Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Open valve slowly. If valve is hard to open, discontinue use and contact your supplier. For other precautions, see section 16.

For additional information on storage and handling, refer to Compressed Gas Association (CGA) pamphlet P-1, *Safe Handling of Compressed Gases in Containers*, available from the CGA. Refer to section 16 for the address and phone number along with a list of other available publications.

OTHER HAZARDOUS CONDITIONS OF HANDLING, STORAGE, AND USE:

High pressure gas. Use piping and equipment adequately designed to withstand pressures to be encountered. **Gas can cause rapid suffocation due to oxygen deficiency.** Store and use with adequate ventilation. Close valve after each use; keep closed even when empty. **Prevent reverse flow.** Reverse flow into cylinder may cause rupture. Use a check valve or other protective device in any line or piping from the cylinder. **Never work on a pressurized system.** If there is a leak, close the cylinder valve. Blow the system down in an environmentally safe manner in compliance with all federal, provincial, and local laws, then repair the leak. **Never place a compressed gas cylinder where it may become part of an electrical circuit.**

Fumes and gases cannot be classified simply. The compostion and quantity of both are dependent upon the metal being worked and the process, procedure, equipment, and supplies used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal beign worked(such as paint, plating, or galvanizing), the number of workers and the volume of the work area, the quality and amount of ventilation, the position of the worker's head with respect to the fume plume, as well as the presence of contaminants int he atmosphere (such as chlorinated hydrocarbon vapours from cleaning and degreasing activities). One recommended way to determine the composition and quantity of fumes and gases to which the workers are exposed is to tkae and air sample from inside the worker's helmet if worn or in the worker's breathing zone. See ANSI/AWSF1.1, availbale from the Amercan Welding Society, 550 N.W. Le Jeune Rd. Miami, FL 33126. Read and understand the manufacturer's instructions and the precautionary label on the product. See American national Standard Z49.1, "Safety in Welding and Cutting" published by the American Society.

8. Exposure Controls/Personal Protection

VENTILATION/ENGINEERING CONTROLS:

LOCAL EXHAUST:	Use a local exhaust system, if necessary, to maintain an adequate supply of oxygen in the worker's breathing zone.
MECHANICAL (general):	General exhaust ventilation may be acceptable if it can maintain an adequate supply of air.
SPECIAL:	None.
OTHER:	None.

PERSONAL PROTECTION:

RESPIRATORY PROTECTION:	Use fume respirator or air supplied respiator when working in confined space or where local exhaust or ventilation does not keep exposure below TLV. Select in accordance with provincial regulations, local bylaws or guidelines. Selection should also be based on the current CSA standard Z94.4, "Selection, Care and Use of Respirators". Respirators should also be approved by NIOSH and MSHA.
SKIN PROTECTION:	Wear work gloves when handling cylinders.
EYE PROTECTION:	Wear goggles with filter lens. Provide protective screens and goggles, if necessary to protect others. Select in accordance with the current CSA standard Z94.3, "Industrial Eye and Face Protection", and any provincial regulations, local bylaws or guidelines.

OTHER PROTECTIVE EQUIPMENT: As needed, wear hand, head, and body protection which help to prevent injury from radiation, sparks and electrical shock. See ANSI Z49.1. At a minimum this includes welder's gloves and a protective face shield, and may include arm protectors, aprons, hats, shoulder protection, as well as dark substantial clothing. Train the worker not to touch live electrical parts.

9. Physical and Chemical Properties

PHYSICAL STATE:	Gas. (Compressed Gas)	FREEZING POINT:	-189.2°C (-308.6°F)	pH:	Not available.
BOILING POINT	-185.9°C (-302.6°F)	VAPOUR PRESSURE	Not applicable.	MOLECULAR WEIGHT:	39.95 g/mole
SPECIFIC GRAVITY: LIQUID (Water = 1)	Not applicable.	SOLUBILITY IN WATER,	Partially soluble in cold water.		
SPECIFIC GRAVITY: VAPOUR (air = 1)	1.38 @ 21.1C	EVAPORATION RATE (Butyl Acetate=1):	Not available.	COEFFICIENT OF WATER/OIL DISTRIBUTION:	Not applicable.
VAPOUR DENSITY:	0.0016 g/ml @ 21.1C	% VOLATILES BY VOLUME:	100% (v/v).	ODOUR THRESHOLD:	Odourless.
APPEARANCE & ODOUR:	Colourless.	Odourless.			

10. Stability and Reactivity

STABILITY:	The product is stable.
CONDITIONS OF CHEMICAL INSTABILITY:	None.
INCOMPATIBILITY (materials to avoid):	None currently known. Product is inert.
HAZARDOUS DECOMPOSITION PRODUCTS:	None.
HAZARDOUS POLYMERIZATION:	Will not occur.
CONDITIONS OF REACTIVITY:	None.

11. Toxicological Information

See section 3.

12. Ecological Information

No adverse ecological effects expected. This product does not contain any Class I or Class II ozone-depleting chemicals. The components of this mixture are not listed as marine pollutants by TDG Regulations.

13. Disposal Considerations

WASTE DISPOSAL METHOD: Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier.

14. Transport Information

TDG/IMO SHIPPING NAME: Argon, Compressed

HAZARD CLASS:	IDENTIFICATION #:	PRODUCT RQ:
CLASS 2.2: Non-flammable, non-corrosive and non-poisonous gas.	UN1006	100 L

SHIPPING LABEL(S): Non-flammable, non-poisonous gas

PLACARD (when required): Non-flammable, non-poisonous gas

SPECIAL SHIPPING INFORMATION:

Cylinders should be transported in a secure position, in a well-ventilated vehicle. Cylinders transported in an enclosed, nonventilated compartment of vehicle can present serious safety hazards.

15. Regulatory Information

The following selected regulatory requirements may apply to this product. Not all such requirements are identified. Users of this product are solely responsible for compliance with all applicable federal, provincial, and local regulations.

WHMIS (Canada) CLASS A: Compressed gas.

International Regulations

EINECS Not available.

DSCL (EEC) This product is not classified according to the EU regulations.

International Lists No products were found.

16. Other Information

MIXTURES:

When two or more gases, or liquefied gases are mixed, their hazardous properties may combine to create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an Industrial Hygienist, or other trained person when you make your safety evaluation of the end product. Remember, gases and liquids have properties which can cause serious injury or death.

HAZARD RATING SYSTEM:

HMIS RATINGS:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

STANDARD VALVE CONNECTIONS FOR U.S. AND CANADA:

THREADED:	CGA-295
PIN-INDEXED YOKE:	Not available.
ULTRA-HIGH-INTEGRITY CONNECTION:	Not available.

Use the proper CGA connections. **DO NOT USE ADAPTERS.** Additional limited-standard connections may apply. See CGA pamphlets V-1 and V-7 listed below.

Ask your supplier about free Praxair safety literature as referred to in this MSDS and on the label for this product. Further information about this product can be found in the following pamphlets published by the Compressed Gas Association, Inc. (CGA), 4221 Walney Road, 5th Floor, Chantilly, VA 20151-2923, Telephone (703) 788-2700, Fax (703) 961-1831, website: www.cganet.com.

AV-1	Safe Handling and Storage of Compressed Gas
G-11.1	Commodity Specification for Argon
P-1	Safe Handling of Compressed Gases in Containers
P-14	Accident Prevention in Oxygen-Rich, Oxygen-Deficient Atmosphere
SB-2	Oxygen-Deficient Atmospheres
V-1	Compressed Gas Cylinder Valve Inlet and Outlet Connections
V-7	Standard Method of Determining Cylinder Valve Outlet Connections for Industrial Gas Mixtures
---	Handbook of Compressed Gases, Fourth Edition

PREPARATION INFORMATION:

DATE:	**10/15/2004**
DEPARTMENT:	**Safety and Environmental Services**
TELEPHONE:	**905-803-1600**

The opinions expressed herein are those of qualified experts within Praxair Canada Inc. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Praxair Canada Inc., it is the user's obligation to determine the conditions of safe use of the product.

Praxair Canada Inc. requests the users of this product to study this Material Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product of the same product hazards and safety information.

PRAXAIR

Praxair Canada Inc.
1 City Centre Drive
Suite 1200
Mississauga, ON L5B 1M2

Imperial Oil

MATERIAL SAFETY DATA SHEET

Date Prepared: September 30, 2003
Supersedes: July 31, 2003
MSDS Number: 08054

1. PRODUCT INFORMATION

Product Identifier: ESSO ATF DEXRON III/MERCON

Application and Use:
Automatic transmission fluid.

Product Description:

A lubricating oil consisting of a mixture of saturated and unsaturated hydrocarbons derived from paraffinic distillate, and additives.

REGULATORY CLASSIFICATION

WHMIS:
Not a controlled product

CEPA: CANADIAN ENVIRONMENTAL PROTECTION ACT
All components of this product are either on the Domestic Substances List (DSL) or are exempt.

