

## AMMONIUM NITRATE

self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### 6. Accidental Release Measures

Remove sources of heat and ignition.

Collected waste may be transferred to a closed, preferably metal, container and sent to a RCRA approved waste disposal facility.

Alternatively, sweep spill into noncombustible container and dissolve in large amount of water. Add soda ash. Mix and neutralize with 6M-HCl.

Neutralized sludge may be sent to an approved waste disposal facility.

### 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Protect against physical damage. Store in a dry location separate from combustible, organic or other readily oxidizable materials. Avoid storage on wood floors. Remove and dispose of any spilled dichromates; do not return to original containers. Do not store above 54C (130F) preferably below 30C (86F). Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

### 8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench

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## AMMONIUM NITRATE

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facilities in work area.

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### 9. Physical and Chemical Properties

Appearance:	Boiling Point:
Colorless crystals.	210C (410F) Decomposes.
Odor:	Melting Point:
Odorless.	170C (338F)
Solubility:	Vapor Density (Air=1):
118g/100g water @ 0C (32F).	No information found.
Specific Gravity:	Vapor Pressure (mm Hg):
1.73 @ 23C (77F)	No information found.
pH:	Evaporation Rate (BuAc=1):
5.4	No information found.
% Volatiles by volume @ 21C (70F): 0	

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### 10. Stability and Reactivity

Stability:  
Stable under ordinary conditions of use and storage. Hygroscopic.

Hazardous Decomposition Products:  
Emits nitrous oxides when heated to decomposition. Liberates ammonia in reaction with strong alkalis.

Hazardous Polymerization:  
Will not occur.

Incompatibilities:  
Aluminum, antimony, chromium, copper, iron, lead, magnesium, manganese, nickel, zinc, brass, oil, charcoal, organic material, acetic acid, ammonium chloride, bismuth, cadmium, chlorides, cobalt, phosphorus, potassium and ammonium sulfate, sodium, sodium hypochlorite, sodium perchlorate, sodium-potassium alloy, and sulfur.

Conditions to Avoid:  
Heat, flame, ignition sources, dusting and incompatibles. Moisture and combustible materials. Shock sensitive.

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**AMMONIUM NITRATE**

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**11. Toxicological Information**

Oral rat LD50: 2217 mg/kg.

-----\Cancer Lists\-----

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Ammonium Nitrate (6484-52-2)	No	No	None

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**12. Ecological Information**

Environmental Fate:

When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is not expected to evaporate significantly. When released into water, this material is expected to readily biodegrade.

Environmental Toxicity:

No information found.

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**13. Disposal Considerations**

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

Dispose of container and unused contents in accordance with federal, state and local requirements.

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**14. Transport Information**

Domestic (Land, D.O.T.)

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Proper Shipping Name: AMMONIUM NITRATE

Hazard Class: 5.1

UN/NA: UN1942

Packing Group: III

Information reported for product/size: 300LB

International (Water, I.M.O.)

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Proper Shipping Name: AMMONIUM NITRATE

Hazard Class: 5.1

UN/NA: UN1942

Packing Group: III

Information reported for product/size: 300LB

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**AMMONIUM NITRATE**

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Wash thoroughly after handling.  
Store preferably below 30C

Label First Aid:

If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. In all cases, get medical attention.

Product Use:

Laboratory Reagent.

Revision Information:

No changes.

Disclaimer:

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Prepared by: Strategic Services Division  
Phone Number: (314) 654-1600 (U.S.A.)

