



Material Safety Data Sheet

1 - Chemical Product and Company Identification

Manufacturer: WD-40 Company Address: 1061 Cudahy Place (92110) P.O. Box 80607 San Diego, California, USA 92138 -0607 Telephone: 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)	Trade Name: blue WORKS INDUSTRIAL GRADE DEGREASER Chemical Name: Organic Mixture Product Use: Cleaner, Degreaser MSDS Date Of Preparation: 02/05/10
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2 – Hazards Identification

Emergency Overview: WARNING! Contents under pressure. Flammable liquid and vapor. May be irritating to eyes, respiratory tract and skin. May be harmful if swallowed. Prolonged overexposure may cause liver, kidney and central nervous system effects. Use with adequate ventilation. Keep away from heat, sparks, flames and all other sources of ignition. Avoid eye contact and inhalation. Symptoms of Overexposure: Inhalation: Excessive inhalation can cause headache, drowsiness, nausea and lack of coordination. Can cause irritation of respiratory tract. Intentional abuse may be harmful or fatal. Skin Contact: May cause skin irritation. Prolonged contact may cause defatting, dermatitis, and drying of the skin. Harmful amounts of 2-butoxyethanol may be absorbed through the skin with symptoms similar to those under inhalation and ingestion. Eye Contact: May cause eye irritation with redness, tearing and blurred vision. Ingestion: Symptoms are similar to those of inhalation including pain, diarrhea and vomiting. May cause damage to the liver and kidneys. Chronic Effects: 2-butoxyethanol has caused lymphatic system, blood, liver and kidney damage. Medical Conditions Aggravated by Exposure: Pre-existing respiratory, skin, eye, liver, kidney and lymphatic disorders. Suspected Cancer Agent: Yes No <input checked="" type="checkbox"/>

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent
Surfactants	Proprietary	1-5%
Isopropanol	67-63-0	1-5%
2-Butoxyethanol	111-76-2	5-10%
Liquefied Petroleum Gas (propane, n-butane) or Isobutane propellant	68476-86-8 75-28-5	5-10%
Non-hazardous Ingredients	Mixture	Balance

See Section 8 for Exposure Limits

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.
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Skin Contact: Rinse skin with water for 15 minutes. Remove contaminated clothing and wash before reuse. Get medical attention if irritation persists or symptoms of exposure develop.

Inhalation (Breathing): Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if irritation or symptoms persist.

5 – Fire Fighting Measures

Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam.

Special Fire Fighting Procedures: Firefighters should always wear positive pressure self-contained breathing apparatus and full protective clothing. Cool fire-exposed containers with water. Use shielding to protect from bursting cans.

Unusual Fire and Explosion Hazards: 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.

6 – Accidental Release Measures

Remove personnel from general area. Wear appropriate protective clothing (see Section 8). Ventilate the area and eliminate all sources of heat. 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

Handling: Avoid contact with eyes. Avoid prolonged contact with skin. Avoid breathing vapors or aerosols. Use 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.

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
Surfactants	None Established
Isopropanol	200 ppm TWA, 400 ppm STEL ACGIH-TLV 400 ppm TWA OSHA PEL
2-Butoxyethanol	20 ppm TWA ACGIH TLV 50 ppm TWA (Skin) OSHA PEL
Propane	1000 ppm TWA ACGIH TLV 1000 ppm TWA OSHA PEL
n-Butane	1000 ppm TWA ACGIH TLV
Isobutane	1000 ppm TWA ACGIH TLV
Non-hazardous Ingredients	None Established

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

Engineering Controls: Use in a well-ventilated area.

Personal Protection:

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

Skin Protection: Avoid prolonged or repeated 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

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

Boiling Point:	212°F (100° C)(concentrate)	Specific Gravity:	1.0 kg/l (concentrate) 0.955 kg/L (with propellant)
Solubility in Water:	Complete	pH:	10.5-11.5
Vapor Pressure:	Not Determined	Vapor Density:	Not Determined
Percent Volatile:	>95%	VOC:	17.3% (162.2 g/L)
Coefficient of Water/ Oil Distribution:	Not Determined	Appearance/ Odor:	Clear colorless liquid with a citrus odor.
Flash Point:	<0°F (propellant) 59°F (15° C)(concentrate with propellant ASTM D3828/US 16CFR 1500.45) >212°F (100°C) (concentrate only)	Flammable Limits:	LEL: 1.8% UEL: 9.5% (propellant)

10 – Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

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

Incompatibilities: Strong oxidizers.

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

11 – Toxicological Information

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-Butoxyethanol: Inhalation rat LC50 450 ppm/4 hr; Oral rat LD50: 1,480 mg/kg; Dermal rabbit LD50: 490 mg/kg

Liquefied Petroleum Gas: No toxicity data is available

Isobutane: Inhalation rat LC50 570000 ppm/15 min.

None of the components of this product is listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

12 – Ecological Information

No data is currently available.

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: Consumer Commodity, ORM-D
IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

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, Chronic 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-butoxyethanol 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

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)

SIGNATURE: _____



TITLE: Director of Global Quality Assurance

REVISION DATE: February 2010

SUPERSEDES: November 2009