

**BRODI SPECIALTY PRODUCTS LTD.  
MATERIAL SAFETY DATA SHEET**

**SECTION I: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

<b>Product Name:</b> POWERFLO <b>Product Number:</b> 0931-23-002B <b>Chemical Family:</b> Halogenated hydrocarbons <b>Molecular Weight:</b> Not Applicable <b>Chemical Formula:</b> Not Applicable <b>Trade names and synonyms:</b> 0931-23-002B Powerflo <b>Product Uses:</b> Degreaser /Cleaner <b>Formula/lab book #:</b> Form – 9910-2-251	<b>Date Prepared:</b> December 1, 2008 <b>Emergency Phone:</b> 1-(800) 228-5635 <b>Information Phone:</b> 1-(877) 744-0751 <b>Supplier's Name:</b> Brodi Specialty Products Ltd. <b>Supplier's Address:</b> 250 Cochrane Drive, Unit 9, Markham, ON, L3R 8E5 <b>Prepared By:</b> MSDS Co-ordinator, (877) 744-0751 ext 205, Brodi Specialty Products Ltd.
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**SECTION 2: COMPOSITION/INFORMATION INGREDIENTS**

Hazardous Ingredients	%	Exposure Limit	C.A.S #	LD/50 Route, Species	LD/50 Route, Species
1,1,1,2 – Tetrafluoroethane	60-100	1000 ppm	811-97-2	Not Available	567000 ppm (4hr) INHAL- RAT
Acetone	1-5	750ppm	67-64-1	9750 mg/kg ORAL-RAT	16,000 ppm 94hr) INHAL-RAT

**SECTION 3: HAZARDS IDENTIFICATION**

Route of entry  
INGESTION.....Product is a gas, therefore, ingestion is not likely a route of exposure  
INHALATION.....Propellant is a simple asphyxiant  
EYE CONTACT.....May cause irritation  
SKIN ABSORPTION.....No data available for this product mixture  
SKIN CONTACT.....May cause irritation. May cause frostbite  
EFFECTS OF ACUTE EXPOSURE.....Dizziness, nausea, irritation to skin and eyes  
EFFECTS OF CHRONIC EXPOSURE.....None known  
EXPOSURE LIMIT OF MATERIAL.....See section 2

**SECTION 4: FIRST AID MEASURES**

EMERGENCY FIRST AID PROCEDURE.....In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention.  
For skin, wash thoroughly with soap and water. If affected by inhalation of vapour or spray mist, remove to fresh air. If swallowed; do not induce vomiting, get medical attention

**SECTION 5: FIRE FIGHTING MEASURES**

AUTO IGNITION TEMPERATURE (°C) .....465  
SPECIAL PROCEDURES.....Water from fogging nozzles may be used to cool closed containers to prevent build up if exposed to extreme temperatures.  
Full protective equipment including self contained breathing apparatus should be worn in a fire involving this material.  
FLAMMABILITY.....Not a flammable product (as per Canadian aerosol regulations)  
IF YES UNDER WHAT CONDITIONS?.....Excessive heat, sparks and open flame  
EXTINGUISHING MEDIA.....Water, carbon dioxide, dry chemical, foam.  
UPPER FLAMMABLE LIMIT (% BY VOLUME).....12.8  
LOWER FLAMMABLE LIMIT (% BY VOLUME).....1  
EXPLOSION DATA  
SENSITIVITY TO DISCHARGE.....Not applicable  
SENSITIVITY TO IMPACT.....Not applicable  
HAZARDOUS COMBUSTION PRODUCTS.....Hydrocarbon fumes and smoke, carbon monoxide where combustion is incomplete

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

LEAK/SPILL.....Remove all sources of ignition, use an inert absorbent material, and non – sparking tools. Ventilate area prevent from entering a watercourse.

