



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** Paroil 170 LV  
**Finalized on** 08-Aug-2007  
**Chemical description** Short-Medium Chain Chlorinated Paraffin Blend (90/10)  
**CAS-No.** 63449-39-8 CAS Number 85535-84-8  
**Product use** Lubricant  
Lubricant Additive  
Flame Retardant  
Plastics Compounding  
**Company information** DOVER CHEMICAL CORPORATION  
3676 Davis Road NW, PO Box 40  
Dover, OH 44622-0040 United States  
**Emergency** CHEMTREC (U.S. and Canada) 1-800-424-9300  
CHEMTREC (Outside the U.S.) 1-703-527-0585  
**Technical contact** Dover Chemical Corporation 330-343-7711  
For information regarding the MSDS contact the MSDS Manager.  
For Technical Information or Literature contact Customer Service.

## 2. Composition / Information on Ingredients

Components	CAS #	Percent
Short Chain Chlorinated Paraffin	63449-39-8	> 90

**Composition comments** CAS# 85535-84-8 is the chemical number recognized for short chain chlorinated paraffin in Europe. Therefore, the classification and labeling listed in sections 2 and 15 pertain to CAS # 85535-84-8 only; not CAS # 63449-39-8. IARC has classified chlorinated paraffin at 60% chlorination and C-12 chain length to be a Class 2B possible carcinogen. The manufacturer states that this product contains either less or more than 60% chlorination. Therefore, the possible carcinogen classification does not apply.

## 3. Hazards Identification

**Emergency Overview** Health injuries are not known or expected under normal use. Prolonged or repeated exposure increases the risk. Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

### Potential short term health effects

**Eyes** Contact with eyes may cause irritation.  
**Skin** Prolonged and/or repeated skin contact may result in mild irritation or redness.  
**Inhalation** Avoid breathing vapors or mists of this product. Inhalation of vapors in high concentration may cause irritation of respiratory system.  
**Ingestion** May be harmful if swallowed. Limited evidence of a carcinogenic effect.  
**Target organs** Liver. Thyroid.  
**Chronic effects** Not established.  
**Main symptoms** May cause eye/skin irritation. Inhalation of vapors in high concentration may cause irritation of respiratory system.  
**Potential environmental effects** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 4. First Aid Measures

**General advice** No hazards which require special first aid measures. If you feel unwell, seek medical advice (show the label where possible).  
**Eye contact** Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

<b>Skin contact</b>	Wash affected area with mild soap and water. Get medical attention if irritation develops or persists.
<b>Inhalation</b>	Move to fresh air in case of accidental inhalation of vapors or decomposition products. If symptoms persist, get medical attention.
<b>Ingestion</b>	Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth to a victim who is unconscious or is having convulsions. If ingestion of a large amount does occur, seek medical attention.
<b>Notes to physician</b>	Treat symptomatically.

## 5. Fire Fighting Measures

<b>Flash Point</b>	> 390 °F (> 198.900000 °C) Pensky-Martens Closed Cup
<b>Flammability Class</b>	Combustible IIIB
<b>General fire hazards</b>	Not a fire hazard.
<b>Unusual fire &amp; explosion hazards</b>	Containers may explode when heated.
<b>Hazardous combustion products</b>	Carbon monoxide, carbon dioxide and other hydrocarbon fragments.
<b>Special exposure hazards in a fire</b>	Not established.
<b>Suitable extinguishing media</b>	Dry chemical, foam, water fog.
<b>Fire fighting equipment/instructions</b>	Firefighters should wear full protective clothing including self contained breathing apparatus. Use water spray to cool unopened containers. Move containers from fire area if you can do it without risk. Do not scatter the material. Water runoff can cause environmental damage.
<b>Special protective equipment for firefighters</b>	In the event of fire, wear self contained breathing apparatus.
<b>Extinguishing media which must not be used for safety reasons</b>	high volume water jet
<b>Specific hazards</b>	Irritating and toxic gases or fumes may be released during a fire.
<b>Specific methods</b>	In the event of fire, cool tanks with water spray.

## 6. Accidental Release Measures

<b>Evacuation procedures</b>	Isolate area. Keep unnecessary personnel away. Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed.
<b>Containment procedures</b>	Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Do not allow product to enter sewer or waterways. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.
<b>Personal precautions</b>	Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Local authorities should be advised if significant spillages cannot be contained.
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Do not contaminate surface water. Runoff may pollute waterways.
<b>Methods for cleaning up</b>	Wear appropriate protective equipment and clothing during clean-up. Dike far ahead of liquid spill for later disposal. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Do not allow material to contaminate ground water system. Avoid runoff into storm sewers and ditches which lead to waterways.
<b>Spill or leak procedure</b>	Not established.

