

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
Department 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: Physical state at 68 °F and 101.3 kPa: liquid
Color: colorless
Odor: Solvent-like
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 mist/vapors/spray.
Wear protective gloves/protective clothing/eye 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).

Hazards not otherwise classified

Potentially explosive mixtures may form if adequate ventilation is not provided.
Inhaling can lead to irritations of the respiratory tract and mucous membrane.
Higher doses may lead to a narcotic effect.
Special danger of slipping by leaking/spilling product.
see section 11: Toxicological information

3. Composition / Information on ingredients

Relevant ingredients:

| CAS No. | Designation | Concentration | Classification |
|-------------|-------------|---------------|--|
| CAS 78-93-3 | Butanone | 70 - 100 % | Flammable Liquid - Category 2. Eye Irritation - Category 2A. Specific Target Organ Toxicity (Single Exposure) - Category 3. |

4. First aid measures

| | |
|-------------------------|--|
| General information: | If medical advice is needed, have product container or label at hand. First aider: Pay attention to self-protection! 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/effects, acute and delayed

May cause drowsiness or dizziness. Causes serious eye irritation.
Higher doses may lead to a narcotic effect.

Information to physician

Treat symptomatically.

5. Fire fighting measures

Flash point/flash point range:

21.2 °F

Auto-ignition temperature: No data available

Suitable extinguishing media:

Water spray jet, dry chemical powder, alcohol resistant foam and carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

Specific hazards arising from the chemical

Highly flammable liquid and vapor.

Air combined with vapors may form potentially explosive mixtures that are heavier than air. Vapors may proceed on the ground over great distances and cause fire and backflashes.

Furthermore, there may develop: 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:

Heating will lead to pressure increase: Danger of bursting and explosion. Keep containers cool with water spray.

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:

Avoid breathing mist/vapors/spray. Avoid contact with the substance. Eliminate all ignition sources if safe to do so. If possible, eliminate leakage. Provide adequate ventilation.

Wear appropriate protective equipment. Keep unprotected people away.

Cordon off downwind area at risk and warn inhabitants.

Take off immediately all contaminated clothing and wash it before reuse.

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:

In case of greater quantities: Collect mechanically (use only explosion-proof equipment when pumping out).

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).

Additional information:

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

7. Handling and storage

Handling

Advices on safe handling: Provide adequate ventilation, and local exhaust as needed. Avoid breathing vapors. 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 immediately all contaminated clothing and wash it before reuse.
Guarantee sufficient ventilation during and after use, in order to prevent vapor accumulation.
Have eye wash bottle or eye rinse ready at work place.

Precautions against fire and explosion:

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.
Use only explosion-protected equipment/instruments. Do not weld.
In partially filled containers explosive mixtures may form.

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 heat and direct sunlight.
Store containers in upright position.

Hints on joint storage:

Do not store together with: Oxidizing agents and strong acids.
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 |
|---------|-------------|------------------|------------------------------------|
| 78-93-3 | Butanone | USA: ACGIH: STEL | 150 ppm |
| | | | (may be absorbed through the skin) |
| | | USA: ACGIH: TWA | 75 ppm |
| | | | (may be absorbed through the skin) |
| | | USA: IDLH: TWA | 3,000 ppm |
| | | USA: NIOSH: STEL | 885 mg/m ³ ; 300 ppm |
| | | USA: NIOSH: TWA | 590 mg/m ³ ; 200 ppm |
| | | USA: OSHA: TWA | 590 mg/m ³ ; 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 for good ventilation or exhaust system or work with completely self-contained equipment. Explosion protection required.
See also information in chapter 7, section storage.

Personal protection equipment (PPE)

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|---------------------------------|--|
| 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: Fluororubber (Viton) Layer thickness: 0.7 mm Breakthrough time: 15 min Splash guard: nitrile rubber Layer thickness: 0.12 mm cover material: Barrier 02-100 Breakthrough time: 480 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 according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/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. Avoid breathing vapors. Do not get in eyes, on skin, or on clothing. Take off immediately all contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. When using do not eat or drink. Wash hands thoroughly after handling. Have eye wash bottle or eye rinse ready at work place. |