TDG INFORMATION (RAIL/ROAD):
Not Regulated in Canada.

Please be aware that other regulations may apply.

TELEPHONE NUMBERS		MANUFACTURER/SUPPLIER:
Emergency 24 hr.	(519) 339-2145	IMPERIAL OIL
Technical Info.	(800) 268-3183	Products Division
		111 St Clair Avenue West
		Toronto, Ontario
		M5W 1K3
		(416) 968-4441

2. REGULATED COMPONENTS

The following components are defined in accordance with sub-paragraph 13(a) (i) to (iv) or paragraph 14(a) of the Hazardous Products Act:

NAME	%	CAS #
Not applicable		

3. TYPICAL PHYSICAL & CHEMICAL PROPERTIES

Physical State: Liquid
Specific gravity: not available
Viscosity: 7.20 cSt at 100 deg C
Vapour Density: not available
Boiling Point: 285 to 615 deg C
Evaporation rate: <0.1 (1= n-butylacetate)
Solubility in water: negligible
Freezing/Pour Point: -40 deg C ASTM D97
Odour Threshold: not available
Vapour Pressure: <1 kPa at 38 deg C
Density: 0.84 g/cc at 15 deg C
Appearance/odour: Red coloured oil, petroleum odour

4. HEALTH HAZARD INFORMATION

NATURE OF HAZARD

INHALATION:

Negligible hazard at normal temperatures (up to 38 deg C).
Elevated temperatures or mechanical action may form vapours, mists or fumes which may be irritating to the eyes, nose, throat and lungs.
Avoid breathing vapours or mists.

EYE CONTACT:

Slightly irritating, but will not injure eye tissue.

SKIN CONTACT:

Low toxicity.
Frequent or prolonged contact may irritate the skin.

INGESTION:

Low toxicity.

ACUTE TOXICITY DATA:

Based on animal testing data from similar materials and products,

the acute toxicity of this product is expected to be:

Oral	:	LD50 > 5000 mg/kg	(Rat)
Dermal	:	LD50 > 3160 mg/kg	(Rabbit)
Inhalation	:	LC50 > 5000 mg/m3	(Rat)

OCCUPATIONAL EXPOSURE LIMIT:

ACGIH recommends:
For oil mists, 5 mg/m3.

Local regulated limits may vary.

5. FIRST AID MEASURES

INHALATION:

Vapour pressure of this material is low and as such inhalation under normal conditions is usually not a problem. If overexposed to oil mist, remove from further exposure. Administer artificial respiration if breathing has stopped. Keep at rest. Call for prompt medical attention.

EYE CONTACT:

Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.

SKIN CONTACT:

Flush with large amounts of water. Use soap if available.
Remove severely contaminated clothing (including shoes) and launder before reuse.
If irritation persists, seek medical attention.

INGESTION:

If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

6. PREVENTIVE AND CORRECTIVE MEASURES

PERSONAL PROTECTION:

The selection of personal protective equipment varies, depending upon conditions of use.
In open systems where contact is likely, wear safety goggles, chemical-resistant overalls, and chemically impervious gloves.
Where only incidental contact is likely, wear safety glasses with side shields. No other special precautions are necessary provided skin/eye contact is avoided.
Where concentrations in air may exceed the occupational exposure limits

given in Section 4 and where engineering, work practices or other means of exposure reduction are not adequate, approved respirators may be necessary to prevent overexposure by inhalation.

ENGINEERING CONTROLS:

The use of local exhaust ventilation is recommended to control emissions near the source. Laboratory samples should be handled in a fumehood. Provide mechanical ventilation of confined spaces.

HANDLING, STORAGE AND SHIPPING:

Keep containers closed. Handle and open containers with care.
Store in a cool, well ventilated place away from incompatible materials.
In keeping with good personal hygiene practices, wash hands thoroughly after handling the material.
Do not handle or store near an open flame, sources of heat, or sources of ignition.
Empty containers may contain product residue. Do not pressurize cut, heat, or weld empty containers. Do not reuse empty containers without commercial cleaning or reconditioning.

LAND SPILL:

Eliminate source of ignition. Keep public away. Prevent additional discharge of material, if possible to do so without hazard.
Prevent spills from entering sewers, watercourses or low areas. Contain spilled liquid with sand or earth.
Recover by pumping or by using a suitable absorbant.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

WATER SPILL:

Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in unconfined waters.
Consult an expert on disposal of recovered material. Ensure disposal in compliance with government requirements and ensure conformity to local disposal regulations. Notify the appropriate authorities immediately.
Take all additional action necessary to prevent and remedy the adverse effects of the spill.

7. FIRE AND EXPLOSION HAZARD

Flashpoint and method: 180 deg C COC ASTM D92

Autoignition: 315 deg C Flammable Limits: LEL: NA UEL: NA

GENERAL HAZARDS:

Low Hazard; liquids may burn upon heating to temperatures at or above the flash point.
Toxic gases will form upon combustion.

FIRE FIGHTING:

Use water spray to cool fire exposed surfaces and to protect personnel.
Shut off fuel to fire.
Use foam, dry chemical or water spray to extinguish fire.
Respiratory and eye protection required for fire fighting personnel.
Avoid spraying water directly into storage containers due to danger of boilover.
A self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of an SCBA may not be required.

HAZARDOUS COMBUSTION PRODUCTS:

Fumes, smoke, carbon monoxide, sulfur oxides, nitrogen oxides, phosphorus oxides, aldehydes and other decomposition products, in the case of incomplete combustion
Various metal oxides

8. REACTIVITY DATA

STABILITY:

This product is stable. Hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Strong oxidizing agents

HAZARDOUS DECOMPOSITION:

none

9. NOTES

All components of this product are listed on the U.S. TSCA inventory.

REVISION SUMMARY:
Since 31 July 2003, this MSDS has been revised in Section(s):
3, 7

10. PREPARATION

Date Prepared: September 30, 2003
Prepared by: Lubricants & Specialties
IMPERIAL OIL
Products Division
111 St Clair Avenue West
Toronto, Ontario
M5W 1K3
(800) 268-3183

CAUTION: " The information contained herein relates only to this product or material and may not be valid when used in combination with any other product or material or in any process. If the product is not to be used for a purpose or under conditions which are normal or reasonably foreseeable, this information cannot be relied upon as complete or applicable. For greater certainty, uses other than those described in Section 1 must be reviewed with the supplier. The information contained herein is based on the information available at the indicated date of preparation. This MSDS is for the use of Imperial Oil customers and their employees and agents only. Any further distribution of this MSDS by Imperial Oil customers is prohibited without the written consent of Imperial Oil."

VÉTOQUINOL CANADA INC.

2000, CHEMIN GEORGES, LAVALTRIE, QC, J5T 3S5

Telephone: 450-586-2252

Order Desk: 800-363-1700

Fax: 450-586-4649

Website: www.vetoquinol.ca

Email: info@vetoquinol.ca

BIOSOLVE

Vétoquinol

MULTIPURPOSE HEAVY DUTY CLEANER

- powerful cleaning concentrate

- superior degreasing properties

- for use in food processing, hatcheries & on the farm

- biodegradable

APPLICATION : For the removal of organic soiling, especially fats and greases. **Biosolve** is ideal for the removal of faecal matter and soiling on farms and in the hatchery. **Biosolve** will remove stubborn fats and grease from all processing equipment such as shackles and cutting blades.

COMPOSITION : Pale yellow liquid. An alkaline blend of non-ionic and amphoteric surfactants in an aqueous solution incorporating a biodegradable sequestrant for superior hard water performance.

DIRECTIONS FOR USE :

SPRAYING : Manually prepare a 0.5% (1:200) solution of **Biosolve** or use dosing equipment to achieve this dilution. Spray using a low pressure lance onto all surfaces at an application rate of 500 ml per square meter. Hot water (60-65°C) will improve the effectiveness of the product particularly in high grease situations. Allow contact time of 15-20 minutes prior to thoroughly washing all surfaces with water at high pressure. Higher concentrations may be required under heavy soiled conditions.

FOAMING : Manually prepare a 2% (1:50) solution of **Biosolve** or using dosing equipment to achieve this dilution. Apply using a foam lance onto all surfaces at an application rate of 250 mL per square meter. Allow a contact time of 15-20 minutes prior to thoroughly washing all surfaces with water at high pressure. Higher concentrations may be required under very heavy soiled conditions.

For Food Plant Use : Food contact surfaces are to be rinsed with potable water before re-use.

Biosolve contains Sodium Hydroxide

Health Hazard : Corrosive to eyes and skin. Inhalation of mists of the diluted product may cause irritation to nose and respiratory tract.

Precautions : Wear mist respirator when working in spray mists. Wear safety glasses and gloves.

First aid : In case of contact: immediately flush eyes or skin with water for at least 10 minutes.

