

# Material Safety Data Sheet

## Dichloroacetic Acid, 99+%

ACC# 17265

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Dichloroacetic Acid, 99+%

**Catalog Numbers:** AC113060010, AC113060050, AC113062500

**Synonyms:** 2,2-Dichloroacetic Acid; Dichloroethanoic Acid; Dichloracetic Acid; Bichloracetic Acid.

**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
79-43-6	Dichloroacetic acid	>99	201-207-0

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: clear, colorless liquid.

**Danger!** Causes eye and skin burns. Water-reactive. Harmful if absorbed through the skin. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. May cause cancer based on animal studies.

**Target Organs:** Central nervous system, respiratory system, reproductive system.

#### Potential Health Effects

**Eye:** Causes eye burns. May cause conjunctivitis. Causes redness and pain.

**Skin:** Harmful if absorbed through the skin. Causes skin burns. Causes redness and pain.

**Ingestion:** May cause severe and permanent damage to the digestive tract. 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. 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:** Repeated inhalation may cause chronic bronchitis. May cause cancer according to animal studies.

### Section 4 - First Aid Measures

**Eyes:** Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

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

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**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. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May polymerize explosively when involved in a fire. Contact with metals may evolve flammable hydrogen gas. Containers may explode when heated.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire. Do NOT get water inside containers. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

**Flash Point:** > 234e deg F (> 112.22 deg C)

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 3; Flammability: 1; Instability: 0

### Section 6 - Accidental Release Measures

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

**Spills/Leaks:** Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Cover with sand, dry lime or soda ash and place in a closed container for disposal. Remove all sources of ignition. Provide ventilation. Do not get water inside containers.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes.

**Storage:** Store in a cool, dry place. Store in a tightly closed container. Corrosives area. Do not store in metal containers.

## 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
Dichloroacetic acid	0.5 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous route	none listed	none listed

**OSHA Vacated PELs:** Dichloroacetic acid: 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 minimize contact with skin.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Liquid

**Appearance:** clear, colorless

**Odor:** Pungent odor.

**pH:** Not available.

**Vapor Pressure:** 1.0 mm Hg @ 44 C

**Vapor Density:** 4.45

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** 194 deg C

**Freezing/Melting Point:** 11-13 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Miscible with water.

**Specific Gravity/Density:** 1.56

**Molecular Formula:** C<sub>2</sub>H<sub>2</sub>Cl<sub>2</sub>O<sub>2</sub>

**Molecular Weight:** 128.9188

## Section 10 - Stability and Reactivity

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

**Conditions to Avoid:** Incompatible materials, ignition sources, metals, excess heat, exposure to moist air or water.

**Incompatibilities with Other Materials:** Strong acids, strong bases, strong oxidizing agents, strong reducing agents.

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

**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

### RTECS#:

CAS# 79-43-6: AG6125000

### LD50/LC50:

CAS# 79-43-6:

Draize test, rabbit, skin: 2 mg/24H Severe;

Oral, rat: LD50 = 2820 mg/kg;

Skin, rabbit: LD50 = 510 uL/kg;

### Carcinogenicity:

CAS# 79-43-6:

- **ACGIH:** A3 - Confirmed animal carcinogen with unknown relevance to humans
- **California:** carcinogen, initial date 5/1/96
- **NTP:** Not listed.
- **IARC:** Group 2B carcinogen

**Epidemiology:** Has been found to cause cancer in laboratory animals.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Mutagenicity:** No information available.

**Neurotoxicity:** No information available.

**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:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	DICHLOROACETIC ACID	DICHLOROACETIC ACID
<b>Hazard Class:</b>	8	8
<b>UN Number:</b>	UN1764	UN1764
<b>Packing Group:</b>	II	II

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 79-43-6 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

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 79-43-6: immediate, delayed.

**Section 313** No chemicals are reportable under Section 313.

#### 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# 79-43-6 can be found on the following state right to know lists: New Jersey.

#### California Prop 65

**The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:**

WARNING: This product contains Dichloroacetic acid, a chemical known to the state of California to cause cancer.

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:

C

**Risk Phrases:**

R 35 Causes severe burns.

**Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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# 79-43-6: 1

**Canada - DSL/NDSL**

CAS# 79-43-6 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D1B, E.

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**

Section 16 - Additional Information
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**MSDS Creation Date:** 2/05/1999

**Revision #4 Date:** 9/12/2005

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