Material Safety Data Sheet
Tellurium(IV) chloride, 99%

ACC# 44078

Section 1 - Chemical Product and Company Identification

MSDS Name: Tellurium(IV) chloride, 99%
Catalog Numbers: AC194740000, AC194740250, AC194741000
Synonyms: Telluric chloride; Tellurium chloride, (T-4)-; Tellurium tetrachloride; Tetrachlorotellurium.
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
10026-07-0	Tellurium(IV) chloride	99	233-055-6

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: off-white crystals.
Danger! Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. Hygroscopic (absorbs moisture from the air). May cause adverse reproductive effects based upon animal studies.
Target Organs: Blood, central nervous system, liver.

Potential Health Effects
Eye: Causes eye burns.
Skin: Causes skin burns.
Ingestion: May cause severe and permanent damage to the digestive tract. 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 burns to the respiratory tract.
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 imme diately. Do NOT allow victim to rub eyes or keep eyes closed. Extensiv e 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: Never give anything by mouth to an unconscious person. Get medical aid immediately. 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. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
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.
Extinguishing Media: Use dry chemical, carbon dioxide, or appropriate foam.
Flash Point: Not applicable.
Autoignition Temperature: Not applicable.
Explosion Limits, Lower: Not available.
Upper: Not available.
NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability:

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a

suitable container for disposal. Provide ventilation.

Section 7 - Handling and Storage

Handling: Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes. Keep from contact with moist air and steam.
Storage: Keep container closed when not in use. Corrosives area. Store protected from moisture. Store in a cool, dry area away from incompatible substances.

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
Tellurium(IV) chloride	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: Tellurium(IV) chloride: No OSHA Vacated PELs are listed for this chemical.
Personal Protective Equipment
Eyes: Wear safety glasses and chemical goggles if splashing is possible.
Skin: Wear appropriate protective gloves and clothing 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: Crystals
Appearance: off-white
Odor: None reported.
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 380 deg C @ 760 mm Hg
Freezing/Melting Point:224 deg C
Decomposition Temperature: Not available.
Solubility: Decomposes.
Specific Gravity/Density:3.26 g/cm3
Molecular Formula: Cl4Te
Molecular Weight:269.40

Section 10 - Stability and Reactivity

Chemical Stability: Stable. However, may decompose if exposed to moist air or water. Reacts with liquid ammonia to form tellurium nitride which explodes at 200°C.
Conditions to Avoid: Dust generation, exposure to moist air or water.
Incompatibilities with Other Materials: Strong acids, ammonia, moisture.
Hazardous Decomposition Products: Hydrogen chloride, chlorine, tellurium fumes.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:
CAS# 10026-07-0: WY2635000
LD50/LC50:
Not available.

Carcinogenicity:
CAS# 10026-07-0: 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: Adverse reproductive effects have occurred in experimental animals.
Mutagenicity: DNA repair: Bacillus subtilis = 1 mmol/L.
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:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.
Hazard Class:	8	8
UN Number:	UN3260	UN3260
Packing Group:	II	II

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 10026-07-0 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.
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# 10026-07-0 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:
C
Risk Phrases:
R 34 Causes burns.

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

WGK (Water Danger/Protection)
CAS# 10026-07-0: No information available.
Canada - DSL/NDSL
CAS# 10026-07-0 is listed on Canada's NDSL List.
Canada - WHMIS
This product has a WHMIS classification of E, D2A.

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# 10026-07-0 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 7/12/1999
Revision #3 Date: 7/27/2005

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.