






Safety Data Sheet

1 - Identification

Product Name: WD-40® BIKE Chain Cleaner & Degreaser Product Use: Chain Cleaner, Degreaser Restrictions on Use: None identified SDS Date Of Preparation: 01/26/2015	Manufacturer: WD-40 Company Address: 9715 Business Park Ave San Diego, CA , USA 92131 Telephone: +1-800-448-9340 +1-858-251-5600 Emergency only: 1-888-324-7596 (PROSAR) Information: 1-888-324-7596 Chemical Spills: 1-800-424-9300 (Chemtrec) 1-703-527-3887 (International Calls)
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2 – Hazards Identification

<p>Hazcom 2012/GHS Classification: Flammable Aerosol Category 2 Gas Under Pressure: Compressed Gas Eye Irritant Category 2A</p> <p>Note: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.</p> <p>Label Elements:</p> <div style="text-align: center;">    </div> <p>DANGER! Extremely Flammable Aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation.</p> <p>Prevention Keep away from heat, sparks, open flames, hot surfaces – No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Wash thoroughly after handling. Wear eye protection.</p> <p>Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.</p> <p>Storage Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place.</p>

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent	US Hazcom 2012/ GHS Classification
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Non-hazardous Ingredients	Mixture	Balance	Not Hazardous
2-(2-Butoxyethoxy)ethanol (Glycol Ether DB)	112-34-5	5-10%	Eye Irritant Category 2
Isopropyl Alcohol (Isopropanol)	67-63-0	1-5%	Flammable Liquid Category 2 Eye Irritant Category 2 Specific Target Organ Toxicity Single Exposure Category 3 (nervous system effects)
Liquefied Petroleum Gas (propane, n-butane) or Isobutane propellant	68476-86-8 75-28-5	1-5%	Flammable Gas Category 1 Gas Under Pressure, Compressed Gas
Surfactants	Proprietary	<2%	Eye Damage Category 1 Aquatic Acute Toxicity Category 2

Note: The specific chemical identity and exact percentages are a trade secret.

4 – First Aid Measures

Ingestion (Swallowed): Do not induce vomiting. Call a physician, poison control center, or the WD-40 Safety Hotline at 1-888-324-7596. Rinse mouth with water and give one eight-ounce glass of water to drink if the patient is conscious and responsive. Never give anything by mouth to an unconscious person.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

Skin Contact: Wash with soap and water. Remove contaminated clothing and wash before reuse. Get medical attention if irritation persists or symptoms of exposure develop.

Inhalation (Breathing): Remove to fresh air. Get medical attention if irritation or symptoms persist.

Signs and Symptoms of Exposure: May cause eye irritation. Excessive inhalation can cause headache, drowsiness, and nausea. Can cause irritation of respiratory tract. Swallowing may cause gastrointestinal irritation.

Indication of Immediate Medical Attention/Special Treatment Needed: Immediate medical attention is generally not required.

5 – Fire Fighting Measures

Suitable (and unsuitable) Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam.

Specific Hazards Arising from the Chemical: Contents under pressure. Keep away from ignition sources and open flames. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Concentrate is a flammable liquid. Vapors are heavier than air and may travel to remote ignition sources and flash back. A vapor and air mixture can create an explosion hazard in confined spaces.

Special Protective Equipment and Precautions for Fire-Fighters: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect against bursting containers.

6 – Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Remove personnel from general area. Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area.

Methods and Materials for Containment/Cleanup: Leaking cans should be placed in a plastic bag or open pail until the pressure has dissipated. Contain and collect liquid with an inert absorbent and place in a container for disposal. Clean spill area thoroughly. Report spills to authorities as required.