A6048

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Automatic Transmission Fluid (ATF)

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\* M S D S \*

\* Canadian Centre for Occupational Health and Safety \*

\* \* \* \* \* Issue : 2001-1 (February, 2001) \*

\*\*\* IDENTIFICATION \*\*\*

MSDS RECORD NUMBER : 2314190

PRODUCT NAME(S) : BP AUTRAN ATF + 3  
AUTOMATIC TRANSMISSION FLUID; ATF;  
LUBRICATING OIL

PRODUCT IDENTIFICATION : MSDS No. 12752 US/ENGLISH  
CAS NUMBER: 72623-86-0

DATE OF MSDS : 2000-01-11

CURRENCY NOTE : This MSDS was provided to CCOHS in  
electronic form on 2000-05-31

\*\*\* MANUFACTURER INFORMATION \*\*\*

MANUFACTURER : BP Lubricants

ADDRESS : 28100 Torch Parkway  
Warrenville Illinois  
U.S.A. 60555-4015  
Telephone: 630-434-6377 (OTHER PRODUCT  
SAFETY INFORMATION)

EMERGENCY TELEPHONE NO. : 312-856-2200 (HEALTH INFORMATION, USA)  
703-527-3887 (SPILL INFORMATION,  
CHEMTREC, USA)

\*\*\* MATERIAL SAFETY DATA \*\*\*

BP AUTRAN ATF + 3

MATERIAL SAFETY DATA SHEET

BP AUTRAN ATF + 3

MSDS No. 12752 US/ENGLISH

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**Automatic Transmission Fluid (ATF)**

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**SECTION 1      CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

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MANUFACTURER/SUPPLIER:

BP Lubricants  
28100 Torch Parkway  
Warrenville, Illinois 60555-4015  
U.S.A.

EMERGENCY HEALTH INFORMATION:

1 (800) 447-8735

EMERGENCY SPILL INFORMATION:

1 (800) 424-9300 CHEMTREC (USA)

OTHER PRODUCT SAFETY INFORMATION:

1 (630) 434-6377 (USA)

SUBSTANCE: BP AUTRAN ATF + 3

TRADE NAMES/SYNONYMS:

AUTOMATIC TRANSMISSION FLUID; ATF; LUBRICATING OIL

CREATION DATE: Jan 11 2000

REVISION DATE: Jan 21 2000

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**SECTION 2      COMPOSITION, INFORMATION ON INGREDIENTS**

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COMPONENT: HYDROTREATED NEUTRAL OIL-BASED LUBRICATING OIL

CAS NUMBER: 72623-86-0

EC NUMBER (EINECS): 276-737-9

PERCENTAGE: 77.0-87.0

COMPONENT: POLYALKYL METHACRYLATE

CAS NUMBER: Not assigned.

EC NUMBER: Not assigned.

PERCENTAGE: 2.6-13.0

COMPONENT: MEDIUM ALIPHATIC SOLVENT NAPHTHA

CAS NUMBER: 64742-88-7

EC NUMBER (EINECS): 265-191-7

PERCENTAGE: 1.0-7.0

(See Section 8, "Exposure Controls, Personal Protection", for exposure guidelines)

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**SECTION 3      HAZARDS IDENTIFICATION**

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NFPA RATINGS (SCALE 0-4): HEALTH=1 FIRE=1 REACTIVITY=0

EMERGENCY OVERVIEW:

COLOR: red

PHYSICAL FORM: oil

ODOR: hydrocarbon odor

MAJOR HEALTH HAZARDS: Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

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## Automatic Transmission Fluid (ATF)

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### POTENTIAL HEALTH EFFECTS:

#### INHALATION:

High vapor concentrations can cause headaches, dizziness, drowsiness, and nausea, and may lead to unconsciousness.

#### SKIN CONTACT:

Causes mild skin irritation. Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

#### EYE CONTACT:

Causes mild eye irritation.

#### INGESTION:

Ingestion causes gastrointestinal irritation and diarrhea.

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## SECTION 4 FIRST AID MEASURES

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INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

SKIN CONTACT: Wash exposed skin with soap and water. Remove contaminated clothing and thoroughly clean and dry before reuse. Get medical attention if irritation develops.

EYE CONTACT: Flush eyes with plenty of water. Get medical attention if irritation persists.

