SAFETY DATA SHEET

This Safety Data Sheet meets or exceeds the requirements of the Canadian Controlled Product Regulations (WHMIS)

Section 1: Identification

1.1 Product Identifier

Product Name: Industrial Degreaser

1.2 Other means of Identification

Not Applicable

1.3 Recommended use and restrictions of use

Recommended use:

Biodegradable degreaser designed to cut heavy dirt and grease on most surfaces

Restricted Uses: No information available

1.4 Initial Suppliers Identifier

Ravcor Cleaning Solutions 108 – 6249, 205th Street, Langley, B.C., Canada V2Y 1N7 1-604-533-2669

1.5 Distributor

BE Pressure Supply 30585 Progressive Way Abbotsford, BC Canada V2T 6W3 Phone: (604) 850-6662 Toll Free: 1-800-850-6662

1.6 Emergency Telephone Number

In Event of an Emergency Call: 1-800-424-9300 CHEMTREC Section 2: Hazard Identification

2.1 Classification of the Substance or Mixture

General Harmonized System (GSH) Classification

Corrosion	
Serious Eye Damage/eye Irritation	Category 2B

Moderate Hazard	
Acute Toxicity - Inhalation	Category 4
Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

2.2 GHS Label Elements

Hazard Pictograms:



2.3 Signal Words

Danger

2.4 Hazard Statements Harmful if swallowed Causes skin irritation and eye damage

<u>2.5 Precautionary Statement</u> Avoid contact with eyes and skin Keep out of reach of children

<u>2.6 Other Hazards</u> No additional information available

Section 3: Composition/Information on Ingredients

3.1 Substances

Not Applicable

3.2 Mixtures

Chemical Name	CAS No	Weight%	Common Name/Synonyms
Disodium Metasilicate	CAS No 6834-92-0	1.25 – 2.5%	Sodium Metasilicate Anhyd (Metso Beads)
Ethylene Glycol Monobutyl Ether	CAS No 111-76-2	0.25– 1.25 %	Glycol Ether EB
Ingredients which are non- hazardous or do not meet requirements for disclosure	Not Applicable	97– 99 %	Not Applicable

Section 4: First Aid

4.1 Description of First Aid Measures

General First Aid

- 1. Check vital functions
- 2. If unconscious check air way and maintain air way and respiration
- 3. If experiencing respiratory arrest supply oxygen or artificial respiration.
- 4. In cases of cardiac arrest perform resuscitation (CPR).
- 5. Call for emergency medical services if immediate medical attention is required.
- 6. Show this safety data sheet to the emergency response and doctors in attendance.

4.2 Inhalation

Remove source of contamination or remove affected person to fresh air. If breathing is difficult give oxygen. If breathing stops give artificial respiration and call for emergency medical service.

4.3 Ingestion

Never give anything by mouth if victim is rapidly losing consciousness, is unconscious, or is convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 300 mL (10 oz.) of water. If milk is available, administer AFTER the water. If vomiting occurs naturally, have the victim lean forward to reduce risk of aspiration. Repeat administration of water. If needed transport to emergency medical facility or call for emergency medical services.

4.4 Skin Contact

Avoid direct contact. Wear impervious protective gloves if necessary. Under running water, remove contaminated clothing, shoes, and leather goods such as watchbands and belts. Immediately flush contaminated areas with lukewarm, gently running water for at least 20 minutes. **Do not interrupt flushing**. If needed transport affected person to emergency medical facility or call for emergency medical services.

4.5 Eye Contact

Immediately flush contaminated eye(s) with lukewarm, gently running water for at least 60 minutes while holding the eyelid(s) open. Take care not to rinse contaminated water into a non-affected eye. Neutral

saline solution may be used for flushing if available. DO NOT INTERRUPT FLUSHING. If needed transport affected person to emergency medical facility or call for emergency medical services. <u>4.6 General Comments</u>

Provide general supportive measures (comfort, warmth, rest). Seek medical attention for all exposures except minor instances of inhalation. First-aid procedures should be reviewed by appropriate personnel familiar with strongly caustic products used in the workplace.

Section 5: Fire Fighting Measures

5.1 Extinguishing Media

Does not burn or support combustion. Use extinguishing agents suitable for the surrounding fire. Use water with caution since it can generate heat if applied directly to product solutions and cause splattering.

5.2 Special Hazards Arising from the Substance or Mixture

Sodium and potassium oxide fumes can be generated by thermal decomposition at elevated temperatures.

At high temperatures, fuming may occur, giving off a strong corrosive gas.

