

DESCRIPTION

Nu-Break 8 is a concentrated, highly alkaline, water soluble, non-flammable liquid degreaser.

Nu-Break 8 is used in cabinet spray re-circulation washers and hot tanks to remove carbon, oil, grease, paint and other contaminants. It is used by maintenance shops in railroads, pulp and paper mills, and mines; also used by machine shops, engine rebuild and transmission shops.

SPECIAL INFORMATION

Keep out of reach of children. Any contact to eyes, skin or inhalation may cause severe irritation and/or burns. Protect eyes and wear protective clothing when handling. Avoid mixing with acids or prolonged contact with aluminum, zinc and their alloys.

DIRECTIONS

Use *Nu-Break 8* at 1-5 oz per US gallon of water (10-40 ml/litre) (1:100-1:25) depending on the amount of grease and oil residues.

The most effective temperature range is 160°F - 190°F (70°C-90°C).

PHYSICAL DATA

| | |
|------------|--------------|
| Appearance | Clear liquid |
| Color | Colorless |
| Foam | Low |
| Odor | None |
| pH (3.1%) | 12.5 - 13.5 |

MATERIAL SAFETY DATA SHEET

SECTION 1 – PRODUCT/MANUFACTURER'S IDENTITY

Product Name: **NU BREAK 8**

WHMIS CODE: E
 Proper Shipping Name: CAUSTIC ALKALI LIQUID, N.O.S.
 (potassium hydroxide)
 Hazard Class: Class 8, P.G. II
 UN Number: UN 1719

| HMIS | |
|------|--------------|
| 3 | Health |
| 0 | Flammability |
| 0 | Reactivity |
| C | Personal |

Product Use: *Degreaser concentrate.*

M-chem Technologies Inc.
 1607 Derwent Way
 Delta, BC V3M 6K8, Canada
 Phone: (604) 526-5655

EMERGENCY PHONE
 Canada: Canutec 613-996-6666
 U.S.A.: Chemtrec 800-424-9300

A=Goggles, B=Goggles & Gloves
 C=Goggles, Gloves and Apron

ABBREVIATION KEY: N/A=Not Applicable, N/E=Not Established, N/D=Not Determined, > =Greater Than

SECTION 2 – HAZARDOUS INGREDIENTS INFORMATION

| INGREDIENT | CAS NO. | RANGE % | PEL | TLV |
|--|-----------|-------------|-----|-------|
| CAPRYLIC ACID LD50 (oral rat) 10,080 mg/kg | 124-07-2 | 1.0-5.0 | N/A | N/A |
| POTASSIUM HYDROXIDE LD50 (oral rat) 273 mg/kg LD50 (dermal) Not Available LC50 Not Available | 1310-58-3 | 10.0 - 20.0 | N/A | 2 ppm |
| TETRAPOTASSIUM PYROPHOSPHATE LD50 (oral rat) 2980 mg/kg LD50 (dermal) 7940 mg/kg (Rabbit) LC50 No Data | 7320-34-5 | 15.0-30.0 | N/D | N/D |

SECTION 3 – PHYSICAL DATA

| | | | |
|---|------------------------------|-------------------------------------|---------------------------------------|
| Color and Odor: Clear liquid, mild odor. | Boiling Point: N/D | Vapor Pressure (mm HG): N/D | pH: 12.5-13.5 (3.1% solution). |
| Physical State: Liquid. | Melting Point: N/A | Vapor Density: N/D | Specific Gravity: 1.205 @ 20°C |
| Coef. Water/Oil Dist: Greater than 1.0 | Evaporation Rate: N/D | Solubility in Water: Soluble | Odor Threshold: No Data |

SECTION 4 – FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method: None to 100°C (TCC) **Sensitivity to Mechanical Impact:** None. **Extinguishing Media:** Not flammable.
Flammable Limits: None known. **Sensitivity to Static Discharge:** None. **Auto ignition Temperature:** None known.
Conditions of Flammability: None.
Unusual Fire and Explosion Hazards: Flammable hydrogen gas may liberate upon prolonged contact with sensitive metals (i.e. aluminum, zinc, etc.).
Hazardous Combustion Products: Oxides of carbon, phosphorus, and other unidentifiable organic compounds.
Special Fire Fighting: Wear full protective equipment, including a NIOSH/MSHA approved, self-contained breathing apparatus for fire fighting situations. Use water spray to cool all nearby fire exposed surfaces.