INGESTION: If swallowed, drink plenty of water. Get immediate medical attention. Induce vomiting only at the instructions of a physician. Do not give anything by mouth to unconscious or convulsive person.

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## SECTION 5 FIRE FIGHTING MEASURES

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FIRE AND EXPLOSION HAZARDS: Slight fire hazard.

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

FIRE FIGHTING: Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Water or foam may cause frothing.

FIRE FIGHTING PROTECTIVE EQUIPMENT: Firefighters should wear full bunker gear, including a positive pressure self contained breathing apparatus.

FLASH POINT: >351 F (>177 C) (COC)

FLAMMABILITY CLASSIFICATION: Not Flammable.

### HAZARDOUS COMBUSTION PRODUCTS:

Thermal decomposition products or combustion: aldehydes, hydrocarbons, oxides of carbon, oxides of calcium, oxides of sulfur, oxides of zinc



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**Automatic Transmission Fluid (ATF)**

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**SECTION 6            ACCIDENTAL RELEASE MEASURES**

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Stop leak if possible without personal risk. Small spills: Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Keep unnecessary people away, isolate hazard area and deny entry. Large spills: Dike for later disposal. Cover with plastic sheet or tarp to minimize spreading and protect from contact with water. Prevent spreading by diking, ditching, or absorbing on inert materials.

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**SECTION 7            HANDLING AND STORAGE**

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STORAGE: Avoid extremes in storage temperatures. Store in a cool, dry, well-ventilated area. Store away from heat, ignition sources, and open flame in accordance with applicable regulations. Keep container tightly closed. Do not store in unlabeled containers.

HANDLING: Keep away from all ignition sources. Use only with adequate ventilation. Do not eat, drink or smoke in areas of use or storage. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet facilities. Wash thoroughly after work using soap and water. Remove contaminated clothing and thoroughly clean and dry before reuse. SPECIAL PRECAUTIONS: Empty containers may contain toxic, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

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**SECTION 8            EXPOSURE CONTROLS, PERSONAL PROTECTION**

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EXPOSURE LIMITS:

HYDROTREATED NEUTRAL OIL-BASED LUBRICATING OIL:

MINERAL OIL MIST:

5 mg/m3 OSHA TWA

5 mg/m3 ACGIH TWA (Notice of Intended Changes 1993-1994)

10 mg/m3 ACGIH STEL (Notice of Intended Changes 1993-1994)

5 mg/m3 MEXICO TWA

10 mg/m3 MEXICO STEL

MEDIUM ALIPHATIC SOLVENT NAPHTHA:

MINERAL OIL MIST:

5 mg/m3 OSHA TWA

5 mg/m3 ACGIH TWA (Notice of Intended Changes 1993-1994)

10 mg/m3 ACGIH STEL (Notice of Intended Changes 1993-1994)

5 mg/m3 MEXICO TWA

10 mg/m3 MEXICO STEL

VENTILATION: Use with adequate ventilation. Control airborne concentrations below the exposure guidelines.

EYE PROTECTION: Do not get in eyes. Wear eye protection.

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## Automatic Transmission Fluid (ATF)

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CLOTHING: Avoid repeated or prolonged contact. Wear protective clothing if prolonged or repeated contact is likely.

GLOVES: Wear protective gloves if prolonged or repeated contact is likely.

PROTECTIVE MATERIAL TYPES: neoprene, nitrile butadiene rubber (NBR)

RESPIRATOR: Use with adequate ventilation.

Avoid breathing vapor or mist.

If ventilation is inadequate, use a NIOSH certified respirator with an organic vapor cartridge and P95 particulate filter.