5.3 Special Equipment and Precautions for Fire Fighters

Evacuate area and fight fire from a safe distance. Wear adequate personal protective equipment. Approach fire from upwind. Remove or isolate materials not involved in the fire if it can be done without risk. At high temperatures, fuming may occur, giving off a strong corrosive gas. Chemical resistant clothing and positive pressure SCBA may be required. Water may be used to keep fire-exposed containers cool to prevent rupture. Do not direct water at source of leak.

Section 6: Accidental Release Measures

6.1 Personal Protections, Protective Equipment and Emergency Procedures

Evacuate unnecessary personnel from spill area. Wear appropriate personal protective equipment as required and ensure area is properly ventilated. Remove chemicals which can react with the spilled material if it can be done without risk. Avoid contact with skin, eyes or clothing.

6.2 Environmental Precautions

Implement spill control plan. Take steps to stop or reduce leaks if safe to do so. Take steps necessary to prevent spill from entering sanitary or storm sewers, waterways, public waters and soil/subsoils by diking with inert materials such as earth or sand.

6.3 Remedial Measures

- Restrict access to area until completion of cleanup.
- Ensure cleanup is conducted by trained personnel only.
- Use all appropriate personal protective equipment.
- Contain and absorb spill with inert materials.
- Neutralization with water, lime or soda ash.
- U Ventilate and flush cleaned area with water.
- Notify government occupational health and safety and environmental authorities as applicable.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

Prevent release of highly corrosive and reactive liquid. Avoid generation of mists. Ensure adequate ventilation. Have emergency equipment readily available. When diluting, slowly add caustic to cold water to avoid boiling or spattering. Keep containers closed when not in use.

7.2 Conditions for Safe Storage, Including any Incompatibilities

Store in a cool, dry, and well-ventilated area. Store away from incompatible materials such as strong bases. Keep storage area separate from populated work areas. Drums may need to be vented periodically by trained personnel. If drums are swollen, contact manufacturer for advice on special procedures and equipment.

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters Occupational exposure limits:

Chemical Name	Alberta OEL	British Columbia OEL	Ontario OEL	Quebec OEL	Exposure Limit- ACGIH	Immediately Dangerous to Life or Health-IDLH
Disodium Metasilicate CAS No 6834-92-0	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
Ethylene Glycol Monobutyl Ether CAS No 111-76-2	TWA: 20 ppm TWA:97 mg/m ³	TWA:20 ppm	TWA:20 ppm	TWA:20 ppm TWA:97mg/m ³	20 ppm TLV-TWA	700 ppm
Ingredients which are non- hazardous or do not meet requirements for disclosure	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available

8.2 Exposure Controls

Appropriate Engineering Controls:

Use general or local exhaust ventilation to maintain exposure below the exposure limits. These controls may need to be augmented by the use of process or personnel enclosures, control of process conditions, or by process modification.

8.3 Individual Protection Measures, Such as Personal Protective Equipment

Respiratory Protection:

Not normally required for most uses. If respiratory protection is required, NIOSH recommendations for strongly acidic products in air are:

Up to 10 mg/m³: SAR operated in continuous-flow mode; or a full-face piece respirator with high - efficiency particulate filter(s); or a powered air-purifying respirator with dust and mist filter(s); or a full face-piece SCBA or full face-piece SAR.

IDLH Conditions (10 mg/m³) or Planned Entry in Unknown Concentrations: Positive pressure, full facepiece SCBA, or positive pressure full face-piece SAR with an auxiliary positive pressure SCBA. Escape: Full face-piece respirator with high-efficiency particulate filter(s), or escape type SCBA. NOTE: Air purifying respirators do not protect against oxygen deficient atmospheres

Skin Protection:

Wear impervious gloves and boots and/or other protective clothing according to circumstances. Avoid use of leather and wool. Some operations may require the use of an impervious full-body encapsulating suit.

Eye and Face Protection:

Eye protection is required. Chemical safety goggles are recommended. A full-face shield may also be necessary. The wearing of contact lenses is not recommended.

Footwear:

As required by worksite rules.

General precautions:

Do not ingest. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Have a safety shower and eye wash station readily available in the immediate work area.

Section 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Purple liquid
Boiling Point	No Data Available
Colour	Purple
Critical Temperature	No Data Available
Evaporation Rate	No Data Available
Flammable (Solid, Gas)	No Data Available
Flash Point	No Data Available
Freezing Point	No Data Available
Melting Point	No Data Available
Odour	Pleasant odour
Odour Threshold	Not Determined
рН	11.8 (1.5% Solution)
Physical State	Liquid
Relative Density	No Data Available
Relative Evaporation Rate	Not Determined
Solubility	Soluble in Water in all Concentrations
Vapour Density	No Data Available
Vapour Pressure	No Data Available
Explosive Limits	No Data Available

Section 10: Stability and Reactivity

10.1 Reactivity/ Chemical Stability

Stable reactions under normal temperature and pressures.

