

# MATERIAL SAFETY DATA SHEET

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

## 1. Product and Supplier Identification

**Product:** Tuff 1 Industrial Degreaser

**Product Use:** Concentrated Cleaner

**Supplier:** EBCO Products Ltd.  
141 – 1305 Welch Street,  
North Vancouver, BC Canada V7P 1B3  
Emergency Telephone: (604) 986-7171

**Manufacturer:** EBCO Products Ltd.  
141 – 1305 Welch Street,  
North Vancouver, BC Canada V7P 1B3  
Emergency Telephone: (604) 986-7171

## 2. Composition

Component	% (w/w)	Exposure Limits ACGIH*	LD <sub>50</sub>	LC <sub>50</sub>
Sodium Metasilicate (CAS No. 6834-92-0)	1-3	None Established	600 mg/kg (oral/rat)	Not established
Triethanolamine (CAS No. 102-71-6)	1 -1.5	TLV-TWA: 5mg/m3 Basis: irritation, liver, kidney	9000 mg/kg (oral/rat)	0.005ppm (6 hour rat/inhalation)

\* American Conference of Governmental Industrial Hygienists (ACGIH). Exposure limits may vary from time to time and from one jurisdiction to another. Check with local regulatory agency for the exposure limits in your area.

## 3. Hazards Identification

### Routes of Entry:

Skin Contact: Minor    Eye Contact: Moderate    Ingestion: Minor    Inhalation: Minor

**Acute Health Effects:** Direct contact may cause minor irritation of the skin in persons predisposed to skin problems. Contact with the eyes may cause minor irritation. Although ingestion is not a typical route of entry, ingesting small amounts may cause abdominal discomfort. Inhalation of vapours may cause dizziness, headache, nausea, and difficulty breathing. If misted, inhalation may cause minor irritation of the upper respiratory tract, and lung sensitization.

**Chronic Health Effects:** Prolonged contact with the skin may cause redness, rash leading to dermatitis. Chronic inhalation of mists or vapours may cause irreversible lung damage.

## 4. First Aid Measures

**EYE CONTACT:** Flush contaminated eye(s) with lukewarm, gently running water for 15 minutes, holding eyelids open. Seek medical attention if irritation persists.

**SKIN CONTACT:** Wash affected area immediately with mild soap and water. If irritation occurs or persists, seek immediate medical attention. Remove any contaminated clothing and launder clothing before reuse.

**INHALATION:** This is an unlikely route of entry, but if victim has been exposed to vapours remove to fresh air. If breathing has stopped, a trained person should perform artificial respiration. Get medical attention immediately.

**INGESTION:** Do **not** induce vomiting. If vomiting occurs naturally, place the head between the knees to reduce the likelihood of aspiration in the lungs. Seek medical attention.

## 5. Fire Fighting Measures

<b>Flash point:</b>	Not applicable
<b>Autoignition temperature:</b>	Not applicable. See information under "Fire Fighting Instructions"
<b>Lower Explosive Limit:</b>	Not applicable
<b>Upper Explosion Limit:</b>	Not applicable
<b>Sensitivity to Impact:</b>	Not sensitive.
<b>Sensitivity to Static Discharge:</b>	Not sensitive.

**Hazardous Combustion Products:** Burning may produce oxides of carbon and nitrogen.

**Extinguishing Media:** Use a means of extinguishing surrounding fire.

**Fire Fighting Instructions:** This product is an aqueous solution, and will not combust. Do not enter confined fire space without proper personal protection. Use approved positive pressure self-contained breathing apparatus.

## 6. Accidental Release Measures

**Personal Protection:** See Section 8 for proper protective equipment to be worn while cleaning an accidental spill.

**Environmental Precautions:** Not expected to have any environmental impact.

**Cleanup Procedures:** Take precautions to prevent entry of the product into the environment. Small spills may be neutralized by use of vinegar to a pH of 7-8. Absorb onto sand or other inert absorbent media. Shovel into approved closable waste containers for disposal. Thoroughly flush residue with water.

