



24 Hour Emergency:
INFOTRAC: 1-800-535-5053

NOTE: INFOTRAC emergency number to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

MATERIAL SAFETY DATA SHEET

Section 1 - Chemical Product / Company Information

Product Name:	CHLORINATED	Revision Date:	04/17/2009
Identification Number:	33659	Supersedes :	04/17/2009
Supplier:	EMCO Chemical Distributors, Inc. 2100 Commonwealth Avenue North Chicago, Illinois 60064 (847) 689-2200	Preparer:	McGrail, Bridget

Section 2 - Composition / Information On Ingredients

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Wt % Less Than</u>	<u>ACGIH TLV- TWA</u>	<u>ACGIH TLV- STEL</u>	<u>OSHA PEL- TWA</u>	<u>OSHA PEL- Ceiling</u>
Aliphatic hydrocarbon	64742-47-8	60.0	100 ppm		500 ppm	
Tetrachloroethylene, stabilized	127-18-4	25.0	25 ppm	100 ppm		
Methylene chloride	75-09-2	25.0				

Section 3 - Hazards Identification

*** EMERGENCY OVERVIEW ***: Combustible liquid and vapor. May be fatal if swallowed. Suspect cancer hazard.

Effects Of Overexposure - Eye Contact: Moderately irritating to the eyes causing transient corneal injury.

Effects Of Overexposure - Skin Contact: May cause severe irritation. Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash). Personnel with pre-existing skin disorders should avoid contact with this product.

Effects Of Overexposure - Inhalation: Harmful if inhaled. Vapors can cause irritation of the respiratory tract. High concentrations can cause headache, nausea, weakness, lightheadedness, and stupor (CNS depression). Prolonged exposure to high concentrations can cause central neurological depression and EEG abnormalities. Easily absorbed through lungs. Excessive exposure may cause carboxyhemoglobinemia, therefore impairing the blood's ability to transport oxygen. Excessive exposure to mists or vapors generated by heat may cause irritation to eyes, nose, throat and lungs, respiratory tract, headaches, nausea.

Effects Of Overexposure - Ingestion: May be fatal if swallowed. Harmful or fatal if liquid is aspirated into lungs. Cause (target organ or system) damage. (e.g., lung, nervous system, blood disorders, liver, kidney, immune system, cardiovascular system, thyroid, testicular, ovarian, etc.). Can be readily absorbed by the stomach and intestinal tract. Symptoms include burning sensation of the mouth and esophagus, nausea, vomiting, dizziness, staggering gait, drowsiness, loss of consciousness and delirium as well as additional central nervous system effects. Irritating to mouth, throat, and stomach. Repeated ingestion may lead to gastrointestinal disturbances. Overexposure may cause nausea, diarrhea, and/or vomiting.

Effects Of Overexposure - Chronic Hazards: May cause liver disorder (e.g., edema, proteinuria) and damage. Overexposure may cause kidney damage. Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system, central nervous system, kidney, liver, skin, and/or eyes. Possible brain damage from overexposure. Suspect cancer hazard. Possible reproductive hazard. May cause delayed lung damage.

Primary Route(s) Of Entry: Skin Contact, Inhalation, Ingestion, Eye Contact

Section 4 - First Aid Measures

First Aid - Eye Contact: Immediately flush eyes with water. Flush eyes with water for a minimum of 15 minutes, occasionally lifting and lowering upper lids. Get medical attention promptly. Remove contact lenses if worn.

First Aid - Skin Contact: Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse. Remove and clean contaminated shoes.

First Aid - Inhalation: Rescuers should put on appropriate protective gear. Remove from area of exposure. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep victim warm. Get immediate medical attention. To prevent aspiration, keep head below knees.

First Aid - Ingestion: Do not induce vomiting. Do not give liquids. Obtain emergency medical attention.

Section 5 - Fire Fighting Measures

Flash Point, F: 108
(TCC)

Lower Explosive Limit, %: N.D.
Upper Explosive Limit, %: N.D.

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Fog

Unusual Fire And Explosion Hazards: Combustible liquid and vapor. Can form explosive mixtures at temperatures at or above the flashpoint. Vapors can travel to a source of ignition and flash back. Vapors/dust may form explosive mixture with air. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Also, do not reuse container without commercial cleaning or reconditioning.

Special Firefighting Procedures: As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear. Avoid use of solid water streams. Water spray to cool containers or protect personnel. Use with caution. Water runoff can cause environmental damage. Dike and collect water used to fight fire.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.) Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Ventilate spill area. Stay upwind of spill. Use only non-combustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Remove from surface by skimming or with suitable absorbents. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Recover by pumping (use an explosion proof or hand pump).

