



GLEN RESEARCH

22825 DAVIS DRIVE

STERLING VA 20164

PHONE

+703-437-6191

FAX

+703-435-9774

INTERNET

<http://www.glenres.com>

MSDS COVER SHEET

Pages including cover sheet: 4

Product Name: **Dichloroacetic acid**

Catalog Number: **40-4044-XX**

Product Description: Dichloroacetic Acid

Glen Research Corporation provides Material Safety Data Sheets (MSDS) based on the hazardous components of each product.

Components and MSDS attached

Dichloroacetic (100%)

CAS number

79-43-6



Material Safety Data Sheet

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Section I: Identification & Information

Product Name: DCA
Catalog number: 40-4044-XX
Product Description: Dichloroacetic acid

Name: Dichloroacetic Acid Chemical Family: Acid

Synonyms: Acetic acid, dichloro; DCA; Dichloroacetic Acid
Formula: $C_2H_2Cl_2O_2$ M.W.: 128.94

DOT Proper Shipping Name: Dichloroacetic Acid
DOT Identification No.: UN1764 CAS No.: 79-43-6
DOT Hazard Class: Corrosive

Section II: Physical Properties

Appearance: Clear, colorless solution
Vapor Pressure @ 20°C: 0.19mmHg
Vapor Density (air=1): 4.5
Stability: Stable
Boiling Point: 194°C

Odor: Pungent
Specific Gravity (H₂O=1): 1.563
Evaporation Rate (BuAc=1): not known
Solubility in H₂O: Soluble
Melting point: 9 - 11°C

Section III: Reactivity Hazard Data

Stable material under ordinary conditions of use and storage. Heat will contribute to instability. Hazardous polymerization does not occur.

Materials to avoid: Strong oxidizers, bases and reducing agents.

Hazardous decomposition products: May emit oxides of carbon and hydrogen chloride gas when heated to decomposition.

Section IV: Fire and Explosion Hazard Data

Flashpoint: 235°F 113°C Autoignition temperature: n/a
Flammable Limits in air % by volume: n/a

Not considered a fire hazard. Not considered an explosion hazard.

Extinguishing Media: Dry chemical, carbon dioxide, or appropriate foam.

Special Fire Fighting Procedures: Wear full protective clothing and self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Emits toxic fumes under fire conditions.

Section V: Hazardous Ingredients

Dichloroacetic Acid ca 100%

Section VI: Toxicity and Health Hazard Data

See Registry of Toxic Effects of Chemical Substances (RTECS).
Information on the human health effects is limited; may cause cancer.

Primary routes of entry: Inhalation, skin absorption, ingestion.

- Inhalation: Vapors are extremely dangerous to the mucous membranes of the upper respiratory tract. Symptoms include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation may be fatal as a result of spasm, inflammation, and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.
- Ingestion: Extremely destructive to tissues.
- Eye contact: Extremely destructive to eyes.
- Skin contact: Extremely destructive to skin.

Emergency First Aid:

- Ingestion: Get emergency medical assistance.
- Eye contact: Rinse with copious amounts of water for at least 15 minutes. Get emergency medical assistance.
- Skin contact: Flush thoroughly with water for at least 15 minutes. Remove contaminated shoes and clothing. Wash contaminated clothing before reuse. Get emergency medical assistance if irritation develops.
- Inhalation: Immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Keep patient warm and at rest. Contact emergency medical assistance.

Section VII: Special Protection

Ventilation: A local exhaust system which captures the contaminant at its source is recommended to prevent dispersion of the contaminant into the workroom area.

Respiratory Protection: Half-mask chemical cartridge respirators should be worn for conditions where exposure to vapor is apparent.

Skin Protection: Protective rubber gloves and clothing are recommended. The choice of material must be based on chemical resistance and other user requirements.

Eye Protection: Laboratory safety glasses are minimum protection. Goggles are preferred. Contact lenses should not be worn when working with this material. Face shield recommended.

Emergency eye wash fountains and safety showers should be available in the vicinity of any potential exposure. Ground and bond metal containers to minimize sparks.

Section VIII: Spill and Disposal Procedures

If a spill occurs, ventilate area of spill. Wear protective clothing (rubber boots and heavy rubber gloves) and use approved respiration equipment suitable for toxic and corrosive vapors. Contain and recover liquid when possible. Absorb spilled material in an absorbent recommended for solvent spills and remove to a safe location for disposal by approved methods. If released into environment, comply with all regulatory notification requirements. Do not flush to sewer. Dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Waste Disposal: In RCRA approved facility.

Section IX: Storage

Dichloroacetic acid should be stored in a tightly sealed container, protected from physical damage and stored in a cool, dry, ventilated area away from incompatible substances.

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Key:

ca: Approximately

TWA: Time Weighted Average

STEL: Short Term Exposure Level

TLV: Threshold Limit Value

n/a: not available

PEL: Permissible Exposure Level

BuAc: Butyl Acetate