



MATERIAL SAFETY DATA SHEET

CONTACT : **LEONID CHEMICALS**
Leonid Chemicals Pvt Ltd
62/A-2 1st Stage, Yeshwanthpur Industrial Suburb
Ashokpuram School Road
Bangalore-560 022, Karnataka, INDIA
Ph: +91-80-2337 8354, Fax: +91-80-2357 4827

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: Chlorotriethylsilane, 99%

Catalog Numbers:

21594-0000, 21594-0050, 21594-0250, 21594-1000

Synonyms:

NA

Company Identification:

LEONID CHEMICALS
62/A-2 2nd Stage, Industrial Suburb
Yeshwanthpur, Bangalore -22, INDIA
Ph- +91-80-23378354

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS #	:	994-30-9
Chemical Name	:	Chlorotriethylsilane
%	:	99%
EINECS#	:	213-615-6
Hazard Symbols	:	C
Risk Phrases	:	10 34

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Flammable. Causes burns. Moisture sensitive.

Potential Health Effects

Eye:

Causes eye burns.

Skin:

Causes skin burns.

Ingestion:

Causes gastrointestinal tract burns. The toxicological properties of this substance have not been fully investigated.

Inhalation:

May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Causes chemical burns to the respiratory



tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

Chronic:

Not available.

SECTION 4 - FIRST AID MEASURES

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

NA

SECTION 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Containers may explode in the heat of a fire. Flammable liquid and vapor.

Extinguishing Media:

Use foam, dry chemical, or carbon dioxide.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool.

SECTION 7 - HANDLING AND STORAGE

Handling:

Use spark-proof tools and explosion proof equipment. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low. Personal Protective Equipment

Personal Protective Equipment**Eyes:**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Liquid
Color	: clear colorless to slightly yellow
Odor	: Not available.
PH	: Not available.
Vapor Pressure	: Not available.
Viscosity	: Not available.
Boiling Point	: 142 - 144 deg C @ 760.00mm Hg
Freezing/Melting Point	: Not available.
Autoignition Temperature	: Not available.
Flash Point	: 29 deg C (84.20 deg F)
Explosion Limits, lower	: Not available.
Explosion Limits, upper	: Not available.
Decomposition Temperature	NA
Solubility in water	:decomposes in water
Specific Gravity/Density	:.8980g/cm3
Molecular Formula	(C2H5)3SiCl
Molecular Weight	150.72

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, ignition sources, exposure to moist air or water.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong acids.

Hazardous Decomposition Products:

Hydrogen chloride, carbon monoxide, carbon dioxide, silicon oxide.

Hazardous Polymerization:

Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 994-30-9 unlisted.

LD50/LC50:

Not available.

Carcinogenicity:

Chlorotriethylsilane -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 - TRANSPORT INFORMATION

IATA

Shipping Name: CHLOROSILANES, FLAMMABLE, CORROSIVE, N.O.S.

Hazard Class: 3

UN Number: 2985

Packing Group: II

IMO

Shipping Name: CHLOROSILANES, FLAMMABLE, CORROSIVE, N.O.S.

Hazard Class: 3
UN Number: 2985
Packing Group: II

RID/ADR

Shipping Name: CHLOROSILANES, FLAMMABLE, CORROSIVE, N.O.S.
Hazard Class: 3
UN Number: 2985
Packing group: II

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives
Hazard Symbols: C

Risk Phrases:

R 10 Flammable.
R 34 Causes burns.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.
S 25 Avoid contact with eyes.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 994-30-9: No information available.

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 994-30-9 is listed on Canada's NDSL List.
CAS# 994-30-9 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA
CAS# 994-30-9 is listed on the TSCA inventory.



SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 9/25/1996 Revision #1 Date: 1/27/1999

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