Section 7 - Handling And Storage

Handling: Use only in a well ventilated area. Avoid breathing vapor, fumes or mist. Avoid contact with eyes, skin, and clothing. Always open containers slowly to allow any excess pressure to vent. When transferring, follow proper grounding procedures. Use spark-resistant tools. Do not load into compartments adjacent to heated cargo. Use explosion proof equipment. Follow all MSDS/label precautions even after containers are emptied because they may retain product residues.

Storage: Keep away from heat, sparks, and flame. Keep container closed when not in use. Containers can build up pressure if exposed to heat (fire). Store containers in a cool, well ventilated place. Protect from direct sunlight. Static Discharge, materials can accumulate static charges which can cause an incendiary electrical discharge. Material is a static accumulator which has the potential of forming ignitable vapor-air mixtures in storage tanks.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Ventilate low-lying areas where dense vapors may collect. Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product. Use explosion-proof ventilation equipment.

Respiratory Protection: Wear a MSHA/NIOSH approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

Skin Protection: Wear impervious gloves to prevent contact with the skin. Wear long sleeves when contact is likely to occur. Wear protective gear as needed - apron, suit, boots. Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

Eye Protection: Wear safety glasses with side shields (or goggles) and a face shield.

Other protective equipment: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Hygienic Practices: Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors. Remove contaminated clothing and wash before reuse. Wash hands before eating. Wash thoroughly after handling.

Section 9 - Physical And Chemical Properties

Boiling Range:	N.D. - N.D.	Vapor Density:	>1 (air=1)
Odor:	TYPICAL	pH:	N.D.
Appearance:	Clear liquid	Evaporation Rate:	<1 (n-butyl acetate=1)
Solubility in H ₂ O:	Partial	Viscosity:	N.D.
Freeze Point:	N.D.	Specific Gravity:	0.9948
Vapor Pressure:	N.D.		
Physical State:	Liquid		

(See section 16 for abbreviation legend)

Section 10 - Stability And Reactivity

Conditions To Avoid: Avoid excess heat and sources of ignition.

Incompatibility: Avoid contact with concentrated sulfuric or nitric acid. Avoid contact with amines. Prevent contact with strong oxidizing agents. Keep separate from alkalis. Keep away from strong bases. May be corrosive to aluminum, magnesium, titanium, and their alloys. May be corrosive to iron, stainless steel, copper, and nickel in the presence of air and water, and especially at elevated temperatures. May react violently with alkali and alkaline earth metals such as sodium, potassium and barium. May react with alkaline earth metals such as sodium, potassium and barium.

Hazardous Decomposition: Toxic gases/fumes are given off during burning or thermal decomposition. During combustion carbon monoxide may be formed. At decomposition temperature, chlorine gas may be emitted. During combustion carbon dioxide may be formed. May release hydrogen chloride under fire conditions.

Hazardous Polymerization: N.D.

Stability: N.D.

Section 11 - Toxicological Information

Product LD50:

Product LC50:

Chemical Name

LD50 mg/kg

LC50 mg/L

Aliphatic hydrocarbon	15000.0	5.5
Tetrachloroethylene, stabilized	2629.0	6.3
Methylene chloride	3250.0	50.0

Section 12 - Ecological Information

Ecological Information: N.D.

Section 13 - Disposal Information

Disposal Information: Dispose of waste in accordance with all local, state and federal regulations.

For assistance with your waste management needs, contact EMCO's Waste Services Division at (262) 658-4000

Section 14 - Transportation Information

DOT Proper Shipping Name: Toxic liquids, organic, n.o.s. (tetrachloroethylene, dichloromethane)
Packing Group: III
DOT Hazard Class: 6.1
DOT UN/NA Number: UN2810
Hazard Subclass:
ERG # 128

The listed Transportation Information applies only to ground transport and does not address regulatory variations due to changes in package size, mode of shipment, or other regulatory descriptors.

Section 15 - Regulatory Information

CERCLA – SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

SARA Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372:

Chemical Name	CAS Number
Tetrachloroethylene, stabilized	127-18-4
Methylene chloride	75-09-2

Toxic Substances Control Act:

All components of this product are listed or are exempt from listing on the TSCA 8(b) inventory. If identified components of this product are listed under the TSCA 12(b) export notification rule, they will be listed below:

U.S. State Regulations: As follows –

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

Pennsylvania Right-to-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

California Proposition 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

<u>Chemical Name</u>	<u>CAS Number</u>
Tetrachloroethylene, stabilized	127-18-4
Methylene chloride	75-09-2

Warning: The following ingredients present in the product are known to the state of California to cause birth defects or other reproductive hazards.

<u>Chemical Name</u>	<u>CAS Number</u>
Methylene chloride	75-09-2

International Regulations:

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Section 16 - Other Information

HMIS Ratings:

Health: 2 Flammability: 2 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, g/L: 549

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

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