E-COAT CLEANER 4770 --

Section 1. Supplier Information

General Chemical Corp.
12336 Emerson Drive
Brighton , MI 48116
(248) 587-5600
Emergency Telephone: 1-800-424-9300

Section 2. Hazardous Ingredients

Hazardous Component(s)	CAS #	PEL TWA	PEL Ceiling	TLV TWA	TLV STEL	MFG Limits	WGT %
2-(2-Butoxyethoxy) ethanol	112-34-5	N/E	N/E	N/E	N/E	35 ppm	35 - 55
Glycol ether TPM	25498-49-1	N/E	N/E	N/E	N/E	N/E	15 - 35
Lactic acid, L(+)-	79-33-4	N/E	N/E	N/E	N/E	N/E	< 15
Surfactant	Proprietary	N/E	N/E	N/E	N/E	N/E	< 5

N/A = Not Applicable; N/E = Not Established; * = Mists; # = Skin; ' = Respirable Dust; " = Total Dust; ^ = Vapor; ** = Fumes; C = Ceiling Limit

All components of this product are listed on the Toxic Substances Control Act (TSCA) Inventory and the Canadian Domestic Substances List (DSL), or are exempt from the listing.

Section 3. Hazards Identification

Primary Routes of Entry

Inhalation:	YES
Skin:	YES
Ingestion:	YES

Hazardous Materials Information System (HMIS) Ratings

Health:	*	2
Fire:		1
Reactivity:		0

0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe
* = Chronic Hazard

Signs of Symptoms of Exposure:

INHALATION: Vapors are irritating to the nose, throat, and respiratory tract, and may produce headache and nausea in areas of poor ventilation.

SKIN: Material is mildly irritating to the skin. Prolonged or repeated contact may cause defatting and drying of the skin, resulting in irritation and dermatitis.

EYES: Vapors are slightly uncomfortable. Splashes can be irritating, will cause painful burning or stinging of eyes and lids, watering of eyes and inflammation of conjunctiva.

INGESTION: Ingestion of large amounts causes gastric disturbances. Nausea and vomiting may result.

Chemical Listed as Potential Carcinogens:

NTP: NO IARC: NO OSHA: NO

Target Organs: Liver, kidneys, blood, skin, and eyes.

Section 4. Emergency And First Aid Procedures

INHALATION: If adverse effects such as dizziness, nausea, or irritation are noted, move person to fresh air. If not breathing, give artificial respiration. Get medical attention!

SKIN: Immediately wash skin with large amounts of soap and water. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing.

EYES: THE OBJECT IS TO FLUSH MATERIAL OUT IMMEDIATELY, THEN SEEK MEDICAL ATTENTION! Immediately flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within several seconds is essential to achieve maximum effectiveness. SEEK MEDICAL ATTENTION IMMEDIATELY!

INGESTION: Call a physician or emergency medical facility immediately!

Section 5. Fire Fighting Measures

Flash Point: > 210 °F (minimum) Method Used: Pensky-Martens Closed Cup

Flammable Limits in Air % by Volume: LEL: N/E UEL: N/E

Extinghisher Media: Carbon dioxide, dry chemical, foam, or water fog.

Special Fire Fighting Procedures: Firefighters should wear a self-contained breathing apparatus with a full facepiece operated in pressure demand or other positive pressure mode, and protective clothing.

Unusual Fire And Explosion Hazards: Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited at locations distant from handling point.

Section 6. Accidental Release Measures

If material is spilled, absorb with sand, earth, or similar inert material. Place in closed, labeled containers for proper disposal.

CERCLA (Superfund) Reportable Quantity (in lbs None.

Section 7. Handling and Storage

Handling: Avoid contact with skin and eyes; wash thoroughly after handling. Avoid breathing vapor; use with adequate ventilation.

Storage: Do not use aluminum or galvanized steel for pumping, storage, or transfer. Store in a dry location at room temperature. Keep container closed and maintain all original markings and labels.

Other: Do not reuse container without recycling or reconditioning. Handle empty containers as if they were full.

Section 8. Exposure Controls and Personal Protection

Respiratory Protection: Use NIOSH / MSHA approved respirator where high vapor or mist concentrations are present.

Local Exhaust: Special ventilation is suggested at points where vapors can be expected to escape to the workplace air.

Mechanical Exhaust: Mechanical ventilation should be sufficient to maintain exposure levels below exposure limits.

Protective Gloves: Wear chemical resistant gloves.