See Material Safety Data Sheet.

Distributed by : Vétoquinol N.-A. Inc., 2000, ch. Georges, Lavaltrie, QC, Canada J5T 3S5

www.vetoquinol.ca

Manufactured by : Antec International - A DuPont Company

www.ahs.dupont.com

NET CONTENTS	CODE :	
4 L	02353019	656302B
20 L	02353008	11.05
200 L	02353009	07.05

NAC No.: 12341592

ANTEC BIOSOLVE

SAFETY DATA SHEET HSD/52D

(1) IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Name: Antec Biosolve

Supplier: Antec International Limited
Windham Road
Chilton Industrial Estate
Sudbury
Suffolk
CO10 2XD

Tel: 44-(0)1787-377305
Fax: 44-(0)1787-310846

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(2) COMPOSITION/INFORMATION ON INGREDIENTS

Composition: A blend of Amphoteric surfactants, Non ionic surfactants, Organic sequestrant & Caustic soda.

Chemical	% Concentration	Classification	CAS	Exposure
Sodium Hydroxide	1-5	C; R35	1310-73-2	2mg/m^3 (OES 15 min Ref. period).

For the full text of the R-phrases mentioned in this section, see section 16.

---

(3) HAZARDS INFORMATION

Corrosive effect on skin and eyes (may cause burns).

---

(4) FIRST AID MEASURES

Exposure	Symptom	Treatment
INHALATION	The concentrate does not represent an inhalation hazard under normal circumstances.	-
	May cause irritation to nose, throat and respiratory tract through inhalation of mists of the diluted product.	Remove from exposure. Seek medical attention.
SKIN CONTACT	Strong irritation.	Remove contaminated clothing. Wash immediately with plenty of water.
EYE CONTACT	May cause pain, reddening and possible eye damage.	Wash immediately with water or buffered eyewash for 10 minutes minimum. Seek immediate medical attention.

INGESTION	May cause damage to mouth, throat, upper digestive tract, stomach.	Wash mouth with water. Drink water, milk (if conscious). Do not induce vomiting. Seek medical advice immediately.

(5) FIRE FIGHTING MEASURES

Product is non-flammable.

Suitable Extinguisher: WATER SPRAY, FOAM, CO_2

Special Precautions: If without personal risk, prevent contamination of surface water drains and watercourses.

Special Protective Equipment: Protect against release of hazardous gases if the product is involved in a fire.

(6) ACCIDENTAL RELEASE PROCEDURES

Personal Precautions: Wear suitable protective clothing (see section 8).

Environmental Precautions: Do not allow concentrate to enter drains or watercourses.

Methods for Cleaning Up: Absorb with sand or sawdust and place in suitable container awaiting disposal. Rinse affected area with water.

(7) HANDLING AND STORING

Precautions during handling: Wear suitable protective clothing (see section 8).

Use chemical resistant overalls, gloves, and eye/face protection when working in spray mists of the diluted product. Certain methods of application may necessitate the use of a face mask.

Storage: Keep containers tightly closed in a cool place.
Do not allow to freeze.

(8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures: Not applicable.

Control Parameters: None specified.

Personal Protection

Respiratory: None required when handling the concentrated product.
When working in spray mists of the diluted product the use of a respiratory mask, fitted with a filter unit for fine mists (P3), is recommended.

Hand: Rubber gloves (e.g. Marigold GO4Y).

Eye: Goggles to BS EN 166 standard.

Skin: Overalls (alkali resistant).

---

(9) **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance/ Odour: Clear pale straw liquid.

pH (1% solution): 11.5

Flash Point: Not applicable.

Specific Gravity: 1.10.

Solubility: Freely soluble in water.

---

(10) **STABILITY AND REACTIVITY**

Stability: Stable under normal conditions.

Conditions to Avoid: Excessive temperatures (hot and cold).
Do not allow to freeze.

Materials to Avoid: Avoid contact with brass, aluminium, zinc, tin.
Do not mix with acids.

---

(11) **TOXICOLOGICAL INFORMATION**

Test data: None available.

Human Experience: Product has corrosive effect on the eyes and skin. Prolonged exposure with skin may lead to dermatitis in extreme cases.

---

(12) **ECOLOGICAL INFORMATION**

Persistence & degradability: No data is available. However, based on evaluation of its components in accordance with 1999/45/EC, this product is not expected to display long term adverse effects in the aquatic environment.

Bio-accumulation: Not noted.

Aquatic toxicity: Does not meet the criteria for aquatic toxicity classification in accordance with 1999/45/EC.

---

(13) **DISPOSAL CONSIDERATIONS**

Disposal of Product: Dispose of as Special Waste in compliance with the Special Waste Regulations of 1996. Observe local restrictions.

Disposal of Packaging: Dispose of in compliance with the Environmental Protection (Duty of Care) Regulations 1991. Observe local restrictions.

---

(14) **TRANSPORT INFORMATION**

U.N. Number: 1760

UK Road (CDG): Corrosive, Class 8.

Sea (IMDG): Corrosive, Class 8.

Road (ADR): Corrosive, Class 8.

Air (IATA): Corrosive, class 8.

Proper shipping name: Corrosive liquid, N.O.S. (sodium hydroxide).

Packaging Group: II

Marine Pollutant: No.

---

(15) **REGULATORY INFORMATION**

Legislation: The product is labelled in accordance with the Chemicals (Hazard Information and Packaging) Regulations 2002 (CHIP3). The product must be handled in accordance with the COSHH (Control of Substances Hazardous to Health) Regulations 2002.

Symbol:

Corrosive

R-Phrases:	R34:	Causes burns.
S-Phrases:	S26:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S24/25:	Avoid contact with skin and eyes.
	S36/37/39:	Wear suitable protective clothing, gloves and eye/face protection.

(16) **OTHER INFORMATION**

Uses: Heavy duty cleaner.

Further Product Information: Contact Antec International Ltd, using the number given below. For uses other than those labelled on the package, please consult manufacturer for advice before proceeding.

Explanation of Risk Phrases (R-phrases) mentioned in section 2:

R35 Causes severe burns.

Changes made since the last edition are indicated by a line in the margin.

The customer should satisfy themselves that the product is suitable for the intended purpose, and that a suitable and sufficient assessment of any risks created by any activity using this product is undertaken before use. The above information is based upon our current state of knowledge of the product at the time of publication. The data is given in good faith and is designed only as a guidance to users of possible risks, and therefore, does not constitute a guarantee of product quality of performance.

Revision: D

Date: 15th July 2004

Replaces: C dated 4th January 2001

EMERGENCY TELEPHONE NUMBER (UK): 01787 377305

MATERIAL SAFETY DATA SHEET

BIRKO *Corporation*

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Birkolene B**

Product Code: I00211

Manufacturer

BIRKO Corporation
9152 Yosemite Street
Henderson, CO 80640
(303) 289-1090
www.birkocorp.com

Emergency Phone Numbers

Transportation:
CHEMTREC (800) 424-9300

Non-Transportation:
BIRKO (303) 289-1090
(800) 525-0476

2. COMPOSITION / INFORMATION ON INGREDIENTS

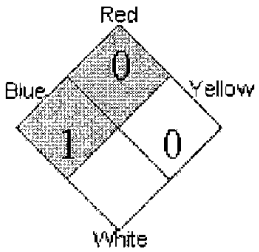
CAS #	Component	Exposure Limit	
01333-86-4	Carbon Black	PEL	3.5 mg/M3 [1]

[1] Carcinogen (IARC) Group 2B

3. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form	Viscous Liquid
Color	Black
Odor	Odorless
Boiling Point	212-220 F
Freeze Point	28-32 F
Water Solubility	Completely
Specific Gravity	1.024
Vapor Pressure	N/A
Vapor Density	> 1
Evaporation Rate	< 1

NFPA Ratings



Blue - Health Hazard	Red - Fire Hazard	Yellow - Reactivity	White - Specific Hazard
4 - Deadly	4 - Flash Point < 73°F	4 - May Detonate	
3 - Extreme Danger	3 - Flash Point > 73°F and < 100°F	3 - Shock or Heat may Detonate	ACID - Acid
2 - Hazardous	2 - Flash Point > 100°F and < 200°F	2 - Violent Chemical Change	ALK - Alkali
1 - Slightly Hazardous	1 - Flash Point > 200°F	1 - Unstable If Heated	COR - Corrosive
0 - Insignificant Hazard	0 - Noncombustible	0 - Stable	OXY - Oxidizer
			P - Polymerization
			^,^ - Radioactive
			W - Use No Water

4. FIREFIGHTING MEASURES

Flash Point	Not Applicable
Extinguishing Media	Water, Carbon Dioxide, Dry Chemical , Foam Blanket
Special Procedures	Always wear self - contained breathing apparatus when fighting a chemical fire.
Unusual Fire/Explosion Hazard	Carbon Monoxide / Carbon Dioxide gases (toxic) liberated during combustion.

