.5 °F
Thermal decomposition:	No data available
Ignition temperature:	> 482 °F
Additional information:	Relative vapor density at 68 °F (air=1): >1

## 10. Stability and reactivity

Reactivity: Highly flammable liquid and vapor.

Chemical stability: Product is stable under normal storage conditions.

Possibility of hazardous reactions  
 Vapors are heavier than air and will travel at floor level.  
 Explosive mixtures with air may even form at room temperature.

Conditions to avoid: Protect against heat /sun rays.

Incompatible materials: Avoid contact with oxidizing agents, reducing agents, strong acids and strong alkalis. Do not store together with combustible or self-igniting materials or any highly flammable solids.

Hazardous decomposition products:

Hazardous vapors may form during fires.

In case of fire may be liberated: carbon monoxide and carbon dioxide.

Thermal decomposition:

No data available

## 11. Toxicological information

### Toxicological tests

Acute toxicity: LD50 Rat, oral: 2-Butanone 3460 mg/kg  
 LD50 Rat, dermal: 2-Butanone 5000 mg/kg  
 LC50 Rat, inhalative: 2-Butanone 20 mg/L/4h

Toxicological effects:

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.

Other information:

Danger of cutaneous absorption.

### Symptoms

After absorption of large quantities:

CNS disorders, inebriation, blood pressure drop, narcosis, cardiac arrhythmias.

In case of inhalation:

Mucous membrane irritation, cough, shortage of breath, fatigue, drowsiness, dizziness.

In case of ingestion: Nausea, stomachache vomiting.

After contact with skin: May cause irritations.

## 12. Ecological information

### Ecotoxicity

Further details:

No data available

### Mobility in soil

No data available

**Persistence and degradability**

Further details: 2-Butanone:  
 Abiotic degradation: quickly degradable (Air).  
 DOC reduction: >70%; BOD >60%; BOD5/COD ratio: >50%  
 Product is readily biodegradable.

**Additional ecological information**

Volatile organic compounds (VOC):  
 82.5 % by weight = 693 g/L  
 General information: Do not allow to penetrate into soil, waterbodies or drains.

**13. Disposal considerations**

**Product**

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

**Contaminated packaging**

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**

**USA: Department of Transportation (DOT)**

Identification number: UN1133  
 Proper shipping name: UN 1133, UN 1133, adhesives  
 Hazard class or Division: 3  
 Packing Group: II  
 Labels: 3  
 Special provisions: 149, B52, IB2, T4, TP1, TP8  
 Packaging – Exceptions: 150  
 Packaging – Non-bulk: 173  
 Packaging – Bulk: 242  
 Quantity limitations – Passenger aircraft / rail: 5 L  
 Quantity limitations – Cargo only: 60 L  
 Vessel stowage – Location: B  
 Vessel stowage – Other:



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**Sea transport (IMDG)**

UN number: UN 1133  
 Proper shipping name: UN 1133, Adhesives  
 Class or division, Subsidiary risk: Class 3, Subrisk -  
 Packing Group: II  
 EmS: F-E, S-D  
 Special provisions: -  
 Limited quantities: 5 L  
 Excepted quantities: E2  
 Contaminated packaging - Instructions: P001  
 Contaminated packaging - Provisions: PP1  
 IBC - Instructions: IBC02  
 IBC - Provisions: -  
 Tank instructions - IMO: -  
 Tank instructions - UN: T4  
 Tank instructions - Provisions: TP1, TP8  
 Stowage and handling: Category B.  
 Properties and observations: Adhesives are solutions of gums, resins, etc., usually volatile due to the solvents. Miscibility with water depends upon their composition.  
 Marine pollutant: no  
 Segregation group: none

**Air transport (IATA)**

UN/ID number: UN 1133  
 Proper shipping name: UN 1133, Adhesives  
 Class or division, Subsidiary risk: Class 3  
 Packing Group: II  
 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): 3L

**15. Regulatory information**

**National regulations - U.S. Federal Regulations**

Butanone: TSCA Inventory: listed  
 TSCA HPVC: not listed  
 Other Environmental Laws:  
 CERCLA: RQ 5000 lbs.  
 RCRA Hazardous Wastes: Code U159  
 RCRA Groundwater Monitoring: Methods 8015, 8240 / PQL 10, 100  
 NIOSH Recommendations:  
 Occupational Health Guideline: 0069\*



**National regulations - U.S. State Regulations**

Butanone: Delaware Air Quality Management List:  
 DRQ: 5000 - RQ State: Federal Regulations Apply  
 Idaho Air Pollutant List: Title 585/Title 586: -  
 Massachusetts Haz. Substance codes: 2,4,5,6 F8 F9  
 Minnesota Haz. Substance:  
 Codes: ANO - Ratings: 9.7 - Status: Air Pollutant Title III. TRI.  
 New Jersey RTK Hazardous Substance:  
 DOT: 1193 - Sub No.: 1258 - TPQ: -  
 New York List of Hazardous Substances:  
 RQ-Air: 5000 - RQ-Land: 1 - Note: No Note Associated with this chemical.  
 Pennsylvania Haz. Substance code: E  
 Washington Air Contaminant:  
 TWA: 200 ppm - 590 mg - STEL: 300 ppm - 885 mg

**National regulations - Great Britain**

Hazchem-Code: •3YE

**16. Other information**

Text for labeling: Contains 70 - 85 % Butanone. Safety data sheet available on request.

Hazard rating systems: NFPA Hazard Rating:  
 Health: 1 (Slight)  
 Fire: 3 (Serious)  
 Reactivity: 0 (Minimal)



HMIS Version III Rating:  
 Health: 1 (Slight)  
 Flammability: 3 (Serious)  
 Physical Hazard: 0 (Minimal)  
 Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	3
PHYSICAL HAZARD	0
X	

Reason of change: Changes in section 1.3: Corporate headquarters  
 Date of first version: 9/30/2004

**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.