Eye Protection:	Safety glasses with side shields. Do NOT wear contact lenses. Chemical goggles and/or faceshield should be worn where splashing is possible.
Other Protection:	Eye wash and safety shower should be readily available. Wear a chemical resistant apron and boots where splashing is possible.
Hygienic Practices:	Protective equipment and clothing should be selected, used and maintained according to applicable standards and regulations. For further information, contact the clothing or equipment manufacturer. Do not eat, drink, or smoke while using this product. Wash hands prior to eating, drinking, smoking, or using restrooms. Cleanse skin thoroughly after contact, before breaks and meals, and at the end of the work shift.

Section 9. Physical and Chemical Properties

Boiling Point:	> 210 ° F
Specific Gravity (H_2O=1):	1.00-1.02
Vapor Pressure (mm Hg):	N/E
Vapor Density (air=1)	> 1
Solubitity in Water:	Complete.
Reactivity in Water:	None.
Weight per Gallon (lb/gal):	8.3 - 8.5 lbs/gal
% Volatile by Volume:	94-97%
% Solid by Weight:	3-6 %
Appearance and Odor:	Clear to slightly hazy, thick liquid with a mild odor.
Theoretical VOC: (>0.1 mm Hg @ 20 ° C)	0 lbs/gal
Analytical VOC : (EPA method 24)	6.4 - 6.6 lbs/gal
pH:	2.0-3.0

Degree of water solubility:
Negligible = Less than 0.1%
Slight = 0.1% - 1%
Moderate = 1% - 10%
Appreciable = More than 10%
Complete = 100%

Section 10. Stability and Reactivity

Stability: Stable. Hazard Polymerization: Will not occur.

Conditions to Avoid:	Heat, sparks, or open flame.
Incompatibility (Materials to Avoid):	Oxidizing agents, strong bases and salts of strong bases at elevated temperatures, aluminum surfaces, or reducing agents.
Hazardous Decomposition Products:	Unidentified organic compounds and oxides of carbon.

Section 11. Toxicological Information

Ethanol, 2-(2-butoxyethoxy) [CASRN 000112-34-5]

ACUTE TOXICITY

Oral LD50 (rat) = 5.1-5.7 g/kg	Eye Irritation: Moderate [Rabbit]
Oral LD50 (mouse) = 2.4 g/kg	Skin Irritation: Slight [Rabbit]
Dermal LD50 (rabbit) ~ 4 g/kg	Inhalation LC50 (rat) > 18 ppm; 7 hours

Other Information: Kidney effects in male rats were observed in laboratory animals exposed to this material. Effects were consistent with male rat hyaline droplet nephropathy, which is of questionable significance to human health.

Mutagenicity: Animal mutagenicity studies were negative. In vitro mutagenicity studies were negative in some cases and positive in other cases. [3-3,3,1,6,4-121600], [18,7-1,3,6,4-020901], & [4,16-6,4,3,1-022001]

Tripropylene glycol methyl ether [CASRN 025498-49-1]

ACUTE TOXICITY
Oral LD50 (rats) = 3200 mg/kg
Dermal LD50 (rabbits) > 20 g/kg (> 20 ml/kg) [3-3,17,19,15,12,6,4-031199]

Lactic acid [CASRN 000079-33-4]

ACUTE TOXICITY
Oral LD50 (rat) = 3,730 mg/kg Eye irritation (rabbit): Severe
Oral LD50 (mouse) = 4,875 mg/kg Skin irritation (rabbit): Severe
Dermal LD50 (rabbit) > 2,000 mg/kg Skin irritation (guinea pig): Slight - none.

Skin: Tests on animals have shown that the effect of lactic acid on skin is species dependent. Human experience and results on guinea pigs have shown that it is an irritant and not corrosive. [15,20-11,11,0-070300]

Surfactant

ACUTE TOXICITY Oral LD50 (rat) = 6,300 mg/kg Eye Irritation (rabbit): Severe irritant
Dermal LD50 (rabbit) > 2,000 mg/kg (est.) Skin Irritation (rabbit): Mild irritant
Inhalation LC50 (rat) > 2 mg/L/1 hour

SUBCHRONIC Exposure of this material or component in test animals has caused abnormalities in the following organs: liver. Component has caused the following reproductive effects in laboratory animals: fertility; however, the effects are not sufficient to characterize the material as a reproductive toxin. [0,8-18,E,G,F,18-07042004]

Section 12. Ecological Information

Ethanol, 2-(2-butoxyethoxy) [CASRN 000112-34-5]