5. REACTIVITY

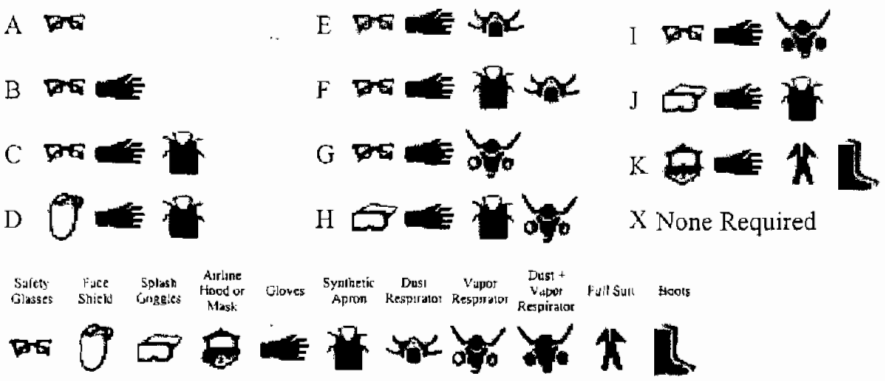
Stability	This product should maintain its physical character when stored closed at moderate temperatures, between 28 °F and 105 °F.
Hazardous Polymerization	This product does not polymerize under normal storage and use conditions.
Incompatible Materials	Oxidizers
Decomposition Products	Carbon Monoxide / Carbon Dioxide gases (toxic) liberated during combustion.

HMIS

0	FLAMMABILITY
1	HEALTH
0	REACTIVITY
X	Personal Protection

Hazard Index
4 - Severe
3 - Serious
2 - Moderate
1 - Slight
0 - Minimal

Personal Protective Index



6. POTENTIAL HEALTH EFFECTS

Routes of Entry	Eye contact, Skin contact, Inhalation, Ingestion
Acute / Chronic Inhalation	Although this product is not likely to be immediately harmful on inhalation, one should take measures to avoid the inhalation of any foreign substance.
Acute / Chronic Skin	If allowed to remain on skin for extended periods of time irritation may occur.

Contact	
Acute / Chronic Eye Contact	Irritates on contact. Corneal damage possible with extended exposure.
Ingestion	No health hazards anticipated with ingestion of this product.

7. FIRST AID MEASURES

Inhalation	Remove from exposure. Administer oxygen if breathing is difficult. Resuscitate if necessary. Get medical help immediately.
Skin Contact	Promptly Rinse exposed areas with water. Do not wear contaminated clothing until it has been laundered. If irritation persists, consult physician.
Eye Contact	Immediately rinse eyes thoroughly in cool running water for at least 15 minutes. If irritation persists, or inflammation or swelling occurs, seek medical attention.
Ingestion	DO NOT induce vomiting. Have a conscious victim drink milk or water to dilute. Never give an unconscious person anything by mouth. Get medical help immediately.

8. ACCIDENTAL RELEASE MEASURES

Avoid contamination of food, feed, waterway, or groundwater. Capture material and contain for re-use or disposal. Remainder may be rinsed to a sewer.

9. WASTE DISPOSAL CONSIDERATIONS

Dispose in approved landfill according to Federal, State, and Local Regulations.

10. HANDLING AND STORAGE

Do not contaminate food, feed, or natural water. Keep container closed when not in use. Store in a cool, dry location. Supplier not responsible for disposition of this product. Do not reuse container.

11. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection	None Required
Skin Protection	None Required
Respiratory Protection	NIOSH approved self contained breathing apparatus for exposure above PEL.
Ventilation	General exhaust acceptable if PEL not exceeded.

12. TSCA CERTIFICATION

Birko Corporation certifies that all ingredients in this chemical formulation comply with all applicable rules or orders under TSCA and that we are not offering a chemical substance for entry in violation of TSCA or any applicable rule or order under TSCA.

13. APPROVALS

Reason for Issue Amendments

Prepared By	Terry McAninch, Chemist
Approved By	Mike S. Brown
Title	Chief Operating Officer
Supercedes Date	5/6/2003
MSDS Number	I00211

GE Betz

GE Betz Canada, Inc.
3451 Erindale Station Road
Mississauga, ON L5C 2S9
Business telephone: (905) 279-2222

Material Safety Data Sheet

Issue Date: 07-APR-2006

EMERGENCY TELEPHONE (Health/Accident): (800) 877-1940

1 PRODUCT IDENTIFICATION

REAGENT NAME:

BUFFER SOLUTION, PH 4.0 (COLOR CODED)

REAGENT CODE:

L1860

REAGENT APPLICATION AREA:

FIELD TEST REAGENT

2 COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the WHMIS Regulations is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Product contains no hazardous ingredients reportable under WHMIS regulation

No component is considered to be a carcinogen by the U.S. National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or under WHMIS.

3 HAZARDS IDENTIFICATION

****

EMERGENCY OVERVIEW

May cause slight irritation to the skin. May cause slight irritation to the eyes. Mists/aerosols may cause irritation to upper respiratory tract.

HAZARDOUS DECOMPOSITION PRODUCTS:
Thermal decomposition (destructive fires) yields elemental oxides.
FLASH POINT:
> 200F > 93C P-M(CC)

6 ACCIDENTAL RELEASE MEASURES

PROTECTION AND SPILL CONTAINMENT:
Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.
DISPOSAL INSTRUCTIONS:
The waste characteristics of the absorbed material, or any contaminated soil, should be determined in accordance with provincial regulations. Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement or discharged under provincial regulations.
Incinerate or land dispose in an approved landfill.

7 HANDLING & STORAGE

HANDLING:
Normal chemical handling.
STORAGE:
Keep containers closed when not in use. Reasonable and safe chemical storage.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS
Consult local authorities for acceptable provincial values.

Product contains no hazardous ingredients reportable under WHMIS regulation

ENGINEERING CONTROLS:
adequate ventilation
RESPIRATORY PROTECTION:
If air-purifying respirator use is appropriate, use a respirator with dust/mist filters.
SKIN PROTECTION:
neoprene gloves-- Wash off after each use. Replace as necessary.
EYE PROTECTION:
splash proof chemical goggles

9 PHYSICAL & CHEMICAL PROPERTIES

Specific Grav.(70F,21C)	1.000	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	32	Vapor Density (air=1)	< 1.00
Freeze Point (C)	0		
Viscosity(cps 70F,21C)	4	% Solubility (water)	100.0

Odor		None
Appearance		Red
Physical State		Liquid
Flash Point	P-M(CC)	> 200F > 93C

NOT REGULATED

16 OTHER INFORMATION

NFPA/HMIS		CODE TRANSLATION
Health	1	Slight Hazard
Fire	0	Minimal Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	B	Goggles,Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
MSDS status:	11-DEC-1997		** NEW **
	13-NOV-2000		11-DEC-1997
	06-MAY-2003	8	13-NOV-2000
	07-APR-2006	16	06-MAY-2003

GE Betz

GE Betz Canada, Inc.
3451 Erindale Station Road
Mississauga, ON L5C 2S9
Business telephone: (905) 279-2222

Material Safety Data Sheet

Issue Date: 07-APR-2006

EMERGENCY TELEPHONE (Health/Accident): (800) 877-1940

1 PRODUCT IDENTIFICATION

READENT NAME:

BUFFER SOLUTION, PH 7.0 (COLOR CODED)

READENT CODE:

L1861

READENT APPLICATION AREA:

FIELD TEST REAGENT

2 COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the WHMIS Regulations is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range(w/w%)
7778-53-2	PHOSPHORIC ACID, TRIPOTASSIUM SALT Severe irritant (eyes) ORAL LD50: NO DATA. DERMAL LD50-RABBIT: >300 MG/KG INHL. LC50: NO DATA.	0.5-1.5

No component is considered to be a carcinogen by the U.S. National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or under WHMIS.

3 HAZARDS IDENTIFICATION

****

EMERGENCY OVERVIEW

FIRE FIGHTING INSTRUCTIONS:
Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).
EXTINGUISHING MEDIA:
dry chemical, carbon dioxide, foam or water
HAZARDOUS DECOMPOSITION PRODUCTS:
Thermal decomposition (destructive fires) yields elemental oxides.
FLASH POINT:
> 200F > 93C P-M(CC)

6 ACCIDENTAL RELEASE MEASURES

PROTECTION AND SPILL CONTAINMENT:
Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.
DISPOSAL INSTRUCTIONS:
The waste characteristics of the absorbed material, or any contaminated soil, should be determined in accordance with provincial regulations. Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement or discharged under provincial regulations.
Incinerate or land dispose in an approved landfill.