Heavy Duty Degreaser

10.2 Possibility of Hazardous Reactions

Risk of exothermic reactions exists for mixing with aqueous solutions. Contact with some active metals may accelerate the decomposition if Sodium Hypochlorite.

10.3 Conditions to Avoid

Strong oxidizing agents and reducing agents.

10.4 Incompatible Materials

Do not mix with acids, solutions containing ammonium and any active metal.

10.5 Hazardous Decomposition Products

Hazardous polymerization will not occur.

Section 11: Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity:

Chemical Name	Oral LD50	Inhalation LC50	Dermal LD50
Disodium Metasilicate	=1153 mg/kg (Rat)	Not Available	Not Available
CAS No 6834-92-0			
Ethylene Glycol Monobutyl	= 470 mg/kg (Rat)	= 450 ppm (Rat) 4h	= 99 mg/kg (Rabbit)
Ether			
CAS No 111-76-2			
Ingredients which are non-hazardous	= 1310 mg/k (Rat)	Not Applicable	= 1780 µL/kg (Rabbit)
or do not meet requirements for	= 2590 mg/kg (Rat)		
disclosure	= 22 g/kg (Rat)		

11.2 Information on Likely Routes of Exposure

Inhalation:

Prolonged inhalation may be harmful. Exposure through this route may cause central nervous system depression (CNS), headaches, drowsiness, nausea and vomiting. Although it does not produce a vapour when used as directed, misted produce will may cause respiratory irritation resulting in burns, which may be delayed. This may cause permanent lung damage.

Ingestion:

Ingestion may cause irritation in the upper digestive tract, cause burns to mouth, throat, and esophagus. Symptoms can include severe pain, vomiting, diarrhea, collapse and possible death.

Skin Contact:

May be irritating to the skin. Sensitization is not expected to occur by skin contact. Upon contact, persons with pre-disposed skin conditions may experience a burning sensation which may produce a rash.

Eye Contact:

Damage can range from mild to sever irritation and even mild scarring to blistering. Use of contact lenses may aggravate the exposure.

11.3 Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Skin Corrosion/Irritation:

No information Available

Serious Eye Damage/Eye Irritation:

No information Available

Respiratory or Skin Sensitization:

There are a few reports of chronic respiratory disease from repeated and prolonged exposure to mist.

Germ Cell Mutagenicity:

No information Available

Carcinogenicity:

There is no evidence of carcinogenicity in humans from occupational exposures.

Specific Target Organ Systemic Toxicity – Single Exposure:

No information Available

Specific Target Organ Systemic Toxicity - Repeated Exposure:

No information Available

Aspiration Hazard:

No information Available

Section 12: Ecological Information

12.1 Ecotoxicity

Chemical Name	Ecotoxicity – Freshwater Algae Data	Ecotoxicity – Fish Species Data	Toxicity to Microorganism	Crustacea
Disodium Metasilicate CAS No 6834-92-0	Not Available	210 mg/L LC50 (Brachydanio rerio) 96 h	Not Available	Not Available
Ethylene Glycol Monobutyl Ether CAS No 111-76-2	Not Available	1490 mg/L LC50 (Lepomis macrochirus) 96h static 2950 mg/L LC50 (Lepomis macrochirus) 96h	Not Available	EC50: >1000mg/L (48h, Daphnia magna)
Ingredients which are non-hazardous or do not meet requirements for disclosure	Not Available	Not Available	Not Available	Not Available

<u>12.2 Persistence and Degradability</u> No Information Available

<u>12.3 Bioaccumulation</u> No Information Available

Heavy Duty Degreaser

Chemical Name	Partition Coefficient
Disodium Metasilicate	Not Available
CAS No 6834-92-0	Not Available
Ethylene Glycol Monobutyl Ether	0.81
CAS No 111-76-2	0.01
Ingredients which are non-hazardous or do not meet requirements for disclosure	Not Available

Other Adverse Effects:

No information available

Section 13: Disposal Considerations

13.1 Waste Treatment Methods

Disposal of all waste must be done in accordance with municipal, provincial and federal regulations.

Do not reuse empty containers.

Section 14: Transport Information

Canadian Transportation of Dangerous Goods Regulations: Not regulated.

Section 15: Regulatory Information

Safety, Health and Environment Regulations

Listed on the Canadian Domestic Substances List

Section 16: Other Information

Original Preparation Date:

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Revisions: None