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## 7. Handling and Storage

<b>Handling</b>	Handle and open container with care. Wear personal protective equipment. Wash hands after handling and before eating. Use appropriate container to avoid environmental contamination.
<b>Storage</b>	Use care in handling/storage. Keep away from heat, sparks, and flame. Keep container closed when not in use.
<b>Special packaging materials</b>	Not established.
<b>Further information</b>	Not established.

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## 8. Exposure Controls / Personal Protection

### Personal protective equipment

<b>Respiratory protection</b>	No personal respiratory protective equipment normally required. If mist is generated (heating, spraying) and engineering controls are not sufficient, wear approved organic vapor respirator suitable for oil mist.
<b>Hand protection</b>	Wear appropriate chemical resistant gloves.
<b>Eye protection</b>	Wear safety glasses with side shields (or goggles) and a face shield.
<b>Skin and body protection</b>	Normal work clothing (long sleeved shirts and long pants) is recommended.
<b>General</b>	Usual safety precautions while handling the product will provide adequate protection against this potential effect.
<b>Exposure limits</b>	Exposure Limits for this product have not been established. Avoid repeated or prolonged exposure to vapor or mist without appropriate respiratory protection.
<b>Engineering measures to reduce exposure</b>	Ensure adequate ventilation, especially in confined areas.
<b>Control parameters</b>	Not established.
<b>Hygiene measures</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Environmental exposure controls</b>	Not established.

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## 9. Physical & Chemical Properties

<b>Form</b>	Liquid.
<b>Color</b>	amber
<b>Odor</b>	very faint
<b>Appearance</b>	clear
<b>Oxidizing properties</b>	Not established.
<b>Specific Gravity</b>	1.1 - 1.55 @ 50 /25 C
<b>Solubility (H2O)</b>	0.15 - 0.47 mg/l @ 20 C
<b>Octanol/H2O Coeff</b>	4.4 - 8

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## 10. Chemical Stability & Reactivity Information

<b>Stability</b>	Stable at normal conditions of use.
<b>Conditions to avoid</b>	Heating to decomposition.
<b>Hazardous decomposition products</b>	Carbon oxides, Hydrogen chloride.
<b>Hazardous polymerization</b>	Will not occur.
<b>Incompatibility</b>	This product may react with strong reducing agents. This product may react with strong oxidizing agents.
<b>Materials to avoid</b>	strong oxidizing agents

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## 11. Toxicological Information

<b>Toxicological information</b>	Not established.
<b>Acute Toxicity</b>	Acute LD50: 26100 g/kg estimated, Rat, Oral
<b>Local effects</b>	May cause eye or skin irritation with susceptible persons.
<b>Component analysis - LD50</b>	Not established.
<b>Pre-existing conditions aggravated by exposure</b>	Not established.
<b>Synergistic materials</b>	No data available for this product.
<b>Epidemiology</b>	No epidemiological data is available for this product.
<b>Neurotoxicity</b>	No data available for this product.
<b>Carcinogenicity</b>	CAS # 85535-84-8: R40 - Limited evidence of a carcinogenic effect. Neither carcinomas nor adenomas considered separately were statistically significant nor were any unusual tumor types noted., namely under conditions which are comparable to those for possible exposure of a human being at the workplace, or from which such comparability can be deduced.
<b>Mutagenicity</b>	Did not show mutagenic effects in animal experiments.
<b>Teratogenicity</b>	Rat, NOEL: 500 mg/kg/day
<b>Chronic toxicity</b>	Not established.
<b>Subchronic toxicity</b>	Not established.
<b>Human experience</b>	CAS # 85535-84-8: R40 - Limited evidence of a carcinogenic effect. Did not cause sensitization on laboratory animals. Did not show mutagenic effects in animal experiments. Neither carcinomas nor adenomas considered separately were statistically significant nor were any unusual tumor types noted., namely under conditions which are comparable to those for possible exposure of a human being at the workplace, or from which such comparability can be deduced.
<b>Symptoms and target organs</b>	Liver, Kidney
<b>Further information</b>	Incomplete toxicological data are available for this product. Health injuries are not known or expected under normal use. High concentration of vapors may cause irritation to eyes and respiratory system and produce narcotic effects.
<b>Reproductivity</b>	Mallard Duck NOEL: 166ppm diet
<b>Routes of exposure</b>	Ingestion, Inhalation, Eye contact, Skin contact.