7 HANDLING & STORAGE

HANDLING:
Normal chemical handling.
STORAGE:
Keep containers closed when not in use. Reasonable and safe chemical storage.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS
Consult local authorities for acceptable provincial values.

CHEMICAL NAME

PHOSPHORIC ACID, TRIPOTASSIUM SALT
PEL (OSHA): NOT DETERMINED
TLV (ACGIH): NOT DETERMINED

ENGINEERING CONTROLS:
adequate ventilation
RESPIRATORY PROTECTION:
If air-purifying respirator use is appropriate, use a respirator with dust/mist filters.
SKIN PROTECTION:
neoprene gloves-- Wash off after each use. Replace as necessary.
EYE PROTECTION:
splash proof chemical goggles

9 PHYSICAL & CHEMICAL PROPERTIES

Specific Grav.(70F,21C)	1.000	Vapor Pressure (mmHG)	~ 18.0

15 REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

CEPA:

All components of this product comply with substance notification requirements under CEPA.

WHMIS CLASSIFICATION:

NOT REGULATED

16 OTHER INFORMATION

NFPA/HMIS		CODE TRANSLATION
Health	1	Slight Hazard
Fire	1	Slight Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	B	Goggles,Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
MSDS status:	11-DEC-1997		** NEW **
	24-JUL-1998	2,8	11-DEC-1997
	02-JUL-2001		24-JUL-1998
	06-MAY-2003	4	02-JUL-2001
	07-APR-2006	16	06-MAY-2003

GE Betz

GE Betz Canada, Inc.
3451 Erindale Station Road
Mississauga, ON L5C 2S9
Business telephone: (905) 279-2222

Material Safety Data Sheet

Issue Date: 07-APR-2006

EMERGENCY TELEPHONE (Health/Accident): (800) 877-1940

1 PRODUCT IDENTIFICATION

REAGENT NAME:

BUFFER SOLUTION, PH 10.0 (COLOR CODED)

REAGENT CODE:

L1862

REAGENT APPLICATION AREA:

FIELD TEST REAGENT

2 COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the WHMIS Regulations is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Product contains no hazardous ingredients reportable under WHMIS regulation

No component is considered to be a carcinogen by the U.S. National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or under WHMIS.

3 HAZARDS IDENTIFICATION

****

EMERGENCY OVERVIEW

May cause slight irritation to the skin. May cause slight irritation to the eyes. Mists/aerosols may cause irritation to upper respiratory tract.

Thermal decomposition (destructive fires) yields elemental oxides.

FLASH POINT:

> 200F > 93C P-M(CC)

6 ACCIDENTAL RELEASE MEASURES

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

DISPOSAL INSTRUCTIONS:

The waste characteristics of the absorbed material, or any contaminated soil, should be determined in accordance with provincial regulations. Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement or discharged under provincial regulations.
Incinerate or land dispose in an approved landfill.

7 HANDLING & STORAGE

HANDLING:

Normal chemical handling.

STORAGE:

Keep containers closed when not in use. Protect from freezing.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Consult local authorities for acceptable provincial values.

Product contains no hazardous ingredients reportable under WHMIS regulation

ENGINEERING CONTROLS:

adequate ventilation

RESPIRATORY PROTECTION:

If air-purifying respirator use is appropriate, use a respirator with dust/mist filters.

SKIN PROTECTION:

neoprene gloves-- Wash off after each use. Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles

9 PHYSICAL & CHEMICAL PROPERTIES

Specific Grav.(70F,21C)	0.998	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	32	Vapor Density (air=1)	< 1.00
Freeze Point (C)	0		
Viscosity(cps 70F,21C)	4	% Solubility (water)	100.0

Odor	None
Appearance	Blue
Physical State	Liquid
Flash Point P-M(CC)	> 200F > 93C
pH As Is (approx.)	10.0
Evaporation Rate (Ether=1)	< 1.00

D2B

16 OTHER INFORMATION

NFPA/HMIS		CODE TRANSLATION
Health	1	Slight Hazard
Fire	1	Slight Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	B	Goggles,Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
MSDS status:	11-DEC-1997		** NEW **
	13-NOV-2000		11-DEC-1997
	06-MAY-2003	4	13-NOV-2000
	07-APR-2006	16	06-MAY-2003

BOSS LUBRICANTS: MATERIAL SAFETY DATA SHEET

PRODUCT IDENTITY: BOSS ULTRA NF 7

EFFECTIVE: January 8, 2006

THIS MSDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)

IMPORTANT: Read this MSDS before handling & disposing of this product. Pass this information on to employees, customers & users of this product.

SECTION 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION / HAZARD RATINGS

PRODUCT IDENTITY:	BOSS ULTRA NF 7	
COMPANY IDENTITY:	BOSS LUBRICANTS	HAZARD RATINGS:
COMPANY ADDRESS:	112, 6303 – 30 th Street S.E.	HEALTH: 0
COMPANY CITY:	CALGARY, AB T2C 1R4	FLAMMABILITY: 1
COMPANY PHONE:	1-800-844-9457	REACTIVITY: 0

SECTION 2. INGREDIENT & REGULATORY INFORMATION

All components of this product are on the TSCA list.
SARA TITLE III Section 313 Supplier Notification

This product does not contain any toxic chemical subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS	CAS	WT/% (REG SECTION)	RQ(LBS)
WHITE MINERAL OIL		100	NA

MATERIAL	CAS	TWA+ (OSHA)	TLV (ACGIH)	HAP
WHITE MINERAL OIL		5mg/m3	5mg/m3	
No				

BOSS LUBRICANTS: MATERIAL SAFETY DATA SHEET

SECTION 3. HAZARDS IDENTIFICATION

THRESHOLD LIMIT VALUE: Not Known

CONTAINS: WHITE MINERAL OIL

ACUTE HAZARDS

EYE & SKIN CONTACT:

Not expected to cause prolonged or significant eye irritation.
Contact with the skin is not expected to cause prolonged or significant irritation.
Not expected to be harmful to internal organs if absorbed through the skin.

INHALATION:

Contains a petroleum based mineral oil. May cause respiratory irritation or other Pulmonary effects following prolonged or repeated inhalation of oil mist at air borne levels above the recommended mineral oil mist exposure limits.

SWALLOWING:

Not expected to be harmful if swallowed.

CHRONIC HAZARDS;

None known.

CANCER AND REPRODUCTIVE DAMAGE HAZARDS:

None known.

BOSS LUBRICANTS: MATERIAL SAFETY DATA SHEET

SECTION 3. HAZARDS IDENTIFICATION (CONTINUED)

SKIN CONTACT:

No first aid procedures required. As a precaution, wash skin thoroughly with soap and water. Remove contaminated clothing. If irritation develops and persists, get medical attention. Launder contaminated clothing before use.

INHALATION:

If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

SWALLOWING:

No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.

SECTION 5. FIRE FIGHTING MEASURES

LOWER FLAMMABLE LIMITS IN AIR (5 by vol.):	Not Determined
FLASH POINT (TEST METHOD) : PMCC	>130°C
FLAMMABILITY CLASSIFICATION:	Not Flammable

EXTINGUISHING MEDIA:

Use foam, dry powder, carbon dioxide (CO2). Water can be used to cool and protect exposed material.

BOSS LUBRICANTS: MATERIAL SAFETY DATA SHEET

SECTION 5. FIRE FIGHTING MEASURES (CONTINUED)

SPECIAL FIRE FIGHTING PROCEDURES:

This material will burn although it is not easily ignited.

UNUSUAL FIRE FIGHTING PROCEDURES:

Normal combustion forms carbon dioxide and water vapor. Incomplete combustion can produce carbon monoxide.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES:

Stop the source of the leak or release.
Dike to contain spill. Pick up free liquid for recycle and/or disposal. Residual liquid and/or solid can be absorbed inert material. Keep from sewers and natural waterways.

WASTE DISPOSAL MEHTOD:

Material if discarded, is not expected to be a characteristic hazardous waste under RCRA. Waste management should be in compliance with local, state, and federal regulations.

BOSS LUBRICANTS: MATERIAL SAFETY DATA SHEET

SECTION 7. HANDLING AND STORAGE

HANDLING:

Keep away from heat and flame.

STORAGE:

Store in a cool ventilated room.
Keep containers closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS:

Use normal handling procedures and controls.

VENTILATION:

Use in a well-ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation, or other measures to keep airborne levels below the recommended exposure levels.

PERSONAL PROTECTIONS:

Use normal safe handling procedures. No special protective equipment is required. If misting is above the recommended exposure level use a NIOSH approved respirator for particulates.

BOSS LUBRICANTS: MATERIAL SAFETY DATA SHEET

SECTION 9. PHYSICAL DATA

APPEARANCE:		COLORLESS LIQUID
ODOR:		MILD PETROLEUM
SPECIFIC GRAVITY	kg/L @ 15.5°C	0.8580
FLASH POINT, °C		154

SECTION 10. REACTIVITY DATA

STABILITY

Stable.

