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 WHITE LITHIUM GREASE** **Chemical Name: Organic Mixture** **Product Use: Cleaner, Lubricant** **MSDS Date Of Preparation: 08/07/09**

2 – Hazards Identification

Emergency Overview:
DANGER! Flammable aerosol. Contents under pressure. Combustible Liquid and Vapor. Harmful or fatal is swallowed. If swallowed, may be aspirated and cause lung damage. May cause eye, skin and respiratory tract irritation. Use only with adequate ventilation. Keep away from heat, sparks, flames and all other sources of ignition.

Symptoms of Overexposure:
Inhalation: Mist or vapor can irritate the throat and lungs. High concentrations may cause nasal and respiratory irritation and central nervous system effects such as headache, dizziness and nausea. Intentional abuse may be harmful or fatal.
Skin Contact: May cause skin irritation with short-term exposure with redness, itching and burning of the skin. Prolonged and/or repeated contact may produce defatting and dermatitis.
Eye Contact: Contact may be irritating to eyes. May cause redness, stinging, swelling and tearing.
Ingestion: This product has low oral toxicity. If swallowed, this material may cause irritation of the mouth, throat and esophagus. Swallowing may cause gastrointestinal irritation, nausea, vomiting, diarrhea, dizziness, drowsiness and other central nervous system effects. This product is an aspiration hazard. If swallowed, can enter the lungs and may cause chemical pneumonitis, severe lung damage and death.
Chronic Effects: Prolonged or repeated skin contact may defat the skin resulting in irritation and dermatitis.
Medical Conditions Aggravated by Exposure: Preexisting eye, skin and respiratory conditions may be aggravated by exposure.

Suspected Cancer Agent:
Yes X No This product contains small amount of titanium dioxide, which is listed by IARC as a suspected carcinogen (Group 2B). Titanium dioxide only presents a risk of cancer by inhalation of very fine dust. In this product, the titanium dioxide is incorporated into the grease and is not present as a respirable dust. There is no exposure to respirable titanium dioxide dust in the normal use of this product.

3 - Composition/Information on Ingredients

Ingredient	CAS #	Weight Percent
Petroleum Solvents	64742-47-8 64742-88-7	25-35%
Hydrotreated Heavy Naphthenic Distillate	64742-52-5	5-10%
Calcium Sulfonate	Proprietary	1-5%
Titanium Dioxide	13463-67-7	<1%
Propellant (propane, n-butane)	74-98-6/106-97-8	40-50%

See Section 8 for Exposure Limits

4 – First Aid Measures

Ingestion (Swallowed): Aspiration Hazard. DO NOT induce vomiting. Call physician, poison control center or the WD-40 Safety Hotline at 1-888-324-7596 immediately.
Eye Contact: Flush thoroughly with water for 15 minutes. Remove contact lenses if present after the first 5 minutes and continue flushing. Get medical attention if irritation persists.
Skin Contact: Wash with soap and water. If irritation develops and persists, get medical attention.
Inhalation (Breathing): If irritation is experienced, move to fresh air. Get medical attention if irritation or other symptoms develop and persist.

5 – Fire Fighting Measures

Extinguishing Media: Use water fog, dry chemical, carbon dioxide or foam. Cool fire exposed containers with water.
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 against bursting cans.
Unusual Fire and Explosion Hazards: Contents under pressure. Keep away from ignition source and open fire. Exposure of containers to extreme heat and flames can cause them to rupture often with violent force. Flammable liquid and vapor. This material can release flammable vapors when heated above ambient temperatures. Vapors can cause a flash fire. Vapors are heavier than air and may travel along surfaces to remote ignition sources and flash back. A vapor and air mixture can create an explosion hazard in confined spaces.

6 – Accidental Release Measures

Wear appropriate protective clothing (see Section 8). Eliminate all sources of ignition and ventilate area. 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 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.
Storage: Store in a cool, well-ventilated area, away from incompatible materials. Do not store in direct sunlight or above 120°F. U.F.C (NFPA 30B) Level 3 Aerosol.

8 – Exposure Controls/Personal Protection

Chemical	Occupational Exposure Limits
Petroleum Solvents	1200 mg/m^3 TWA Supplier Recommended (total hydrocarbon)
Hydrotreated Heavy Naphthenic Distillate	5 mg/m3 TWA, 10 mg/m3 STEL ACGIH TLV 5 mg/m3 TWA OSHA PEL
Calcium Sulfonate	None Established
Titanium Dioxide	15 mg/m3 (total dust) TWA OSHA PEL 10 mg/m3 TWA ACGIH TLV
Propane	1000 ppm TWA OSHA PEL 1000 ppm TWA ACGIH TLV (aliphatic hydrocarbon gas)
n-Butane	1000 ppm TWA ACGIH TLV (aliphatic hydrocarbon gas)

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 away from face.
Skin Protection: Avoid prolonged skin contact. Chemical resistant gloves recommended for operations where prolonged 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:	218-257°C (424-495°F) (Petroleum Solvent)	Specific Gravity:	0.87
Solubility in Water:	Insoluble	pH:	Not Applicable
Vapor Pressure:	Not Determined	Vapor Density:	6.5 (Petroleum Solvent)
Percent Volatile:	>80%	VOC:	48%
Coefficient of Water/Oil Distribution:	Not Determined	Appearance/Odor	Colorless liquid with a petroleum odor.
Flash Point:	<-29.2°F (TCC)	Flammable Limits:	LEL: 0.9% UEL: 9.5%

10 – Stability and Reactivity

Stability: Stable
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Avoid heat, sparks, flames and other sources of ignition.
Incompatibilities: Strong acids, alkalis, and oxidizers.
Hazardous Decomposition Products: Carbon monoxide and carbon dioxide, oxides of nitrogen and sulfur, smoke, fumes, and/or unburned hydrocarbons.

11 – Toxicological Information

The oral toxicity of this product is estimated to be greater than 5,000 mg/kg based on an assessment of the ingredients. This product is not classified as toxic by established criteria. It is an aspiration hazard.
This product contains small amount of titanium dioxide, which is listed by IARC as a suspected carcinogen (Group 2B). Titanium dioxide only presents a risk of cancer by inhalation of very fine dust. In this product, the titanium dioxide is incorporated into the grease and is not present as a respirable dust. There is no exposure to respirable titanium dioxide dust in the normal use of this product.
None of the components of this product is considered a reproductive hazard.

12 – Ecological Information

No data is currently available.

13 - Disposal Considerations

If this product becomes a waste, it would be expected to meet the criteria of a RCRA ignitable hazardous waste (D001). However, it is the responsibility of the generator to determine at the time of disposal the proper classification and method of disposal. Dispose in accordance with federal, state, and local regulations. Do not puncture or incinerate containers.

14 – Transportation Information_

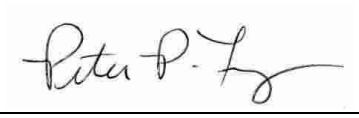
DOT Surface Shipping Description: Consumer Commodity, ORM-D
IMDG Shipping Description: UN1950, Aerosols, 2.1, LTD QTY

15 – Regulatory Information

U.S. Federal Regulations:
CERCLA 103 Reportable Quantity: This product is not subject to CERCLA reporting requirements, however, oil spills are reportable to the National Response Center under the Clean Water Act and 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: None
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 WHMIS Classification: Class B-5 (Flammable Aerosol), Class D-2-A (Very toxic material causing other chronic 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 – 4 (severe hazard), Reactivity – 0 (minimal hazard)

SIGNATURE:  TITLE: Director of Global Quality Assurance

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