ECOTOXICITY
LC50 (Poecilia reticulata) = 1150 mg/L LC50 (Lepomis macrochirus) = 1300 mg/L LC50 (Leuciscus idus) = 1805-2304 mg/L LC50 (Menidia beryllina) = 2000 mg/L
LC50 (Carassius auratus) = 2700 mg/L LC50 (Daphnia magna) = 2850 mg/L
LC50 (Notropis atherinoides) > 500 mg/L Growth inhibition IC50 (bacteria) = 255 mg/L

MOVEMENT & PARTITIONING: Bioconcentration potential is low (BCF less than 100 or Log Pow less than 3). Log octanol/water partition coefficient (log Pow) is 0.56. Potential for mobility in soil is high (Koc between 50 and 150). Log soil organic carbon partition coefficient (log Koc) is estimated to be 1.88. Henry's Law Constant (H) is estimated to be 1.52E-9 atm.m3/mol.

DEGRADATION & PERSISTENCE: Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD greater than 40%). Degradation is expected in the atmospheric environment within minutes to hours. 5-Day biochemical oxygen demand (BOD5) is 0.05 p/p. 10-Day biochemical oxygen demand (BOD10) is 0.39 p/p. 20-Day biochemical oxygen demand (BOD20) is 1.08 p/p. Theoretical oxygen demand (ThOD) is calculated to be 2.17 p/p. Biodegradation rate may increase in soil and/or water with acclimation. [3-3,3,1,6,4-121600]

Glycol Ether TPM [CASRN 025498-49-1]

ECOTOXICOLOGY:
LC50 (Daphnia magna) > 10,000 mg/L LC50 (Pimephales promelas) = 11,619 mg/L

MOVEMENT & PARTITIONING: Bioconcentration potential is low (BCF less than 100 or Log Pow less than 3). Log octanol/water partition coefficient (log Pow) is estimated using a structural fragment method to be -0.20. Potential for mobility in soil is very high (Koc between 0 and 50). Soil organic carbon/water partition coefficient (Koc) is estimated to be 0.398. Henry's Law Constant (H) is estimated to be <1.14E-08 atm-m3/mole.

DEGRADATION & PERSISTENCE: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. 20-Day biochemical oxygen demand (BOD20) is 1/08 p/p. 10-Day biochemical oxygen demand (BOD10) is below detectable limits. 5-Day biochemical oxygen demand (BOD5) is below detectable limits. Theoretical oxygen demand (ThOD) is calculated to be 2.09 p/p. Biodegradation rate may increase in soil and/or water with acclimation. Biodegradation reached in Manometric Respirometry Test (OECD Test No. 301 F) after 28 days: 60%. [3-3,17,19,15,12,6,4-031199]

Lactic acid [CASRN 000079-33-4]

ECOTOXICITY
48 hr - LC50 (fish) = 320 mg/l EC50 (algae) = 3,500 mg/l (neutral)
48 hr - EC50 (daphnia) = 240 mg/l

Biodegradability: Readily biodegradable, according to appropriate OECD test.
Biochemical oxygen demand (BOD5) = 0.45 mg O2/mg
Biochemical oxygen demand (BOD20) = 0.60 mg O2/mg
Chemical oxygen demand (COD) = 0.90 mg O2/mg [15,20-11,11,0-070300]

Surfactant

ECOTOXICITY EC50 (selenastrum capricornutum) = 93 mg/l (72 h) [0,8-18,E,G,F,18-07042004]

Section 13. Disposal Considerations

Waste Disposal Methods (Federal, State, Local):
In accordance with all federal, state and local requirements.

RCRA Hazardous Waste Number: N/A

Section 14. Transport Information

Hazardous Material Description:
(Proper shipping name, hazard class, hazard ID#, packing group)

Domestic ground non-bulk: NOT REGULATED

Domestic ground bulk: NOT REGULATED

International: NOT REGULATED

Section 15. Regulatory Information

SARA 313 Information 'This product contains the following chemical(s) above deminis concentrations and may be subject to reporting under section 313:

Reportable Category: Certain glycol ethers, 40 - 50%

Section 16. Other Information

This MSDS contains revisions in the following sections: New product

Prepared by: Andrew J. Thomas Chemist

Revised by:

The development of this Material Safety Data Sheet (MSDS) relies upon information provided to us by each of our raw material suppliers. This MSDS will be updated as changes occur to their MSDS(s).
We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damage, direct or indirect, as a result of their use.