

Material Safety Data Sheet

Alpha, Alpha-Dichlorotoluene, 95% (GC)

ACC# 55411

Section 1 - Chemical Product and Company Identification

MSDS Name: Alpha, Alpha-Dichlorotoluene, 95% (GC)

Catalog Numbers: AC407020000, AC407020050, AC407021000

Synonyms: Benzal Chloride; Benzyl Dichloride; Benzylene Chloride; Chlorobenzal.

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
98-87-3	Benzal Chloride	95	202-709-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: 88 deg C.

Danger! May be fatal if inhaled. Causes respiratory tract irritation. Causes eye and skin irritation. **Combustible liquid and vapor.** May cause digestive tract irritation. May cause central nervous system depression. Potential cancer hazard. May cause cancer based on animal studies. Moisture sensitive.

Target Organs: Central nervous system.

Potential Health Effects

Eye: Causes eye irritation. May cause redness, pain, blurred vision and possible eye damage. May cause chemical conjunctivitis and corneal damage.

Skin: Causes skin irritation. May cause irritation and dermatitis. May cause cyanosis of the extremities.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: May be fatal if inhaled. Causes respiratory tract irritation. Aspiration may lead to pulmonary edema. Can produce delayed pulmonary edema. Inhalation at high concentrations may cause CNS depression and asphyxiation. Inhalation of large amounts may cause respiratory stimulation, followed by respiratory depression, convulsions and possible death due to respiratory paralysis.

Chronic: Effects may be delayed.

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.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Combustible liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Do NOT get water inside containers.

Flash Point: 88 deg C (190.40 deg F)

Autoignition Temperature: Not applicable.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: ; Flammability: ; Instability:

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. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Do not get water inside containers.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not allow contact with water. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep from contact with moist air and steam.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Benzal Chloride	none listed	none listed	none listed

OSHA Vacated PELs: Benzal Chloride: No OSHA Vacated PELs are listed for this chemical.

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. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: colorless

Odor: toluene-like odor

pH: Not available.

Vapor Pressure: 3 mm Hg @ 25 C

Vapor Density: 5.55

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 82-84C @ 11mmHg

Freezing/Melting Point: -17 deg C

Decomposition Temperature: Not available.

Solubility: Not available.

Specific Gravity/Density: 1.2950g/cm³

Molecular Formula: C₇H₆Cl₂

Molecular Weight: 161.03

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, ignition sources, moisture, excess heat, strong oxidants.

Incompatibilities with Other Materials: Moisture, strong oxidizing agents, strong bases.

Hazardous Decomposition Products: Hydrogen chloride, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:

CAS# 98-87-3: CZ5075000

LD50/LC50:

CAS# 98-87-3:

Inhalation, mouse: LC50 = 32 ppm/2H;

Inhalation, mouse: LC50 = 210 mg/m³;

Inhalation, rat: LC50 = 61 ppm/2H;

Inhalation, rat: LC50 = 400 mg/m³;

Oral, mouse: LD50 = 2462 mg/kg;

Oral, mouse: LD50 = 1400 mg/kg;

Oral, rat: LD50 = 3249 mg/kg;

Oral, rat: LD50 = 1400 mg/kg;

Carcinogenicity:

CAS# 98-87-3:

- **ACGIH:** Not listed.
- **California:** Not listed.
- **NTP:** Not listed.
- **IARC:** Group 2A carcinogen

Epidemiology: The risk of cancer depends on duration and level of exposure.**Teratogenicity:** No information found**Reproductive Effects:** No information found**Mutagenicity:** Mutagenic effects have occurred in experimental animals.**Neurotoxicity:** No information found**Other Studies:****Section 12 - Ecological Information**

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.**RCRA U-Series:**

CAS# 98-87-3: waste number U017.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	BENZYLIDENE CHLORIDE	No information available.
Hazard Class:	6.1	
UN Number:	UN1886	
Packing Group:	II	

Section 15 - Regulatory Information**US FEDERAL****TSCA**

CAS# 98-87-3 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 98-87-3: 5000 lb final RQ; 2270 kg final RQ

SARA Section 302 Extremely Hazardous Substances

CAS# 98-87-3: 500 lb TPQ

Section 313

This material contains Benzal Chloride (CAS# 98-87-3, 95%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 98-87-3 can be found on the following state right to know lists: California, (listed as .alpha.-Chlorinated toluenes and benzoyl chloride), New Jersey, Pennsylvania, Minnesota, (listed as .alpha.-Chlorinated toluenes and benzoyl chloride), Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

T

Risk Phrases:

- R 22 Harmful if swallowed.
- R 23 Toxic by inhalation.
- R 37/38 Irritating to respiratory system and skin.
- R 40 Limited evidence of a carcinogenic effect.
- R 41 Risk of serious damage to eyes.

Safety Phrases:

- S 36/37 Wear suitable protective clothing and gloves.
- S 38 In case of insufficient ventilation, wear suitable respiratory equipment.
- 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# 98-87-3: 3

Canada - DSL/NDSL

CAS# 98-87-3 is listed on Canada's NDSL List.

Canada - WHMIS

This product has a WHMIS classification of D1A, D2A, B3.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 98-87-3 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 7/30/1999

Revision #3 Date: 10/03/2005

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 event shall Fisher 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 Fisher has been advised of the possibility of such damages.