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### SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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PHYSICAL STATE: liquid

COLOR: red

PHYSICAL FORM: oil

ODOR: hydrocarbon odor

BOILING POINT: Not available

FREEZING POINT: Not available

VAPOR PRESSURE: Not available

VAPOR DENSITY: Not available

SPECIFIC GRAVITY (water=1): 0.910 @ 16 C

BULK DENSITY: 0.910 g/cm<sup>3</sup>

WATER SOLUBILITY: Not available

PH: Not available

VOLATILITY: Not available

ODOR THRESHOLD: Not available

EVAPORATION RATE: slower than ether

VISCOSITY: 7.4-7.7 cSt @ 100 C

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

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### SECTION 10 STABILITY AND REACTIVITY

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REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

INCOMPATIBILITIES: strong oxidizing materials

HAZARDOUS DECOMPOSITION:

Thermal decomposition products or combustion: aldehydes, hydrocarbons, oxides of carbon, oxides of calcium, oxides of sulfur, oxides of zinc

POLYMERIZATION: Will not polymerize.

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### SECTION 11 TOXICOLOGICAL INFORMATION

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EYE IRRITATION: Testing not conducted. See Other Toxicity Data.

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SKIN IRRITATION: Testing not conducted. See Other Toxicity Data.

DERMAL LD50: Testing not conducted. See Other Toxicity Data.

ORAL LD50: Testing not conducted. See Other Toxicity Data.

INHALATION LC50: Testing not conducted. See Other Toxicity Data.

**OTHER TOXICITY DATA:**

Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience.

No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).

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**SECTION 12      ECOLOGICAL INFORMATION**

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Ecological testing has not been conducted on this product by BP Amoco.

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**SECTION 13      DISPOSAL CONSIDERATIONS**

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Dispose in accordance with all applicable regulations.

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**SECTION 14      TRANSPORT INFORMATION**

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U.S. DEPARTMENT OF TRANSPORTATION: Not regulated.

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: Not regulated.

LAND TRANSPORT ADR/RID: Not regulated.

AIR TRANSPORT IATA/ICAO: Not regulated.

MARITIME TRANSPORT IMDG: Not regulated.

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**SECTION 15      REGULATORY INFORMATION**

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CERCLA SECTIONS 102a/103 HAZARDOUS SUBSTANCES (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA TITLE III SECTION 311/312 HAZARDOUS CATEGORIZATION (40 CFR Part 370):

ACUTE: N

CHRONIC: N

FIRE: N

REACTIVE: N

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**Automatic Transmission Fluid (ATF)**

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SUDDEN RELEASE: N

SARA TITLE III SECTION 313 (40 CFR Part 372): This product is not regulated under Section 313 of SARA and 40 CFR Part 372.

STATE REGULATIONS:

California Proposition 65: N

TSCA INVENTORY STATUS: Listed on inventory.

OSHA HAZARD COMMUNICATION STANDARD: Contains a component listed by ACGIH.  
Contains a component listed by OSHA.

EC INVENTORY (BINECS/ELINCS): One or more components not listed on inventory.

JAPAN INVENTORY (MITI): Not determined.

AUSTRALIA INVENTORY (AICS): Not determined.

KOREA INVENTORY (ECL): Not determined.

CANADA INVENTORY (DSL): Listed on inventory.

PHILIPPINE INVENTORY (PICCS): Not determined.

CHINA INVENTORY (IECS): Not determined.

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**SECTION 16      OTHER INFORMATION**

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Prepared by: Product Stewardship and Toxicology

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**COPPER SULPHATE**

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\* M S D S \*

\* Canadian Centre for Occupational Health and Safety \*

\* \* \* \* \* Issue : 2001-1 (February, 2001) \*

\*\*\* IDENTIFICATION \*\*\*

MSDS RECORD NUMBER : 2426887

PRODUCT NAME(S) : COPPER SULPHATE

DATE OF MSDS : 1999-11-17

CURRENCY NOTE : This MSDS was provided to CCOHS in  
electronic form on 2000-09-27

\*\*\* SUPPLIER/DISTRIBUTOR INFORMATION \*\*\*

SUPPLIER/DISTRIBUTOR : CANADA COLORS AND CHEMICALS LIMITED

ADDRESS : 80 Scarsdale Road  
Don Mills Ontario  
Canada M3B 2R7  
Telephone: 416-449-7750

EMERGENCY TELEPHONE NO. : 416-444-2112

SUPPLIER/DISTRIBUTOR NOTE :  
For further information about this product please contact the Canada  
Colors Customer Service Department at 416-449-7750.