CONDITIONS TO AVOID:

No data available.

MATERIALS TO AVOID:

Keep away from Oxidizers, such as chlorates, nitrates, and peroxides.

HAZARDOUS DECOMPOSITION PRODUCT:

Smoke, Carbon Dioxide and Carbon Monoxide under fire conditions.

HAZARDOUS POLYMERIZATION:

Cannot occur.

BOSS ULTRA NF 7

BOSS LUBRICANTS: MATERIAL SAFETY DATA SHEET

NOTICE

The supplier disclaims all expressed or implied warranties of fitness or merchantability for a specific use, with respect to the product, or the information provided herein, except for confirmation to contracted specifications. All information appearing herein is based upon data obtained from manufacturer and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency.

Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

BOSS NF 7

Praxair Material Safety Data Sheet

1. Chemical Product and Company Identification

Product Name:	Carbon dioxide Liquid Carbon dioxide	**Trade Name:**	Carbon dioxide Liquid Carbon dioxide
Product Use:	Many		
Chemical Name:	Carbon dioxide	**Synonym:**	Carbon anhydride, Carbonic acid gas.
Chemical Formula:	CO_2	**Chemical Family:**	Acid anhydrides (Acid.)
Telephone:	**Emergencies:** * 1-800-363-0042	**Supplier /Manufacture:**	Praxair Canada Inc. 1 City Centre Drive Suite 1200 Mississauga, ON L5B 1M2
		Phone:	905-803-1600
		Fax:	905-803-1682

**Call emergency numbers 24 hours a day only for spills, leaks, fire, exposure, or accidents involving this product. For routine information, contact your supplier or Praxair sales representative.*

2. Composition and Information on Ingredients

INGREDIENTS	% (VOL)	CAS NUMBER	LD_{50} (Species & Routes)	LC_{50} (Rat. 4 hrs.)	TLV-TWA (ACGIH)
Carbon dioxide	100	124-38-9	Not applicable.	Not available.	5000 ppm

3. Hazards Identification

Emergency Overview

CAUTION! High-pressure liquid and gas. Can cause rapid suffocation. Can increase respiration and heart rate. May cause nervous system damage. May cause frostbite. May cause dizziness and drowsiness. Self-contained breathing apparatus and protective clothing may be required by rescue workers.

ROUTES OF EXPOSURE: Inhalation. Skin contact. Eye contact.

THRESHOLD LIMIT VALUE: TLV-TWA Data from 2004 Guide to Occupational Exposure Values (ACGIH). TLV-TWAs should be used as a guide in the control of health hazards and not as fine lines between safe and dangerous concentrations.

EFFECTS OF A SINGLE (ACUTE) OVEREXPOSURE:

INHALATION: Asphyxiant. Effects are due to lack of oxygen. Moderate concentrations may cause headaches, drowsiness, dizziness, excitation, excess salivation, vomiting, and unconciousness. Lack of oxygen can kill.

SKIN CONTACT: No harm expected from vapour. Liquid may cause frostbite.

SKIN ABSORPTION: No harm expected. Liquid may cause frostbite.

SWALLOWING:

This product is a gas at normal temperature and pressure. Liquid may cause frostbite.

EYE CONTACT:

Vapour may cause a stinging sensation; liquid may cause frostbite.

EFFECTS OF REPEATED (CHRONIC) OVEREXPOSURE:
No evidence of adverse effects from available information.
OTHER EFFECTS OF OVEREXPOSURE:
Damage to retial ganglion cells and central nervous system may occur.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:
Repeated or prolonged exposure is not known to aggravate medical condition.

SIGNIFICANT LABORATORY DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH HAZARD EVALUATION:

A single study has shown an increase in heart defects in rats exposed to 6% carbon dioxide in air for 24 hours at different time during gestation. There is no evidence that carbon dioxide is tetratogenic in humans.

CARCINOGENICITY:
Not listed as carcinogen by OSHA, NTP or IARC.

4. First Aid Measures

INHALATION:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SKIN CONTACT:

For exposure to liquid, immediately warm frostbite area with warm water not to exceed 41 C. In case of massive exposure, remove contaminated clothing while showering with warm water. Call a physician.

SWALLOWING:

This product is a gas at normal temperature and pressure.

EYE CONTACT:

For contact with the liquid, immediately flush eyes throughly with warm water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. See a physician, preferably an ophthalmologist, immediately.

NOTES TO PHYSICIAN:

There is no specific antidote. Treatment of over-exposure should be directed at the control of symptoms and the clinical condition.

5. Fire Fighting Measures

FLAMMABLE :	No.	IF YES, UNDER WHAT CONDITIONS?	Not applicable.
FLASH POINT (test method)	Not applicable.	AUTOIGNITION TEMPERATURE	Not applicable.
FLAMMABLE LIMITS IN AIR, % by volume:	LOWER: Not applicable.	UPPER:	Not applicable.

EXTINGUISHING MEDIA:

This material cannot catch fire. Use media appropriate for surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES:

CAUTION! **High-pressure gas.** Asphxiant. Effects are due to lack of oxygen. Evacuate all personnel from danger area. Immediately deluge cylinders with water from maximum distance until cool; then move them away from fire area if without risk.

UNUSUAL FIRE AND EXPLOSION HAZARD:

Gas cannot catch fire. Container may rutpure due to heat of fire. No part of a container should be subjected to a temperature higher than 52 C. Most containers are provided with a pressure relief device designed to vent contents when they are exposed to elevated temperature.

HAZARDOUS COMBUSTION PRODUCTS:

Not applicable.

SENSITIVITY TO IMPACT:

Avoid impact against container.

SENSITIVITY TO STATIC DISCHARGE:

Not applicable.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

CAUTION! **High-pressure gas.** Evacuate all personnel from danger area. Use self-contained breathing apparatus where needed. Shut off flow if you can do so without risk. Ventilate area or move cylinder to a well-ventilated area. Test for sufficient oxygen, especially in confined spaces, before allowing reentry.

WASTE DISPOSAL METHOD:

Prevent waste from contaminating the surrounding environment. Keep personnel away. Discard any product, residue, disposable container, or liner in an environmentally acceptable manner, in full compliance with federal, provincial, and local regulations. If necessary, call your local supplier for assistance.

7. Handling and Storage

PRECAUTIONS TO BE TAKEN IN STORAGE:

Store and use with adequate ventilation. Firmly secure cylinders upright to keep them from falling or being knocked over. Screw valve protection cap firmly in place by hand. Store only where temperature will not exceed 52 C. Store full and empty cylinders separately. Use a first-in, first-out inventory system to prevent storing full cylinders for long periods.

PRECAUTIONS TO BE TAKEN IN HANDLING:

Protect cylinders from damage. Use a suitable hand truck to move cylinders; do not drag, roll, slide, or drop. Never attempt to lift a cylinder by its cap; the cap is intended solely to protect the valve. Never insert an object (e.g., wrench, screwdriver, pry bar) into cap openings; doing so may damage the valve and cause a leak. Use an adjustable strap wrench to remove over-tight or rusted caps. Open valve slowly. If valve is hard to open, discontinue use and contact your supplier. For other precautions, see section 16.

For additional information on storage and handling, refer to Compressed Gas Association (CGA) pamphlet P-1, *Safe Handling of Compressed Gases in Containers,* available from the CGA. Refer to section 16 for the address and phone number along with a list of other available publications.

OTHER HAZARDOUS CONDITIONS OF HANDLING, STORAGE, AND USE:

Extremely cold liquid and gas. Do not get liquid or vapours in eyes, on skin, or clothing. Safety showers and eyewash fountains should be immediately available. Use only in a closed system. Use piping and equipment adequately designed to withstand pressures to be encountered. ***Store and use with adequate ventilation at all times.*** Close valve after each use; keep closed even when empty. ***Prevent reverse flow.*** Reverse flow into cylinder may cause rupture. ***When returning cylinder to supplier,*** be sure valve is closed. ***Never work on a pressurized system.*** If there is a leak, close the cylinder valve. Vent the system down in a safe and environmentally sound manner in compliance with all federal, provincial, and local laws; then repair the leak. ***Never place a compressed gas cylinder where it may become part of an electrical circuit.***

8. Exposure Controls/Personal Protection

VENTILATION/ENGINEERING CONTROLS:

LOCAL EXHAUST: Preferred.

MECHANICAL (general): General exhaust ventilation may be acceptable if it can maintain an adequate supply of air.

SPECIAL: Not applicable.

OTHER: Not applicable.

PERSONAL PROTECTION:

RESPIRATORY PROTECTION: Use air supplied respirator when working in confined space or where local exhaust or ventilation does not keep exposure below TLV. Select in accordance with the provincial regulations or guidelines. Selection should also be based on the current CSA standards Z94.4, "Selection, care and use of respirators". Respirators should be approved by NIOSH and MSHA.

