



Material Safety Data Sheet
Tetracyanoethylene, 98%

MSDS# 00492

Section 1 - Chemical Product and Company Identification

MSDS Name: Tetracyanoethylene, 98%
Catalog Numbers: AC138050000, AC138050100, AC138050250, BTB10306DA, BTB10306EA
Synonyms: TCNE.

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticaaan 3a
2440 Geel, Belgium

Company Identification: (USA) Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01

For information in Europe, call: +32 14 57 52 11

Emergency Number, Europe: +32 14 57 52 99

Emergency Number US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300

CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#: 670-54-2
Chemical Name: Tetracyanoethylene
%: 98
EINECS#: 211-578-0

Hazard Symbols: T+



Risk Phrases: 28

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Danger! Moisture sensitive. The toxicological properties of this material have not been fully investigated. May cause central nervous system effects. May cause irritation. May be fatal if inhaled. Target Organs: Central nervous system.

Potential Health Effects

Eye: Dust may cause mechanical irritation.

Skin: No information regarding skin irritation and other potential effects was found.

Ingestion: May be fatal if swallowed. The toxicological properties of this substance have not been fully investigated. May cause central nervous system effects.

Inhalation: Inhalation of dust may cause respiratory tract irritation.

Chronic: No information found.

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. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: 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: 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:

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: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Autoignition Temperature: Not available

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: NFPA Rating:

Section 6 - Accidental Release Measures

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

Spills/Leaks: Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Do not ingest or inhale.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep refrigerated. (Store below 4°C/39°F.)

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Tetracyanoethylene	none listed	none listed	none listed

OSHA Vacated PELs: Tetracyanoethylene: None listed

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

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: Powder

Color: beige

Odor: None reported.

pH: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 223 deg C @760mmHg (433.40°F)

Freezing/Melting Point: 195 - 200 deg C

Decomposition Temperature:

Solubility in water: hydrolyzes (forming hcn)

Specific Gravity/Density:

Molecular Formula: C6N4

Molecular Weight: 128.09

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials, moisture.

Incompatibilities with Other Materials Strong oxidizing agents, strong acids, strong bases, 1-methylsilacyclopenta-2,-4diene.

Hazardous Decomposition Products Hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 670-54-2: KM7300000

RTECS:

CAS# 670-54-2: Dermal, guinea pig: LD50 = 100 mg/kg;

LD50/LC50: Oral, mouse: LD50 = 5 mg/kg;

Oral, rat: LD50 = 5 mg/kg;

Other: Oral, rat: LD50 = 5

Carcinogenicity: Tetracyanoethylene - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT

Shipping Name: Please contact Fisher Scientific for shipping information

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: TOXIC SOLID ORGANIC NOS (TETRACYANOETHYLENE)

Hazard Class: 6.1

UN Number: UN2811

Packing Group: I

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T+

Risk Phrases:

R 28 Very toxic if swallowed.

Safety Phrases:

S 1 Keep locked up.

S 28A After contact with skin, wash immediately with plenty of water.

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# 670-54-2: Not available

Canada

CAS# 670-54-2 is listed on Canada's DSL List

Canadian WHMIS Classifications: D1A, D2B, F

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.

CAS# 670-54-2 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 670-54-2 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 5/14/1998

Revision #5 Date 7/20/2009

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 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.