\*\*\* MATERIAL SAFETY DATA \*\*\*

MATERIAL SAFETY DATA SHEET : 00004230

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CANADA COLORS AND CHEMICALS LI  
80 SCARSDALE ROAD  
DON MILLS, ONTARIO M3B 2R7  
(416) 449-7750

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**SECTION 01: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

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MANUFACTURER..... CHEMARKETING INDUSTRIES INC.  
2155 DUNWIN DRIVE, UNIT # 15  
MISSISSAUGA, ONTARIO

L5L 4M1

PRODUCT NAME.....

PRODUCT CODE.....

CHEMICAL FORMULA..... CU.H2O4S.

CHEMICAL FAMILY..... INORGANIC.

MATERIAL USE..... REFER TO TECHNICAL LITERATURE.

EMERGENCY PHONE NO..... (416)-444-2112.

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**COPPER SULPHATE**

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**SECTION 02: COMPOSITION/INFORMATION ON INGREDIENTS**

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%	CAS / TLV	LD/50, ROUTE, SPECIES	LC/50, ROUTE, SPECIES
COPPER SULPHATE			
100	7758-98-7	472 MG/KG (ORAL-RAT)	N.AV.
	1.0 MG/M3		

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**SECTION 03: HAZARDS IDENTIFICATION**

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ROUTE OF ENTRY:.....

SKIN CONTACT..... IRRITANT TO WET SKIN.

SKIN ABSORPTION..... NO.

EYE CONTACT..... CORROSIVE. EYE CORROSION WITH CORNEAL OR CONJUNCTIVAL ULCERATION.

INHALATION..... CORROSIVE TO RESPIRATORY TRACT.

INGESTION..... SWALLOWING MAY BE FATAL.MAY CAUSE SEVERE GASTROINTESTINAL TRACT IRRITATION.MAY CAUSE ABDOMINAL PAIN.MAY CAUSE NAUSEA AND VOMITING.

EFFECTS OF ACUTE EXPOSURE..... SEE ABOVE.

EFFECTS OF CHRONIC EXPOSURE..... CORROSIVE TO EYES AND RESPIRATORY TRACT.DUST CAN COLOUR EXPOSED HAIR AND FINGERNAILS.

MEDICAL CONDITIONS AGGRAVATED..... PREEXISTING EYE, SKIN AND RESPIRATORY BY OVEREXPOSURE DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

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**SECTION 04: FIRST AID MEASURES**

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INSTRUCTIONS:..... IN CASE OF SKIN CONTACT.WASH SKIN WITH SOAP AND WATER.REMOVE CONTAMINATED CLOTHING.WASH CLOTHING AND DECONTAMINATE SHOES BEFORE REUSE.OBTAIN MEDICAL ATTENTION, IF IRRITATION PERSISTS.EYE CONTACT: IMMEDIATELY FLUSH WITH LARGE QUANTITIES OF WATER FOR AT LEAST 15 MINUTES AND CALL A PHYSICIAN.INHALATION: REMOVE PATIENT TO FRESH AIR.OXYGEN MAY BE GIVEN BY QUALIFIED PERSONNEL. SEEK MEDICAL ATTENTION IF RESPIRATORY IRRITATION OCCURS OR IF BREATHING IS DIFFICULT.IN CASE OF

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**COPPER SULPHATE**

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INGESTION:. RINSE MOUTH WITH WATER.GIVE  
LARGE QUANTITIES OF WATER OR MILK.CONTACT  
A PHYSICIAN, THE NEAREST HOSPITAL OF THE  
NEAREST POISON CONTROL CENTRE. TELL THE  
PERSON CONTACTED: THE COMPLETE PRODUCT  
NAME, THE TYPE AND AMOUNT OF EXPOSURE,  
DESCRIBE ANY SYMPTOMS AND FOLLOW THE  
ADVICE GIVEN.IF VOMITING OCCURS KEEP HEAD  
BELOW HIPS TO PREVENT ASPIRATION OF LIQUID  
INTO THE LUNGS.IF VOMITING OCCURS, GIVE  
FLUIDS AGAIN.