SECTION 5 – REACTIVITY DATA

Chemical Stability: Stable under normal storage conditions.
Hazardous Polymerization: Will not Occur.
Incompatibility (material to avoid): Strong oxidizers and acids.
Hazardous Decomposition Products: Oxides of carbon, phosphorus, and other unidentifiable organic compounds.

SECTION 6 – TOXICOLOGICAL DATA

| | |
|---|-------------------------------------|
| Exposure Limits: See Section 2 under Hazardous Ingredient. | Teratogenicity: None known. |
| Routes of Entry: skin and eye contact, and inhalation. | Sensitization: None known. |
| Irritancy of Product: Corrosive to skin, eyes and respiratory system. | Carcinogenicity: None known. |
| Name of Toxicological Synergistic Product: None known. | Mutagenicity: None known. |
| Reproductive Toxicity: None known. | |
| Effects of Chronic Exposure: Prolonged or repeated exposure may cause skin irritation or dermatitis. | |
| Effects of Acute Exposure to Product: Product exposure may burn eyes and irritate or burn skin. Prolonged inhalation of vapors or mists may cause breathing problems, headaches and nausea. Also, may be harmful if absorbed through skin. Ingestion may cause gastro-intestinal and abdominal discomfort, and symptoms similar to inhalation. | |

SECTION 7 – PREVENTATIVE AND CONTROL MEASURES

Respiratory Protection: If product is misted or sprayed, or used in a confined area, use a NIOSH/MSHA approved dust/mist respirator.
Ventilation: Good general ventilation or local exhaust ventilation for spraying and misting in confined areas.
Protective Gloves: Natural or butyl rubber, nitrile or neoprene gloves.
Eye Protection: Chemical goggles, safety goggles or face shield.
Protective Clothing and Equipment: Long sleeve coveralls. Eye wash recommended in the immediate work area.
Storage and Handling Procedures: Use good industrial hygiene. Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing sprays or mists. Store in a cool, dry place away from incompatibles. Keep container closed when not in use. Do not mix with any other chemicals. Store at temperatures below 30°C (86°F) and keep from freezing.
Disposal Procedures for Spills or Leaks: Wear protective equipment. Dike and contain large spills. Pump spills into an approved waste container. For small spills, soak up with a suitable absorbent such as clay, soil or commercially available absorbents, and then dispose of into an approved waste container. Keep away from sewers and out of natural waters.
Waste Disposal Method: Reuse if possible, or otherwise dispose recovered material in accordance with all local, Provincial or Federal Regulations.
Special Shipping Information: Store at temperatures below 30°C (86°F) and keep from freezing.

SECTION 8 – EMERGENCY FIRST AID PROCEDURES

First Aid: If swallowed, give plenty of clean water to drink to dilute product. Do not induce vomiting. Call a Physician. In case of contact with eyes, flush with clean water for 15 minutes. Get medical attention. For contact with skin, wash with clean water and rinse well. If irritation occurs or persists, get medical attention.

PREPARATION DATA

PREPARED BY: Technical Service / Regulatory Division PHONE: 604-526-5655 LAST UPDATE: 10/07/11
 THE INFORMATION PROVIDED IN THIS MATERIAL SAFETY DATA SHEET HAS BEEN OBTAINED FROM CURRENT SOURCES AND IS BELIEVED TO BE RELIABLE