## 7. Handling and Storage

**Handling Procedures:** Use in an adequately ventilated area. Keep container tightly closed when not in use. Avoid methods of use that will cause misting of product. Launder clothing before reuse. Wash face and hands thoroughly after handling and before eating, drinking, or using tobacco products. Keep from freezing.

**Storage:** Store in cool, dry place and in an upright position to prevent leakage and away from acids.

## 8. Exposure Controls, Personal Protection

**Engineering Controls:** If used indoors, ensure adequate ventilation by using local exhaust.

**Respiratory Protection:** If product is atomized, or heated to product vapours, use a NIOSH approved organic vapour respirator. When cartridge type respirators are used, ensure that the cartridges are changed frequently.

**Skin Protection:** Wear impervious gloves and clothing such as nitrile rubber or neoprene gloves and apron to prevent skin contact.

**Eye and Face Protection:** Chemical splash-proof goggles must be worn at all times.

**Footwear:** As required by worksite rules.

**Other:** Eye wash station should be located near work area.

## 9. Physical and Chemical Properties

<b>Appearance:</b>	Amber coloured liquid, or reddish-brown gel	<b>Vapour Density:</b>	No data (air = 1)
<b>Odour:</b>	Mild minty odour	<b>Freezing Point:</b>	0 °C
<b>Odour Threshold:</b>	No data	<b>Boiling Point:</b>	100 °C
<b>pH:</b>	10 - 11 (product)	<b>Critical Temperature:</b>	No data
<b>Vapour Pressure:</b>	No data.	<b>Relative Density:</b>	1.0 (water = 1)
<b>Solubility:</b>	Soluble in water in all concentrations.	<b>Partition Coefficient:</b>	No data
		<b>Evaporation Rate:</b>	No data

## 10. Stability and Reactivity

**Chemical Stability and Reactivity:** Product is stable. Product may react with strong mineral acids.

**Incompatibility:** Avoid contact with strong oxidizers and mineral acids.

**Hazardous Decomposition Products:** Oxides of carbon and nitrogen. When mixed with acids, the release of hydrogen in an exothermic reaction may take place.

**Hazardous Polymerization:** Hazardous polymerization will not occur.

## 11. Toxicological Information

**Acute Exposure** Theoretical oral LD<sub>50</sub> for the product is greater than 25 g/kg (oral/rat). The LD<sub>50</sub> (dermal) and LC<sub>50</sub> has not been determined.

<b>Chronic Exposure:</b>	See Section 3.
<b>Exposure Limits:</b>	See Section 2.
<b>Irritancy:</b>	See Section 3.
<b>Sensitization:</b>	See Section 3
<b>Carcinogenicity:</b>	No evidence
<b>Teratogenicity:</b>	No evidence
<b>Reproductive toxicity:</b>	No evidence
<b>Mutagenicity:</b>	No evidence
<b>Synergistic products:</b>	None reported.

## 12. Ecological Information

**Environmental toxicity:** No data available.

**Biodegradability:** No data available.

## 13. Disposal Considerations

**Canadian Environmental Protection Act:** Dispose according to all local, provincial and federal requirements. Neutralized product may be washed into sewers.

## 14. Transport Information

**Canadian Transportation of Dangerous Goods Regulations:** Not regulated.

**International Air Transport Association (IATA):** Not regulated.

**International Maritime Organization (IMO):** Not regulated.

## 15. Regulatory Information

**Canadian Federal Regulations:**

**Canadian Environmental Protection Act:** All ingredients are on the Domestic Substances List.

**WHMIS Classification:** Does not meet criteria

## 16. Other Information

**Original Preparation Date:** July 20, 2009

**Prepared by:** Kel-Ex Agencies Ltd., P.O. Box 52201, Lynnmour RPO, North Vancouver, BC, Canada, V7J 3V5

Comments: This Material Safety Data Sheet was prepared using information provided by EBCO Products Ltd., and CCINFO.

**Revisions:** None