NOTES TO PHYSICIAN:..... N.AV.

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**SECTION 05: FIRE FIGHTING MEASURES**

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T.D.G. FLAM. CLASS..... NOT REGULATED.  
FLAMMABILITY..... NOT FLAMMABLE.  
IF YES, UNDER WHICH.....  
CONDITIONS?  
EXTINGUISHING MEDIA..... SUITABLE FOR SURROUNDING FIRE.  
SPECIAL PROCEDURES..... FIREFIGHTERS SHOULD WEAR THE USUAL  
PROTECTIVE GEAR; SELF-CONTAINED BREATHING  
APPARATUS.  
  
FLASH POINT (C), METHOD..... N.AP.  
AUTO IGNITION TEMPERATURE..... N.AP.  
UPPER FLAMMABLE LIMIT (% BY..... N.AP.  
VOL.)  
LOWER FLAMMABLE LIMIT (% BY..... N.AP.  
VOL.)  
EXPLOSION DATA.....  
EXPLOSIVE POWER..... N.AV.  
RATE OF BURNING..... N.AV.  
SENSITIVITY TO STATIC..... N.AP.  
DISCHARGE  
SENSITIVITY TO IMPACT..... N.AP.  
UNUSUAL FIRE AND EXPLOSION..... SEALED CONTAINERS MAY RUPTURE FROM  
HAZARDS PRESSURE OF WATER VAPOUR RELEASED FROM  
CRYSTALS BY INTENSE HEAT.AT TEMPERATURES  
ABOVE APPROXIMATELY 110 (C), COPPER  
SULPHATE WILL MELT AND FLOW.AVOID CONTACT  
WITH DIRECT WATER STREAM AS THIS WILL  
CAUSE SPLATTERING.  
  
HAZARDOUS COMBUSTION PRODUCTS..... COPPER OXIDE. SULPHUR DIOXIDE.

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**COPPER SULPHATE**

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**SECTION 06: ACCIDENTAL RELEASE MEASURES**

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LEAK/SPILL..... WEAR NIOSH/MSHA APPROVED RESPIRATOR  
(SELF-CONTAINED BREATHING APPARATUS  
PREFERRED) AND APPROPRIATE PROTECTIVE  
EQUIPMENT.AVOID DUST ACCUMULATION.SWEEP,  
SCOOP, OR VACUUM DISCHARGED  
MATERIAL.COLLECT AND CONTAIN IN SUITABLE  
DISPOSAL CONTAINERS.NEUTRALIZE. WASH AREA  
WITH WATER.PREVENT RUNOFF INTO DRAINS,  
SEWERS, AND OTHER WATERWAYS.

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**SECTION 07: HANDLING AND STORAGE**

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HANDLING PROCEDURES AND..... KEEP CONTAINER CLOSED WHEN NOT IN  
EQUIPMENT USE.EMPTY PRODUCT CONTAINERS MAY CONTAIN  
PRODUCT RESIDUE.FOLLOW LABELED WARNINGS  
EVEN AFTER CONTAINER IS EMPTIED.DO NOT  
SWALLOW.AVOID CONTACT WITH EYES, SKIN, AND  
CLOTHING.AVOID CHRONIC INHALATION OF  
DUST.AVOID EATING AND DRINKING IN USE.WEAR  
PROTECTIVE EQUIPMENT DURING HANDLING.USE  
WITH ADEQUATE VENTILATION.MAINTAIN A GOOD  
PERSONAL HYGIENE.