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## 12. Ecological Information

<b>Ecotoxicity</b>	EC50, 0.3 - 11.1 Mg/L, Daphnia magna, 24.00 Hours
<b>Environmental effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
<b>Persistence / degradability</b>	Not established.
<b>Bioaccumulation</b>	Not established.
<b>Aquatic toxicity</b>	May cause long-term adverse effects in the aquatic environment.
<b>Partition coefficient</b>	Not established.

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## 13. Disposal Considerations

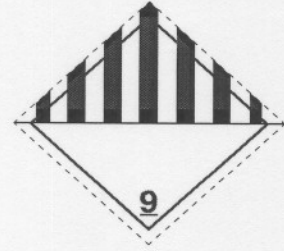
<b>Waste Codes</b>	Waste codes should be assigned by the user based on the application for which the product was used.
<b>Disposal instructions</b>	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

Waste from residues / unused products      Dispose of in accordance with local regulations.  
Contaminated packaging      Do not re-use empty containers.

## 14. Transportation Information

### DOT - bulk - Road

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CHLORINATED PARAFFIN (C10-C13))
Hazard class	9
Special provisions	8, 146, IB3, T4, TP1, TP29
Packaging exceptions	155
Packaging non bulk	203
Packaging bulk	241
Quantity limits passenger	No limit
Quantity limits cargo	No limit
Vessel stowage location	A
UN number	UN3082
Packing group	III
Labels required	9
Severe marine pollutant	Yes
ERG number	171

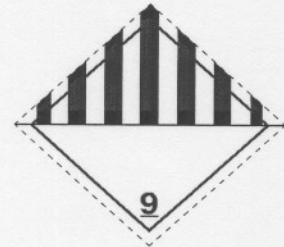


### DOT - Non-Bulk - Road

Not regulated as dangerous goods.

### TDG - bulk - Road

Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CHLORINATED PARAFFIN (C10-C13))
Hazard class	9
Special provisions	8, 146, IB3, T4, TP1, TP29
Packaging exceptions	155
Packaging non bulk	203
Packaging bulk	241
Quantity limits passenger	No limit
Quantity limits cargo	No limit
Vessel stowage location	A
UN number	UN3082
Packing group	III
Labels required	9
Marine pollutant	yes
Severe marine pollutant	Yes



### TDG - Non-Bulk - Road

Not regulated as dangerous goods.

General	Not established.
Further information	Not established.

## 15. Regulatory Information

### Inventory status

Country(s) or Region	Inventory Name	On Inventory (Yes/No)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (CCS)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Japanese Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Korean Inventory of Chemicals (KICS)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**International regulations** Not established.

**US Federal Regulations** All components are on the U.S. EPA TSCA Inventory List.

**State Regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

#### U.S. - Massachusetts - Right To Know List

Short Chain Chlorinated Paraffin 63449-39-8 Carcinogen; Extraordinarily hazardous

### Occupational Safety and Health Administration (OSHA)

**1910.H.119 PSM Highly Hazardous Chemicals** Not Listed

**1910.Z.1200 Hazardous Chemical** Listed

### EPA

**CERCLA 302.4 List of Hazardous Substances** Not Listed

**CWA 116.4 List of Hazardous Substances** Not Listed

**CERCLA 372 SARA Title III 313 Toxic Chemicals/Categories** Listed - Category N583: 90

**CAA Hazardous Air Pollutant** Not Listed

**CERCLA SARA Title III 311/312 Hazard Categories** Immediate Hazard - No

Delayed Hazard - Yes

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

**WHMIS Status** Controlled

**WHMIS Classification** D2A - Other Toxic Effects-VERY TOXIC

**Canadian Regulations** 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.

#### Canada - CEPA - Priority Substances List

Short Chain Chlorinated Paraffin 63449-39-8 Priority Substance List 1 (substance considered toxic)

<b>HMIS Ratings</b>	Health	1
	Flammability Classification	1
	Physical	0
	Pers. Prot	B
<b>NFPA Ratings</b>	Health	1
	Flammability Classification	1
	Instability	0
<b>Labelling</b>	Xn - Harmful	
	N - Dangerous for the environment	

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## 16. Other Information

<b>Disclaimer</b>	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.
<b>Recommended use</b>	Not established.
<b>Recommended restrictions</b>	Prohibited for use in metalworking fluids and leather finishing products
<b>Further information</b>	Not established.
<b>Notification date</b>	08-Aug-2007
<b>MSDS sections updated</b>	Chemical Product and Company Identification: Alternate Trade Names HazReg Data: Hazard - Regulatory Values