SKIN PROTECTION: Insulated neoprene gloves.

EYE PROTECTION: Wear safety glasses when handling cylinders.

Select in accordance with the current CSA standard Z94.3, "Industrial Eye and Face Protection", and any provincial regulations, local bylaws or guidelines.

OTHER PROTECTIVE EQUIPMENT: Metatarsal shoes for cylinder handling. Protective clothing where needed. Cuffless trousers should be worn outside the shoes. Select in accordance with the current CSA standard Z195, "Protective Foot Wear", and any provincial regulations, local bylaws or guidelines.

9. Physical and Chemical Properties

PHYSICAL STATE:	Compressed Liquefied Gas.	FREEZING POINT:	Not applicable.	pH:	Not applicable.
BOILING POINT	Sublimation: -78.5 C	VAPOUR PRESSURE	5775.2 kPa (@ 20°C)	MOLECULAR WEIGHT:	44.01 g/mole
SPECIFIC GRAVITY: LIQUID (Water = 1)	Not applicable.	SOLUBILITY IN WATER,	Slight.		
SPECIFIC GRAVITY: VAPOUR (air = 1)	1.522	EVAPORATION RATE (Butyl Acetate=1):	>1 compared to (Butyl Acetate = 1)	COEFFICIENT OF WATER/OIL DISTRIBUTION:	Not applicable.
VAPOUR DENSITY:	0.00198 g/ml @ 0 C	% VOLATILES BY VOLUME:	100% (v/v).	ODOUR THRESHOLD:	Odourless.

APPEARANCE & ODOUR: Colourless. Odourless gas. It is felt by some to have a slight, pungent odour and biting taste.

10. Stability and Reactivity

STABILITY:	The product is stable.
CONDITIONS OF CHEMICAL INSTABILITY:	Not applicable.
INCOMPATIBILITY (materials to avoid):	Alkali metats, alkaline earth metals, metal acetylides, chromium, titanium above 550 C, uranium above 750 C.
HAZARDOUS DECOMPOSITION PRODUCTS:	In the presence of an electrical discharge, carbon dioxide is decomposed to form carbon monoxide and oxygen.
HAZARDOUS POLYMERIZATION:	Will not occur.
CONDITIONS OF REACTIVITY:	None known.

11. Toxicological Information

See section 3.

Carbon dioxide is an asphyxiant. It initially stimulates respiration and then causes respiratory depression. High concentrations result in narcosis. Symptoms in humans are as follows:

EFFECTS:	CO_2 CONCENTRATION:
Breathing rate increases slightly.	1%
Breathing rate increases to 50% above normal level. Prolonged exposure can cause headache, tiredness.	2%
Breathing increases to twice normal rate and become labored. Weak narcotic effect. Impaired hearing, headache, increased blood pressure and pulse rate.	3%
Breathing increases to approximately four times normal rate, symptoms of intoxication become evident, and slight choking may be felt.	4 - 5%
Characteristic sharp odor noticeable. Very labored breathing, headache, visual impairment, and ringing in the ears. Judgment may be impaired, followed within minutes by loss of consciousness.	5 - 10%
Unconsciousness occurs more rapidly above 10% level. Prolonged exposure to high concentrations may eventually result in death from asphyxiation.	50 - 100%

12. Ecological Information

No adverse ecological effects expected. This product does not contain any Class I or Class II ozone-depleting chemicals. The components of this mixture are not listed as marine pollutants by TDG Regulations.

13. Disposal Considerations

WASTE DISPOSAL METHOD:	Do not attempt to dispose of residual or unused quantities. Return cylinder to supplier.

14. Transport Information

TDG/IMO SHIPPING NAME:	(Gas): Carbon dioxide; (Liquid): Carbon Dioxide, Refrigerated Liquid		
HAZARD CLASS:	CLASS 2.2: Non-flammable, non-corrosive and non-poisonous gas.	IDENTIFICATION #:	UN1013 (Gas) UN2187 (Liquid)
PRODUCT RQ:	100 L		
SHIPPING LABEL(s):	Non-flammable, non-poisonous gas		
PLACARD (when required):	Non-flammable, non-poisonous gas		

SPECIAL SHIPPING INFORMATION:

Cylinders should be transported in a secure position, in a well-ventilated vehicle. Cylinders transported in an enclosed, nonventilated compartment of vehicle can present serious safety hazards.

15. Regulatory Information

The following selected regulatory requirements may apply to this product. Not all such requirements are identified. Users of this product are solely responsible for compliance with all applicable federal, provincial, and local regulations.

WHMIS (Canada) CLASS A: Compressed gas.

International Regulations

EINECS	Not available.
DSCL (EEC)	This product is not classified according to the EU regulations.
International Lists	No products were found.

16. Other Information

MIXTURES:

When two or more gases, or liquefied gases are mixed, their hazardous properties may combine to create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an Industrial Hygienist, or other trained person when you make your safety evaluation of the end product. Remember, gases and liquids have properties which can cause serious injury or death.

HAZARD RATING SYSTEM:

HMIS RATINGS:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

STANDARD VALVE CONNECTIONS FOR U.S. AND CANADA:

THREADED:	CGA-320
PIN-INDEXED YOKE:	CGA-940

ULTRA-HIGH-INTEGRITY CONNECTION: CGA-716

Use the proper CGA connections. **DO NOT USE ADAPTERS**. Additional limited-standard connections may apply. See CGA pamphlets V-1 and V-7 listed below.

Ask your supplier about free Praxair safety literature as referred to in this MSDS and on the label for this product. Further information about this product can be found in the following pamphlets published by the Compressed Gas Association, Inc. (CGA), 4221 Walney Road, 5th Floor, Chantilly, VA 20151-2923, Telephone (703) 788-2700, Fax (703) 961-1831, website: www.cganet.com.

AV-1	Safe Handling and Storage of Compressed Gas
G-6	Carbon Dioxide
G-6.1	Standard for Low Pressure Carbon Dioxide Systems at Customer Sites
G-6.2	Commodity Specification for Carbon Dioxide
P-1	Safe Handling of Compressed Gases in Containers
P-14	Accident Prevention in Oxygen-Rich, Oxygen-Deficient Atmospheres
SB-2	Oxygen-Deficient Atmospheres
V-1	Compressed Gas Cylinder Valve Inlet and Outlet Connections
V-7	Standard Method of Determining Cylinder Valve Outlet Connections for Industrial Gas Mixtures
---	Handbook of Compressed Gases, Fourth Edition

PREPARATION INFORMATION:

DATE: **10/15/2004**
DEPARTMENT: **Safety and Environmental Services**
TELEPHONE: **905-803-1600**

The opinions expressed herein are those of qualified experts within Praxair Canada Inc. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Praxair Canada Inc., it is the user's obligation to determine the conditions of safe use of the product.

Praxair Canada Inc. requests the users of this product to study this Material Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product, a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety nformation, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product of the same product hazards and safety information.

PRAXAIR

Praxair Canada Inc.
1 City Centre Drive
Suite 1200
Mississauga, ON L5B 1M2

MATERIAL SAFETY DATA SHEET

Product identifier:	**CF 128-DW Insulating Foam**
Product description / use:	Polyurethane foam, spray insulation
Supplier:	Hilti (Canada) Corporation, 6790 Century Avenue, Suite #300, Mississauga, Ontario L5N 2V8
Originator	Hilti, Inc., P. O. Box 21148, Tulsa, Oklahoma, USA 74121
Emergency phone number	ChemTrec: 1 800 424 9300

INGREDIENTS INFORMATION

Ingredient	CAS Number	% (wt.)	LC_{50}, (rat)	LD_{50} (rat)	TLV	STEL
Urethane / polyol prepolymer *	Mixture *	60 - 70	N/Av	N/Av	N/E	N/E
1,1,1,2 tetrafluoroethane	811-97-2	10 – 15	N/Av	N/Av	N/E	N/E
4,4' diphenylmethane diisocycanate (MDI) *	101-68-8	05 – 15	178 mg/m^3	N/Av	5 ppb	N/E
Dimethyl ether	115-10-6	01 – 05	30,800 mg/m^3	N/Av	N/E	N/E
Propane	074-98-6	01 – 03	N/Av	N/Ap	2500 ppm	N/E
Butane	106-97-8	01 – 03	65,800 mg/m^3/4H	N/Ap	800 ppm	N/E

* MDI isomers and homologues are partially linked with a polyol mixture. Excess MDI is shown separately.

PHYSICAL PROPERTIES

Appearance / Physical state:	Yellow to tan liquid	**Odour:**	Mild odour.
Specific gravity (at 20°C):	1.1	**Odour threshold:**	Not determined.
Vapour pressure (at 20°C):	5 - 5.6 bar @ 68° F	**Vapour density:**	> 1 (MDI Polymer)
Evaporation rate:	< .1 (ether = 1)	**Boiling point:**	Not determined.
Freezing point:	Not determined.	**pH:**	Not determined.
Coefficient of H20 / oil distrib:	Not determined.	**Solubility in water:**	Not soluble.