STORAGE NEEDS..... KEEP THE CONTAINER TIGHTLY CLOSED WHEN NOT  
IN USE.STORE AWAY FROM INCOMPATIBLE  
MATERIALS.STORE IN A COOL AND  
WELL-VENTILATED AREA.

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**SECTION 08: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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GLOVES/ TYPE..... WEAR IMPERVIOUS GLOVES.

RESPIRATORY/TYPE..... USE NIOSH/MSHA APPROVED EQUIPMENT WHEN  
AIRBORNE EXPOSURE IS EXCESSIVE.IN DUSTY  
ATMOSPHERE, USE AN APPROVED DUST  
RESPIRATOR.

EYE/TYPE..... GOGGLES. SAFETY GLASSES.

FOOTWEAR/TYPE..... BOOTS.

CLOTHING/TYPE..... WEAR AN APRON AND/OR AN OVERALL.

OTHER/TYPE..... EYE BATH AND SAFETY SHOWER.

ENGINEERING CONTROLS..... USE PROCESS ENCLOSURE, LOCAL EXHAUST  
VENTILATION, OR OTHER ENGINEERING CONTROLS  
TO MAINTAIN AIRBORNE LEVELS BELOW  
RECOMMENDED EXPOSURE LIMITS.TWA = 1 MG/KG.  
PROVIDE SUFFICIENT VENTILATION TO CONTROL  
EXPOSURE LEVELS BELOW AIRBORNE EXPOSURE  
LIMITS.



COPPER SULPHATE

SECTION 09: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE.....	POWDER.
ODOUR.....	NO ODOUR.
ODOUR THRESHOLD.....	N.AV.
VAPOUR PRESSURE (MMHG).....	N.AV.
VAPOUR DENSITY (AIR=1).....	N.AV.
EVAPORATION RATE.....	N
AV.	
BOILING POINT.....	N.AV.
MELTING POINT (C).....	-4 H2O @ 43 C (110 F).
PH.....	N.AV.
SPECIFIC GRAVITY (WATER=1).....	2.284.
SOLUBILITY IN WATER (% W/W).....	22.37% @ 0 C. 117.95% @ 100 C.
COEFFICIENT OF WATER/OIL DIST.....	N.AV.

SECTION 10: STABILITY AND REACTIVITY

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CHEMICAL STABILITY:.....
    YES..... YES.
    NO, WHICH CONDITIONS?.....
COMPATABILITY WITH OTHER.....
SUBSTANCES:
    YES.....
    NO, WHICH ONES?..... MAGNESIUM. CORROSIVE TO MILD STEEL.THE
                           ANHYDROUS FORM OF COPPER SULPHATE CAUSES
                           HYDROXYLAMINE TO IGNITE, AND THE HYDRATED
                           SALT IS VIGOROUSLY REDUCED.
REACTIVITY CONDITIONS?..... CONTACT WITH INCOMPATIBLES.SOLUTIONS CAN
                           BE CORROSIVE TO METALS.
HAZARDOUS PRODUCTS OF..... SEE HAZARDOUS COMBUSTION PRODUCTS.
DECOMPOSITION                MATERIAL IS ACIDIC WHEN DISSOLVED IN
                           WATER.THE SOLUTION CAN REACT WITH
                           MAGNESIUM TO FORM FLAMMABLE HYDROGEN GAS.
HAZARDOUS POLYMERIZATION..... WILL NOT OCCUR.

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**COPPER SULPHATE**

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**SECTION 11: TOXICOLOGICAL INFORMATION**

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EXPOSURE LIMIT OF MATERIAL..... SEE SECTION 02.  
LC 50 OF MATERIAL, SPECIES &..... SEE SECTION 02.  
ROUTE  
LD 50 OF MATERIAL, SPECIES &..... SEE SECTION 02.  
ROUTE  
CARCINOGENICITY OF MATERIAL..... NONE.  
REPRODUCTIVE EFFECTS..... N.AP.  
  
