

## MSDS for 2,2,2-TRICHLOROETHYL CHLOROFORMATE, 96+WT%(GC)

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

### 2,2,2-TRICHLOROETHYL CHLOROFORMATE, 96+WT%(GC)

#### Section 1 - Chemical Product and Company Identification

**MSDS Name** 2,2,2-TRICHLOROETHYL CHLOROFORMATE, 96+WT%(GC)

**Synonyms** á,á,á-Trichloroethoxycarbonyl chloride, TcecCl

**Company Identification** Atul Ltd - PP Site  
P.O. Atul 3960 20  
Dist -Valsad  
Gujarat, India

Telephone nos 0091 2632 233621 / 233474 /  
230184

#### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	%	EINECS#
17341-93-4 363-7	2,2,2-TRICHLOROETHYL CHLOROFORMATE,	96+WT%(GC)	241-

#### Section 3 - Hazards Identification

Hazard Symbols: T C  
Risk Phrases: 23 34

#### EMERGENCY OVERVIEW

Toxic by inhalation. Causes burns.Mutagen.Moisture sensitive.

#### POTENTIAL HEALTH EFFECTS

**Eye** Causes eye burns.

**Skin** Causes skin burns.

**Ingestion** Causes gastrointestinal tract burns.

**Inhalation** May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary

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

**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.
- Skin** Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.
- Ingestion** May cause methemoglobinemia, cyanosis, convulsions, and death.
- Inhalation** Remove from exposure to fresh air immediately.

#### **Notes to Physician**

#### **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.
- Extinguishing Media** Do NOT use water directly on fire. 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, dry sand or earth), then place into a chemical waste container.

#### **Section 7 - Handling and Storage**

- Handling** 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** Store in a tightly closed container. Store in a dry area. Refrigerator (approx 4°C).

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls** Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

### PERSONAL PROTECTIVE EQUIPMENT

**Eyes** Wear safety glasses and chemical goggles if splashing is possible.

**Skin** Wear appropriate protective gloves and clothing to prevent skin exposure.

**Clothing** Wear appropriate protective clothing to minimize contact with skin.

**Respirators** Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

## Section 9 - Physical and Chemical Properties

<b>Physical State</b>	Clear liquid
<b>Appearance</b>	faint yellow
<b>Odor</b>	Not available.
<b>pH</b>	Not available.
<b>Vapor Pressure</b>	60 mmHg @ 75 C
<b>Viscosity</b>	Not available.
<b>Boiling Point</b>	171.0 - 172.0 deg C @ 760.00m
<b>Freezing/Melting Point</b>	0 deg C
<b>Autoignition Temperature</b>	Not available.
<b>Flash Point</b>	Not available.
<b>Explosion Limits, lower</b>	Not available.
<b>Explosion Limits, upper</b>	Not available.
<b>Decomposition Temperature</b>	
<b>Solubility</b>	decomposes
<b>Specific Gravity/Density</b>	1.5390g/cm3

**Molecular Formula** C3H2Cl4O2  
**Molecular Weight** 211.86

### Section 10 - Stability and Reactivity

**Chemical Stability** Stable under normal temperatures and pressures.

**Conditions to Avoid** Incompatible materials, exposure to moist air or water.

**Incompatibilities with Other Materials** Strong bases.

**Hazardous Decomposition Products** Hydrogen chloride, phosgene, carbon monoxide, carbon dioxide

**Hazardous Polymerization** Has not been reported.

### Section 11 - Toxicological Information

**RTECS#** CAS# 17341-93-4 unlisted.

**LD50/LC50** Not available.

**Carcinogenicity** 2,2,2-TRICHLOROETHYL CHLOROFORMATE, 96+WT%(GC) - 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

	<b>IATA</b>	<b>IMO</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S.*	CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S.	CHLOROFORMATES, TOXIC, CORROSIVE, N.O.S.
<b>Hazard Class:</b>	6.1	6.1	-
<b>UN Number:</b>	3277	3277	3277

<b>Packing Group:</b> II	II	-
<b>Dangerous Goods - Code:</b>	-	6.1(27B)

## Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T C

Risk Phrases:

R 23 Toxic by inhalation.

R 34 Causes burns.

Safety Phrases:

S 33 Take precautionary measures against static discharges.

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# 17341-93-4: No information available.

United Kingdom Occupational Exposure Limits

Canada

CAS# 17341-93-4 is listed on Canada's NDSL List.

CAS# 17341-93-4 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

US FEDERAL

TSCA

CAS# 17341-93-4 is listed on the TSCA inventory.