

MATERIAL SAFETY DATA SHEET

Chlorinated Rubber

I: COMPANY INFORMATION:

Distributor's Name/Agent: Skylighter, Inc.
Address: PO Box 480 Round Hill, VA 20142
Emergency Telephone No: 800-424-9300 (CHEMTREC)
Other Information Call: 540-338-3877

II: PRODUCT CLASSIFICATION:

PRODUCT NAME: CHLORUB (Chlorinated Rubber)
CHEMICAL NAME: Chlorinated Rubber
CHEMICAL FAMILY: Chlorinated Rubber
SYNONYMS: Chlorub, Parlon, Alloprene
FORMULA: approx. $(C_{10}H_{18-x}Cl_x)_n$ [X: ~7, n: according to grade]

***WARNING! Before dissolving CHLORUB in any solvent, read this Material Safety Data Sheet. See especially "Supplemental Information, Section XIII".**

III: PHYSICAL PROPERTIES:

PHYSICAL FORM: Free-flowing granular powder
COLOR: Creamy-white
ODOR: Odorless
BOILING POINT: N/A
MELTING POINT: 176°C
SOLUBILITY IN WATER: Negligible
SPECIFIC GRAVITY: 1.6 g/ml
VAPOR PRESSURE: Not determined
VAPOR DENSITY: N/A

IV: HAZARDOUS INGREDIENTS:

<u>INGREDIENT NAME</u>	<u>CAS NUMBER</u>	<u>CONCENTRATION (%)</u>	<u>EXPOSURE LIMITS</u>
Carbon Tetrachloride	56-23-5	less than 1%	TLV: 5ppm (skin) (ACGIH) PEL: 10 ppm (OSHA)

V: FIRE AND EXPLOSION DATA:

FLASH POINT: Not determined
AUTO-IGNITION TEMPERATURE: N/A
FLAMMABLE LIMITS:
LEL: N/A
UEL: N/A

EXTINGUISHING MEDIA: Water spray, dry chemical, foam, carbon dioxide, or halon.

SPECIAL FIRE FIGHTING PROCEDURES: None

UNUSUAL FIRE / EXPLOSION HAZARDS: Dependent on combustion conditions, This may include sever eye, skin and respiratory tract irritants such as Phosgene, Hydrogen, Chloride, and Chlorinated acids, aldehydes and ketones. Carbon Monoxide and Carbon Dioxide may also be formed.

VI: HUMAN HEALTH DATA:

WARNING! Before dissolving CHLORUB in any solvent, read this Material Safety Data Sheet. See especially "Supplemental Information, Section XIII".

ROUTE(S) OF ENTRY:

- Chlorub: Inhalation, Ingestion
- Carbon Tetrachloride: Inhalation, Eyes

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE:

- Chlorub: None known. Chlorub dust in the eye may cause physical irritation
- Carbon Tetrachloride: May cause mild, reversible irritation and pain to the eyes. When inhaled can cause drowsiness, fatigue, giddiness, headache, impaired coordination and nausea.

CARCINOGENICITY:

- Chlorub: NTP-not listed; IARC-not evaluated; OSHA- not regulated as a carcinogen

-Carbon Tetrachloride: NTP-listed as a substance that “may be reasonably anticipated to be a carcinogen”; IARC-determined to be carcinogenic in animals; OSHA-not listed.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

-Chlorub: None

-Carbon Tetrachloride: Cirrhosis of the liver and other liver disease, kidney disease, CCl₄, may increase the action of central nervous system depressants (such as alcohol and barbiturates) and tranquilizers.

REPORTED HUMAN EFFECTS:

-Chlorub: Not a skin sensitizer or a skin irritant. Eating the equivalent of 3 ounces/day for an adult male human for 7 days did not cause any effects.

-Carbon Tetrachloride: Exposure to high atmospheric levels of carbon tetrachloride causes central nervous system depression, liver damage, kidney damage, respiratory and eye irritation. The clinical signs and symptoms reported following overexposure to CCl₄ reflect the toxic effects on these organs/systems. They include: blurred or dim vision, double vision, Drowsiness, dizziness/impaired coordination, giddiness, fatigue, headache, muscle aches, irregular heartbeat, nausea, vomiting, unconsciousness, diarrhea, labored breathing, abdominal pain, Jaundice and increased urination followed by decreased urination. Changes in the concentrations of components of blood and urine, which reflect kidney and liver damage also have been reported. Drinking CCl₄ caused severe gastrointestinal irritation.

REPORTED ANIMAL EFFECTS:

-Chlorub: Not a skin irritant or sensitizer.