MUTAGENICITY..... N.AP.  
TERATOGENICITY..... N.AP.  
IRRITANCY OF MATERIAL..... SEE SECTION 03.  
SENSITIZING CAPABILITY OF..... MAY CAUSE SENSITIZATION TO SOME PEOPLE,  
MATERIAL  
SYNERGISTIC MATERIALS..... N.AV.

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**SECTION 12: ECOLOGICAL CONSIDERATIONS**

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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WASTE DISPOSAL..... IN ACCORDANCE WITH MUNICIPAL, PROVINCIAL  
AND FEDERAL REGULATIONS.

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**SECTION 14: TRANSPORT INFORMATION**

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UN NUMBER..... NA 9109.  
TDG CLASSIFICATION..... 9.2.  
PACKING GROUP..... II.  
SPECIAL SHIPPING INSTRUCTIONS..... N.AP.

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**SECTION 15: REGULATORY INFORMATION**

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WHMIS CLASSIFICATION..... D1B. D2B.  
CPR COMPLIANCE..... 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.

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**COPPER SULPHATE**

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**SECTION 16: OTHER INFORMATION**

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N.AV.=NOT AVAILABLE.....

N.AP.=NOT APPLICABLE.....

PREPARED BY..... Regulatory Affairs

DATED..... 11171999

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**DIESEL FUEL**

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\* \* \* \* \*

\* M S D S \*

\* Canadian Centre for Occupational Health and Safety \*

\* \* \* \* \* Issue : 2001-1 (February, 2001) \*

\*\*\* IDENTIFICATION \*\*\*

MSDS RECORD NUMBER : 2482868

PRODUCT NAME(S) : LIGHT DISTILLATE

ESSO STOVE OIL (DYED OR CLEAR)

DIESEL ARCTIC (DYED OR CLEAR)

ESSO DIESEL DEW (DYED OR CLEAR)

ESSO DIESEL ARCTIC (DYED OR CLEAR)

ESSO STOVE QUALITY COMMERCIAL FUEL

ESSO STOVE QUALITY FURNACE FUEL

ESSO STOVE QUALITY HEATING OIL (DYED OR CLEAR)

STOVE QUALITY FURNACE FUEL

DIESEL 60 (DYED OR CLEAR)

DIESEL DEW (DYED OR CLEAR)

ESSO DIESEL 60 (DYED OR CLEAR)

ESSO DIESEL LIGHT (DYED OR CLEAR)

STOVE OIL (DYED OR CLEAR)

STOVE QUALITY HEATING OIL (DYED OR CLEAR)

ESSO DIESEL FUEL OIL 50 (DYED OR CLEAR)

DIESEL LOW SULFUR LIGHT (DYED OR CLEAR)

LIGHT DISTILLATE (LOW SULFUR)

STOVE QUALITY COMMERCIAL FUEL

DIESEL FUEL OIL 50 (DYED OR CLEAR)

DIESEL LIGHT (DYED OR CLEAR)

DIESEL LOW SULFUR LIGHT DYED EP

FURNACE LIGHT (DYED OR CLEAR)

PRODUCT IDENTIFICATION : MSDS Number: 08529

DATE OF MSDS : 1998-05-12

CURRENCY NOTE : This MSDS was provided to CCOHS in electronic form on 2000-12-14

\*\*\* MANUFACTURER INFORMATION \*\*\*

MANUFACTURER : Imperial Oil (Products Division)

ADDRESS : 111 St Clair Avenue West

Toronto Ontario

Canada M5W 1K3

Telephone: 416-968-4111

\*\*\* SUPPLIER/DISTRIBUTOR INFORMATION \*\*\*

SUPPLIER/DISTRIBUTOR : Imperial Oil (Products Division)

ADDRESS : 111 St Clair Avenue West

Toronto Ontario

Canada M5W 1K3

Telephone: 416-968-4111

\*\*\* MATERIAL SAFETY DATA \*\*\*