

Material Safety Data Sheet

4,4'-Dimethyldiphenyl ditelluride, 98%

ACC# 52365

Section 1 - Chemical Product and Company Identification

MSDS Name: 4,4'-Dimethyldiphenyl ditelluride, 98%

Catalog Numbers: AC276470050

Synonyms: None.

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
32294-57-8	4,4'-Dimethyldiphenyl ditelluride	98	unlisted

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: dark red needles.

Warning! Harmful if swallowed, inhaled, or absorbed through the skin. May cause eye, skin, and respiratory tract irritation. May cause nervous system effects. Possible risk of harm to the unborn child. The toxicological properties of this material have not been fully investigated.

Target Organs: Blood, central nervous system, liver.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. Harmful if absorbed through the skin.

Ingestion: Harmful if swallowed. Ingestion of tellurium and its compounds has produced symptoms such as "garlic-like" odor of the breath and sweat, metallic taste, sleepiness, anorexia, cyanosis, restlessness, tremor, diminished reflexes, paralysis, convulsions, liver damage, and nausea.

Inhalation: May cause respiratory tract irritation.

Chronic: Possible risk of harm to the unborn child. Prolonged or repeated exposure affects the nervous system.

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: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

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.

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 if cough or other symptoms appear.

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.

Extinguishing Media: Use foam, dry chemical, or carbon dioxide.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 1; Instability:

Section 6 - Accidental Release Measures

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

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing.

Storage: Store in a cool, dry place. Store in a tightly closed container.

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 general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
4,4'-Dimethyldiphenyl ditelluride	0.1 mg/m3 TWA (excluding hydrogen telluride, as Te) (listed under Tellurium compounds, n.o.s.).	0.1 mg/m3 TWA (as Te, except Tellurium hexafluoride and Bismuth telluride) (listed under Tellurium compounds, n.o.s.).	0.1 mg/m3 TWA (as Te) (listed under Tellurium compounds, n.o.s.).

OSHA Vacated PELs: 4,4'-Dimethyldiphenyl ditelluride: 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: Needles

Appearance: dark red

Odor: Not available.

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: Not available.

Evaporation Rate:Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point:54 - 58 deg C

Decomposition Temperature:Not available.

Solubility: Not available.

Specific Gravity/Density:Not available.

Molecular Formula:C₁₄H₁₄Te₂

Molecular Weight:437.46

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Dust generation, excess heat, excess light.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, tellurium fumes.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 32294-57-8 unlisted.

LD50/LC50:

Not available.

Carcinogenicity:

CAS# 32294-57-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No reports of serious illness in workers exposed to Te & its compounds in industry were identified. Complaints & findings, including anorexia, nausea, drowsiness, metallic taste, & garlic-like odor to breath & sweat, are major negative effects reported.

Teratogenicity: Studies have found that diphenyl ditelluride can be teratogenic to rat fetuses and toxic for dams. The late fetal stages of rat prenatal development appeared uniquely sensitive to organic tellurium exposure.

Reproductive Effects: No data available.

Mutagenicity: No data available.

Neurotoxicity: Diphenyl ditelluride is extremely neurotoxic and even compounds that release the Te atom slowly may represent a neurotoxic time bomb for mammals.

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
Shipping Name:	TELLURIUM COMPOUND, N.O.S.	Tellurium Compound, N.O.S.
Hazard Class:	6.1	6.1
UN Number:	UN3284	UN3284
Packing Group:	III	III

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 32294-57-8 is not listed on the TSCA inventory. It is for research and development use only.

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 product 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.

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 depleters.

This material does not contain any Class 2 Ozone depleters.

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# 32294-57-8 can be found on the following state right to know lists: California, (listed as Tellurium compounds, n.o.s.), Minnesota, (listed as Tellurium compounds, n.o.s.).

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:

XN

Risk Phrases:

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.

WGK (Water Danger/Protection)

CAS# 32294-57-8: No information available.

Canada - DSL/NDSL

None of the chemicals in this product are listed on the DSL or NDSL list.

Canada - WHMIS

This product has a WHMIS classification of D1B.

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

MSDS Creation Date: 9/02/1997

Revision #4 Date: 10/10/2005

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.