FIRE AND EXPLOSION DATA

Flash point / Method:	- 40° C (propellants)	**Flammable limits:**	1.5 – 18.6%
Conditions of flammability:	Extremely flammable aerosol. Contents under pressure. Cans exposed to fire or direct heat can rupture from pressure build-up and be propelled through the air. CAUTION: Do not heat cold cans with a torch or flame to raise product temperature; this may cause the can to burst.		
Auto-ignition temperature:	Not determined.		
Means of extinction:	Carbon Dioxide, Dry Chemical, Foam.		
Special fire fighting procedures:	Isocyanates are not compatible with water.		
Hazardous combustion products:	Thermal decomposition products such as oxides of carbon and nitrogen can be produced under fire conditions.		
Sensitivity to mechanical impact / static discharge:	Not susceptible to mechanical impact or to a static discharge.		

REACTIVITY DATA

Stability:	Reacts (i.e. expands at a ratio of > 40:1 to form a polyurethane foam) upon contact with air. Contact with moisture or water will also cause material to polymerize (non-violently).
Conditions of reactivity:	Reacts with water or moisture.
Incompatible materials:	Alcohols, amines, strong bases, alkali metal compounds. Reacts with water (nonviolently).
Hazardous decomposition products:	CO, CO_2, HCN, isocyanates, NO_X, Cl, PO_X

TOXICOLOGICAL PROPERTIES

Routes of exposure:	☐ N/A ☒ Skin contact ☐ Skin absorption ☒ Eye contact ☒ Inhalation ☐ Ingestion
Acute effects of exposure:	**Eyes:** Can adhere to cornea. **Skin:** Can adhere to the skin. Can cause irritation and possibly sensitization; e.g. itching, swelling, rash, etc. **Inhalation:** Vapor generated when heated to temperatures > 38° C can cause irritation of the breathing tract. **Ingestion:** Effects of ingestion have not been determined. Not a likely route of exposure. No ill effects expected.

Chronic effects of exposure:	Some individuals can develop an allergic (asthmatic-like) response. Should this occur, immediately move to fresh air. Those individuals who develop an allergic reaction should avoid future use of this product.
Synergistic materials:	None known.

FIRST AID MEASURES

Eyes:	**Immediately** flush with plenty of water and seek medical attention.
Skin:	Cured material is difficult to remove. Remove immediately with soap and warm water. Acetone may remove uncured material. If material has hardened, use hand cleaner or a light mineral oil. If still unable to remove, buff off with a pumice stone.
Inhalation:	Move victim to fresh air. Call a physician if symptoms persist.
Ingestion:	Do not induce vomiting unless large amounts are ingested. If conscious, give 1 to 2 glasses of water to drink. Never give anything by mouth to an unconscious person. Contact a physician immediately.
Other:	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure

CONTROL MEASURES AND PERSONAL PROTECTIVE EQUIPMENT

Engineering controls:	General (natural or mechanically induced fresh air movements).
Eye protection:	Goggles recommended; safety glasses with side shields as a minimum.
Skin protection:	Cloth gloves are suitable.
Respiratory protection:	None normally required. If MDI concentrations exceed recommended levels, a supplied air respirator is required.
Other:	No additional measures are normally required.

PRECAUTIONS FOR SAFE HANDLING AND USE

Handling procedures and equipment:	For industrial use only. Keep out of reach of children. Use with adequate ventilation. Avoid contact. Material will adhere to eyes and skin. Extremely flammable aerosol. Contents under pressure. Do not apply direct heat to the cans. Always wash thoroughly after handling chemical products. Follow label / use instructions.
Storage requirements:	Store in a cool dry place. Do not store in direct sunlight. Keep from freezing. Store between 4° and 38° C.
Spill, leak or release:	Immediately wipe away spilled material before it hardens. Place in a container for proper disposal.
Waste disposal:	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, provincial, and federal safety, health and environmental regulations.
Special shipping instructions:	Avoid temperature extremes. Keep from freezing.

REGULATORY INFORMATION

WHMIS classification:	B5, D1B, D2A, D2B
HMIS codes:	Health 2, Flammability 3, Reactivity 1, PPE B (Goggles, Gloves)
TDG shipping name:	Consumer Commodity, ORM-D
IATA shipping name:	Aerosols, Class 2.1, UN 1950

PREPARATION INFORMATION / CONTACTS

Prepared by:	Hilti, Inc., Tulsa, OK USA Emergency phone number: 1 800 424 9300
Customer Service:	Hilti (Canada) Corporation, Mississauga, Ontario; 1 800 363 4458
Health / Safety contacts:	Hilti, Inc., Tulsa, OK USA; 1 800 879 6000, Jerry Metcalf (x6704)
Abbreviations used:	**N/E** = None Established. **N/Ap** = Not Applicable. **N/Av** = Not Available. **HMIS** = Hazardous Materials Identification System

GE Betz, Inc.
4636 Somerton Road
Trevose, PA 19053
Business telephone: (215) 355-3300

Material Safety Data Sheet

Issue Date: 02-SEP-2004

EMERGENCY TELEPHONE (Health/Accident): (800) 877-1940

1 PRODUCT IDENTIFICATION

REAGENT NAME:

CONDUCTIVITY STD. SOL. 1,000 UMHOS @ 25

REAGENT CODE:

L1917

REAGENT APPLICATION AREA:

FIELD TEST REAGENT

2 COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

This product is not hazardous as defined by OSHA regulations.

No component is considered to be a carcinogen by the National Toxicology Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration at OSHA thresholds for carcinogens.

3 HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW

CAUTION

Non-hazardous to skin. May cause slight irritation to the eyes. Mists/aerosols may cause irritation to upper respiratory tract.

DOT hazard is not applicable
Emergency Response Guide is not applicable
Odor: None; Appearance: Colorless, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide, foam or water

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POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:
Non-hazardous to skin.

ACUTE EYE EFFECTS:
May cause slight irritation to the eyes.

ACUTE RESPIRATORY EFFECTS:
Primary route of exposure;Mists/aerosols may cause irritation to upper respiratory tract.

INGESTION EFFECTS:
No adverse effects expected. If more than several mouthfuls are swallowed, abdominal discomfort, nausea, diarrhea and weakness may occur.

TARGET ORGANS:
No evidence of potential chronic effects.

MEDICAL CONDITIONS AGGRAVATED:
Not known.

SYMPTOMS OF EXPOSURE:
May cause eye, skin, and/or respiratory tract irritation.

4 FIRST AID MEASURES

SKIN CONTACT:
No treatment required.

EYE CONTACT:
Immediately flush eyes with water for 15 minutes. Immediately contact a physician for additional treatment.

INHALATION:
Remove victim from contaminated area to fresh air. Apply appropriate first aid treatment as necessary.

INGESTION:
Do not feed anything by mouth to an unconscious or convulsive victim. No treatment required- no hazard.

NOTES TO PHYSICIANS:
No special instructions

5 FIRE FIGHTING MEASURES

FIRE FIGHTING INSTRUCTIONS:
Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:
dry chemical, carbon dioxide, foam or water

HAZARDOUS DECOMPOSITION PRODUCTS:
Thermal decomposition (destructive fires) yields elemental oxides.

FLASH POINT:
> 200F > 93C SETA(CC)

6 ACCIDENTAL RELEASE MEASURES

PROTECTION AND SPILL CONTAINMENT:
Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

DISPOSAL INSTRUCTIONS:
Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

7 HANDLING & STORAGE

HANDLING:
This product is non-hazardous.

STORAGE:
Keep containers closed when not in use. Do not freeze. If frozen, thaw and mix completely prior to use.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

This product is not hazardous as defined by OSHA regulations.

ENGINEERING CONTROLS:
adequate ventilation

PERSONAL PROTECTIVE EQUIPMENT:
Use protective equipment in accordance with 29CFR 1910 Subpart I

RESPIRATORY PROTECTION:
A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.
USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.
If air-purifying respirator use is appropriate, use a respirator with dust/mist filters.

SKIN PROTECTION:
rubber gloves-- Wash off after each use. Replace as necessary.

EYE PROTECTION:
splash proof chemical goggles

9 PHYSICAL & CHEMICAL PROPERTIES

Specific Grav.(70F,21C)	0.990	Vapor Pressure (mmHG)	ND
Freeze Point (F)	ND	Vapor Density (air=1)	ND
Freeze Point (C)	ND		
Viscosity(cps 70F,21C)	ND	% Solubility (water)	ND

Odor		None
Appearance		Colorless
Physical State		Liquid
Flash Point	SETA(CC)	> 200F > 93C
pH As Is (approx.)		6.4