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 68 °F and 101.3 kPa: liquid Color: colorless |
| Odor: | Solvent-like |
| Odor threshold: | No data available |
| pH: | at 100%: 7 |
| Melting point/freezing point: | No data available |
| Initial boiling point and boiling range: | 176 °F |
| Flash point/flash point range: | 21.2 °F |
| Evaporation rate: | No data available |
| Flammability: | Highly flammable liquid and vapor. |
| Explosion limits: | LEL (Lower Explosion Limit): 1.80 Vol-% UEL (Upper Explosive Limit): 11.50 Vol-% |
| Vapor pressure: | at 68 °F: 104 hPa |
| Vapor density: | No data available |
| Density: | at 68 °F: 0.85 g/mL |

| | |
|---|--|
| Solubility: | organic solvents 82.6 mg/L |
| Water solubility: | Partially soluble |
| Partition coefficient: n-octanol/water: | at 104 °F: 0.3 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: | 941 °F |

10. Stability and reactivity

| | |
|-------------------------------------|--|
| Reactivity: | Highly flammable liquid and vapor. |
| Chemical stability: | Stable under recommended storage conditions. |
| Possibility of hazardous reactions: | Heating will lead to pressure increase: Danger of bursting and explosion. Reacts with oxidizing agents and strong acids.. |
| Conditions to avoid: | Keep away from heat sources, sparks and open flames. Protect from direct sunlight. |
| Incompatible materials: | Oxidizing agents and strong acids. |
| Hazardous decomposition products: | No hazardous reaction when handled and stored according to provisions. |
| Thermal decomposition: | No data available |

11. Toxicological information

Toxicological tests

| | |
|------------------------|--|
| Toxicological effects: | <p>The statements are derived from the properties of the single components. No toxicological data is available for the product as such.</p> <p>Acute toxicity (oral): Based on available data, the classification criteria are not met.</p> <p>Acute toxicity (dermal): Based on available data, the classification criteria are not met.</p> <p>Acute toxicity (inhalative): Based on available data, the classification criteria are not met.</p> <p>Skin corrosion/irritation: Based on available data, the classification criteria are not met.</p> <p>Serious eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.</p> <p>Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.</p> <p>Skin sensitisation: Based on available data, the classification criteria are not met.</p> <p>Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.</p> <p>Carcinogenicity: Based on available data, the classification criteria are not met.</p> <p>Reproductive toxicity: Based on available data, the classification criteria are not met.</p> <p>Effects on or via lactation: Lack of data.</p> <p>Specific target organ toxicity (single exposure): Specific Target Organ Toxicity (Single Exposure) - Category 3 = May cause drowsiness or dizziness.</p> <p>Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.</p> <p>Aspiration hazard: Based on available data, the classification criteria are not met.</p> |
| Other information: | <p>Information about 2-Butanone:</p> <p>LD50, Rat, oral: 2,193 mg/kg (OECD 423)</p> <p>LD50, Rabbit, dermal: > 10 mL/kg bw (OECD 402)</p> |

Symptoms

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

12. Ecological information

Ecotoxicity

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|-------------------|---|
| Aquatic toxicity: | <p>Information about 2-Butanone:</p> <p>Fish toxicity:</p> <p>LC50 Pimephales promelas (fathead minnow): 2993 mg/L/96h (OECD 203)</p> <p>Daphnia toxicity:</p> <p>EC50 Daphnia magna (Big water flea): 308 mg/L/48h (OECD 202)</p> <p>Algae toxicity:</p> <p>EC50 Pseudokirchneriella subcapitata (green algae): 2029 mg/L/96h (OECD 201)</p> |
|-------------------|---|

Mobility in soil

No data available

Persistence and degradability

| | |
|------------------|-------------------|
| Further details: | No data available |
|------------------|-------------------|

Additional ecological information

Volatile organic compounds (VOC):

82.63 % by weight / 702.4 g/L

General information:

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

13. Disposal considerations

Product

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

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

ADR/RID, IMDG, IATA-DGR:

UN 1133

UN proper shipping name

ADR/RID, IMDG, IATA-DGR:

UN 1133, ADHESIVES

Transport hazard class(es)

ADR/RID:

Class 3, Code: F1

IMDG:

Class 3, Subrisk -

IATA-DGR:

Class 3



Packing group

ADR/RID, IMDG, IATA-DGR:

II

Environmental hazards

Marine pollutant:

no

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

No data available

USA: Department of Transportation (DOT)

Identification number: UN1133
 Proper shipping name: 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:



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
 Package - Instructions: P001
 Package - 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
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

16. Other information

Text for labeling:

Hazard rating systems:



Contains 70 - 100 % Butanone.

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 |

Abbreviations and acronyms:

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
 AS/NZS: Australian Standards/New Zealand Standards
 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
 EC50: Effective Concentration 50%
 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
 LC50: Median lethal concentration
 LD50: Lethal dose 50%
 LEL: Lower Explosion Limit
 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
 RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
 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

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

Date of first version: **9/30/2004**

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.