7 – Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use only with adequate ventilation. Keep away from heat, sparks, pilot lights, hot surfaces and open flames. Unplug electrical tools, motors and appliances before spraying or bringing the can near any source of electricity. Electricity can burn a hole in the can and cause contents to burst into flames. To avoid serious burn injury, do not let the can touch battery terminals, electrical connections on motors or appliances or any other source of electricity. Wash thoroughly with soap and water after handling. Keep containers

closed when not in use. Keep out of the reach of children. Do not puncture, crush or incinerate containers, even when empty.

Conditions for Safe Storage: Store in a cool, well-ventilated area, away from incompatible materials and heat, sparks or open flame. Do not store in direct sunlight or above 120°F. U.F.C (NFPA 30B) Level 1 Aerosol.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Isopropanol	200 ppm TWA, 400 ppm STEL ACGIH-TLV 400 ppm TWA OSHA PEL
2-(2-Butoxyethoxy) ethanol	10 ppm TWA ACGIH TLV (inhalable fraction and vapor)
Propane	1000 ppm TWA OSHA PEL
n-Butane	1000 ppm STEL ACGIH TLV
Isobutane	1000 ppm STEL ACGIH TLV
Surfactants	None Established
Non-hazardous Ingredients	None Established

The Following Controls are Recommended for Normal Consumer Use of this Product

Appropriate Engineering Controls: Use in a well-ventilated area.

Personal Protection:

Eye Protection: Avoid eye contact. Always spray away from your face.

Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where skin contact is likely.

Respiratory Protection: None needed for normal use with adequate ventilation.

For Bulk Processing or Workplace Use the Following Controls are Recommended

Appropriate Engineering Controls: Use adequate general and local exhaust ventilation to maintain exposure levels below that occupational exposure limits.

Personal Protection:

Eye Protection: Safety goggles recommended where eye contact is possible.

Skin Protection: Wear chemical resistant gloves.

Respiratory Protection: None required if ventilation is adequate. If the occupational exposure limits are exceeded, wear a NIOSH approved respirator. Respirator selection and use should be based on contaminant type, form and concentration. Follow OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

Work/Hygiene Practices: Wash with soap and water after handling.

9 – Physical and Chemical Properties

Appearance:	Clear colorless liquid	Flammable Limits: (Solvent Portion)	LEL: 1.8% UEL: 9.5% (propellant)
Odor:	Citrus odor	Vapor Pressure:	Not Determined
Odor Threshold:	Not established	Vapor Density:	Not Determined
pH:	10.5-11.5	Relative Density:	1.0 kg/l (concentrate) 0.955 kg/L (with propellant)
Melting/Freezing Point	Not established	Solubilities:	Soluble in water
Boiling Point/Range:	212°F (100° C) (concentrate)	Partition Coefficient; n- octanol/water:	Not established
Flash Point:	<0°F (propellant) 59°F (15° C)(concentrate with propellant ASTM D3828/US 16CFR 1500.45) >212°F (100°C) (concentrate only)	Autoignition Temperature:	Not established

Evaporation Rate:	Not established	Decomposition Temperature:	Not established
Flammability (solid, gas)	Flammable Aerosol	Viscosity:	Not Determined
VOC:	6.5% (33.4 g/L)	Pour Point:	Not established

10 – Stability and Reactivity

Reactivity: Not reactive under normal conditions

Chemical Stability: Stable

Possibility of Hazardous Reactions: None known.

Conditions to Avoid: Extreme heat, sources of ignition, physical damage to aerosol can.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may yield carbon monoxide, carbon dioxide.

11 – Toxicological Information

Symptoms of Overexposure:

Inhalation: Excessive inhalation can cause headache, drowsiness, and nausea. Can cause irritation of respiratory tract. Intentional abuse may be harmful or fatal.

Skin Contact: Prolonged contact may cause defatting, dermatitis, and drying of the skin.

Eye Contact: May cause eye irritation with redness, tearing and blurred vision.

Ingestion: Swallowing may cause gastrointestinal irritation. Not expected to be acutely toxic.