-Carbon Tetrachloride: Except for a report of optic nerve and sciatic nerve damage following repeated exposure at 10-80 times the TLV, the effects of CCl₄ in animals parallel those reported above for humans.

VII: EMERGENCY AND FIRST AID PROCEDURES:

FIRST AID FOR EYES:

-Chlorub: In case of contact, immediately flush with plenty of low-pressure water. Remove any contact lenses to ensure thorough flushing.

-Carbon Tetrachloride: same as Chlorub instructions.

FIRST AID FOR INHALATION:

-Carbon Tetrachloride: Remove to fresh air. If breathing has stopped, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician.

VIII: EMPLOYEE PROTECTION RECOMMENDATIONS:

EYE PROTECTION REQUIREMENTS: Safety glasses with side shields or goggles.

SKIN PROTECTION REQUIREMENTS: Not necessary but work gloves are recommended.

RESPIRATORY REQUIREMENTS: Appropriate respiratory protection is required when exposure to an airborne contaminant is likely to exceed acceptable limits. Respirators should be selected and use in accordance with OSHA, Subpart 1 (29 CFR 1910.134) and manufacturer’s recommendations.

VENTILATION REQUIREMENTS: Adequate ventilation should be provided to keep dust and vapor concentrations below acceptable exposure

ADDITIONAL PROTECTIVE MEASURES: Avoid contact with eyes, skin and clothing. Avoid breathing dust.

IX: REACTIVITY DATA:

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILITIES: Avoid mixtures with chrome pigments or other strong oxidizing compounds in the presence of heat.

DECOMPOSITION PRODUCTS: Hydrochloric Acid (HCl)

HAZARDOUS PRODUCTS OF COMBUSTION: These will depend on combustion conditions. They may include severe eye, skin and respiratory irritants such as phosgene, hydrogen chloride and Chlorinated acids, aldehydes and ketones. Carbon monoxide and carbon dioxide also may be formed.

X: SPILL AND LEAK PROCEDURES:

SPILL OR LEAK PROCEDURES: Wear the necessary protective clothing, sweep up spilled material for use or disposal. Flush spill area with water spray.

WASTE DISPOSAL METHOD: Do not incinerate. Landfill in a permitted facility in accordance with local, state and federal regulations.

NOTICE! This product contains carbon tetrachloride listed as a “Toxic Pollutant” under section 307 of the Clean Water Act and specific discharge limitations on wastewaters containing it may apply. Refer to the Effluent Guidelines for your industry (40 CFR 401-469). This product contains one or more of the solvents listed in hazardous waste regulations 40 CFR 261.31 (f) sections F001 through F005 because of its toxicity. Therefore, disposal of unused product and all spill cleanup residues must comply with the hazardous waste regulations.

XI: SPECIAL PRECAUTIONS & STORAGE DATA:

STORAGE TEMPERATURE (MIN/MAX) Ambient/Ambient

SHELF LIFE: Indefinite when stored properly

SPECIAL SENSITIVITY: This product may react with chrome pigments or other strong oxidizing compounds in the presence of heat and should not be

stored near such materials.

XII: SHIPPING INFORMATION:

PROPER SHIPPING NAME: Chlorinated Rubber
Not a DOT regulated material.

XIII: SUPPLEMENTAL INFORMATION:

Chlorinated Rubber contains approximately less than 1% residual, tightly bound carbon tetrachloride (CCl₄). This CCl₄ is not released from the solid Chlorinated Rubber (Chlorub) at work place temperatures. It is release when Chlorub is dissolved in any solvent.

Analysis of workplace atmosphere in areas where Chlorinated Rubber was being used dissolved and processed indicates that CCl₄ vapor levels in these areas may exceed the TLV unless positive ventilation of some sort is provided. In most cases, ventilation adequate to suitable control worker exposure in the solvent vapors also will suitable control worker exposure to CCl₄ vapors. However, each user through appropriate air analysis should confirm this. Analytical laboratories and ventilation engineering firms in your local area can assist in testing of your areas for ventilation efficiency and in designing appropriate modifications where necessary.

As shipped and at ambient temperatures, Chlorinated Rubber may be treated as a nuisance dust or particles in accordance with the recommendations of the TLV committee of the American Conference of Governmental Industrial Hygienists (ACGIH)

XIV: FEDERAL REGULATORY INFORMATION:

U.S. INFORMATION

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CALIFORNIA PROPOSITION 65: This product contains materials, which the State of California has found to cause cancer, birth defects, or other reproductive harm.

OSHA STATUS: This product is not listed on OSHA's List of Highly Hazardous Chemicals (29 CFR 1910.119).

The information herein is given in good faith, but no warranty, express or implied, is made.

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