**SECTION 7: HANDLING AND STORAGE**

STORAGE NEEDS.....Keep away from heat, sparks, and open flames.  
ENGINEERING CONTROLS.....Ventilation – local (mechanical if used indoors on a continuous basis)  
HANDLING PROCEDURES AND EQUIPMENT.....Store in a cool, well ventilated area not to exceed 50 °C  
SYNERGISTIC MATERIALS.....None Known

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

GLOVES/TYPE.....Wear chemical resistant gloves  
RESPIRATORY/TYPE.....If used indoors on a continuous basis, use of a cartridge type respirator (NIOSH/MSHATC 23C or equivalent) is recommended  
EYE/TYPE.....Safety glasses  
FOOTWEAR/TYPE.....Not normally required  
OTHER/TYPE.....Not required

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE.....Aerosol  
APPEARANCE.....Colourless  
ODOR.....Ethereal  
ODOR THRESHOLD.....Not available  
VAPOUR PRESSURE (PSIG)-AEROSOL AT 20 °C.....65-75  
BOILING POINT (°C)(CONC).....57  
EVAPORATION RATE n-BUTYL ACETATE = 1.....Not available  
VAPOUR DENSITY (AIR=1).....Greater than 1  
(BY WEIGHT)  
SOLUBILITY IN WATER g/l (20°C).....0.15  
pH.....Not available  
SPECIFIC GRAVITY (LIQUID).....Not available  
COEFFICIENT OF WATER/OIL DIST.....Not available  
FREEZING POINT: (°C).....-117  
AEROSOL PERCENT VOLATILE(BY WEIGHT).....100

## SECTION 10: STABILITY AND REACTIVITY

HAZARDOUS PRODUCTS OF DECOMPOSITION..... Hydrocarbon fumes and smoke. Carbon monoxide where combustion is incomplew.  
CHEMICAL STABILITY:  
YES.....Under normal conditions  
NO, WHICH CONDITIONS?.....Not applicable  
COMPATIBILITY WITH OTHER SUBSTANCES:  
NO, WHICH ONES?.....Strong oxidizing agents  
REACTIVITY CONDITIONS?.....Not applicable  
HAZARDOUS POLYMERIZATION.....Will not occur

## SECTION 11: TOXICOLOGICAL INFORMATION

REPRODUCTIVE EFFECTS.....No information is available and no adverse reproductive effects are anticipated  
IRRITATION OF MATERIAL.....Skin/eye irritant  
SENSITIZING CAPABILITY OF MATERIAL.....Unknown  
CARCINOGENICITY OF MATERIAL.....The ingredients of this product are not listed as carcinogens by NTP. (National Toxicology program), not regulated as carcinogens by OSHA (Occupational Safety and Health Administration), and have not been evaluated by IARC (International Agency for Research on Cancer), nor by ACGIH( American Conference of Governmental Industrial Hygenists).  
TERATOGENICITY.....No information is available and no adverse teratogenic effects are anticipated.  
MUTAGENICITY.....No information is available and no adverse mutagenic effects are anticipated

## SECTION 12: ECOLOGICAL CONSIDERATIONS

ENVIRONMENTAL.....Not available

## SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL.....Do not puncture or incinerate containers, even when empty. Dispose of in accordance with local, provincial, and federal regulations.

## SECTION 14: TRANSPORTATION INFORMATION

T D G CLASSIFICATION.....Consumer commodity (aerosols, UN1950, class 2.2)  
D O T CLASSIFICATION.....Consumer commodity ORM-D

## SECTION 15: REGULATORY INFORMATION

### CANADIAN REGULATIONS

WHMIS CLASSIFICATION.....A,D2B  
CNFC SECTION 3.3.5.....LEVEL 1  
CEPA (CANADIAN ENVIRONMENTAL PROTECTION ACT).....All substances in this product are listen on the Canadian domestic substances list. (DSL) or are not required to be listed.

### U.S REGULATIONS

HMIS RATING HEALTH.....1 slight hazard  
HMIS RATING FLAMMABILITY.....0 minimal hazard  
HMIS RATING REACTIVITY.....1 slight hazard  
HMIS RATING PERSONAL PROTECTION.....B  
NFPA COE 30B.....Level 1  
SARA 313 INFORMATION.....This product contains no ingredients subject to the reporting requirements of section 313 of the emergency planning and community right-to-know act of 1986 and of 40 CFR 372  
CAS # CHEMICAL NAME  
N/A  
CALIFORNIA PROPOSITION 65.....The following statement is made in order to comply with the California safe drinking water and toxic enforcement California to act of 1986. Warning this product does not intentionally contain any chemicals known to the state of cause cancer, birth defects, or other reproductive harm.  
CAS# CHEMICAL NAME  
N/A  
TSCA (TOXIC SUBSTANCES CONTROL ACT) .....All components of this product are listed on the TSCA inventory any impurities present in this product are exempt from listing.  
VOC (w/w%).....0.