Chronic Effects: 2-(2-butoxyethoxy) ethanol has caused effects on the liver and kidneys in studies with laboratory animals.

Carcinogen Status: None of the components are listed as a carcinogen or suspect carcinogen by IARC, NTP, ACGIH or OSHA.

Reproductive Toxicity: None of the components is considered a reproductive hazard.

Numerical Measures of Toxicity: Acute Toxicity Estimates: Oral >5000 mg/kg; Dermal >2000 mg/kg.

Surfactant: Oral rat LD50: 412-2394 mg/kg, Dermal rabbit LD50 1127-2395 mg/kg, Inhalation rat LC50 1.06 mg/L/4 hr

Isopropanol: Inhalation rat LC50 16,000 ppm/8 hr, Oral rat LD50 5045 mg/kg, Dermal rabbit LD50 12,800 mg/kg

2-(2-Butoxyethoxy)ethanol: Oral rat LD50: 5660 mg/kg; Dermal rabbit LD50: 4000 mg/kg

Liquefied Petroleum Gas: No toxicity data is available

Isobutane: Inhalation rat LC50 570000 ppm/15 min.

12 – Ecological Information

Ecotoxicity: Surfactant: 96 hr LC50 Fathead minnow 3.2-3.6 mg/L (static test); 48 hr EC50 Daphnia magna 7.3 mg/L (static test, immobilization)

Isopropanol: 96 hr LC50 Fathead minnow 9490 mg/L; 48 hr EC50 Daphnia magna 13299 mg/L.

2-(2-Butoxyethoxy)ethanol: 96 hr LC50 Bluegill 1300 mg/L (static); 48 hr EC50 Daphnia magna >100 mg/L

Persistence and Degradability: Solvents and surfactants are readily biodegradable.

Bioaccumulative Potential: Bioaccumulation is not expected based on an assessment of the ingredients.

Mobility in Soil: No data available

Other Adverse Effects: None known

13 - Disposal Considerations

Aerosol containers should not be punctured, compacted in home trash compactors or incinerated. Empty containers may be disposed of through normal waste management options. Dispose of all waste product, absorbents, and other materials in accordance with applicable Federal, state and local regulations.

14 – Transportation Information

DOT Surface Shipping Description:

UN1950, Aerosols, 2.1 Ltd. Qty (Note: Shipping Papers are not required for Limited Quantities unless transported by air or vessel – each package must be marked with the Limited Quantity Mark)

IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

ICAO Shipping Description: UN1950, Aerosols, flammable, 2.1 NOTE: WD-40 does not test aerosol cans to assure that they meet the pressure and other requirements for transport by air. We do not recommend that our aerosol products be transported by air.

15 – Regulatory Information

U.S. Federal Regulations:

CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

SARA TITLE III:

Hazard Category For Section 311/312: Acute Health, Fire Hazard, Sudden Release of Pressure

Section 313 Toxic Chemicals: This product contains the following chemicals subject to SARA Title III

Section 313 Reporting requirements: 2-(2-butoxyethoxy)ethanol 5-10% (glycol ether compound)

Section 302 Extremely Hazardous Substances (TPQ): None

EPA Toxic Substances Control Act (TSCA) Status: All of the components of this product are listed on the TSCA inventory

VOC Regulations: This product complies with the consumer product VOC limits of CARB, the US EPA and states adopting the OTC VOC rules.

Canadian Environmental Protection Act: All of the ingredients are listed on the Canadian Domestic Substances List or exempt from notification

Canadian WHMIS Classification: Class A (Compressed Gas), Class B-2 (Flammable Liquid), Class D-2-B (A toxic material causing other harmful effects)

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

16 – Other Information:

HMIS Hazard Rating:

Health – 1 (slight hazard), Fire Hazard – 2 (moderate hazard), Physical Hazard – 0 (minimal hazard)

Revision Date: January 26, 2015

Supersedes: New SDS

Revision Summary: New SDS.

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