

Material Safety Data Sheet

Last Revision: 05/03/2007 **Printing Date:** 05/03/2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:

PERKACIT® TDEC

MSDS NO.

FLXP0022

Chemical Name:

Tellurium Diethyldithiocarbamate

Synonyms:

Use:

Bis(diethyldithiocarbamato)tellurium; Tellurium, tetrakis(diethylcarbamodithiato-S,S')-

Accelerator.

Manufactured By:

Flexsys America L.P. 260 Springside Drive Akron OH 44333-2433 USA

Emergency Telephone:

CHEMTREC: 1-800-424-9300 [TOLL FREE - USA and Territories]

703-527-3887 [ELSEWHERE - Collect Calls Accepted]

CANUTEC: 613-996-6666 [Canada] SETIQ: 91-800-00-214 [Mexico]

Prepared By:

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2. HAZARDS IDENTIFICATION

Emergency Overview:

WARNING! Combustible dust - explosion potential. Causes respiratory irritation. This material may cause transient skin and eye irritation. May cause alcohol intolerance.

Eye Contact:

Causes mild eye irritation. Mild Eye Irritation: signs/symptoms can include redness,

swelling, pain and tearing.

Skin Contact:

May cause skin defatting with prolonged exposure. May be absorbed through the skin and product effects similiar to those caused by inhalation and/or ingestion.

Inhalation:

Exposure to dust particles generated from this material may cause irritation of the

respiratory tract. Inhalation may cause alcohol intolerance

Ingestion:

May cause alcohol intolerance (Antabuse Effect). May cause headache, dizziness, nausea, vomiting, gastrointestinal irritation. May cause metallic taste. May cause

weakness.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Tellurium Diethyldithiocarbamate	20941-65-5	96 - 99
White Mineral Oil	8042-47-5	1-2

4. FIRST AID MEASURES

In Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

On Skin:

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before

reuse. Get medical attention if irritation persists.

FLXP0022

MARKETED BY

HARWICK STANDARD DISTRIBUTION CORPORATION

60 S. Seiberling Street • Akron, Ohio 44305

FIRST AID MEASURES

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is Inhaled:

difficult, get immediate medical attention.

Swallowed: If swallowed, call a physician immediately. Only induce vomiting at the instruction of

a physician. Never give anything by mouth to an unconscious person.

Notes To Physician: Treat symptomatically. Exposure by ingestion, inhalation or skin absorbtion may

cause alcohol intolerance (Antabuse Effect).

5. FIRE FIGHTING MEASURES

Flash Point (°F/C): Flash Point Method: 248°F / 120°C Closed Cup Not Determined

Autoignition Temp. (°F/C): Lower Explosion Limit (LEL): **Upper Explosion Limit (UEL):**

Not Determined. Not Determined.

Extinguishing Media:

Use water fog, carbon dioxide, foam or dry chemical.

Special Exposure Hazards:

Fight fire from a safe distance and from a protected location. Use water spray to cool fire exposed surfaces. Decomposition in fire may produce toxic gases. Do not allow

runoff to enter waterways.

Special Protective Equipment:

Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

Unusual Fire/Explosion Hazards: Toxic emissions may result if product is involved in a fire.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures:

Wear protective equipment specified. Avoid the generation of dust. Sweep, vacuum,

or shovel and place into closable container for disposal.

Procedure for

Cleaning/Absorption:

Isolate area and remove sources of friction, impact, heat, low level electrical current, and RF energy. Remove ignition sources and work with non-sparking tools. Scoop

up and remove solids. Do NOT spread spilled product with water.

CERCLA Reportable Quantity

(RQ):

Not Applicable

HANDLING AND STORAGE

Handling:

Avoid contact with eyes, skin and clothing. Avoid generating or breathing dust. Wash thoroughly with soap and water after handling. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Reclose containers of unused product. Keep containers tightly closed when not in use. Do not reuse this container.

Storage:

Store closed containers in a cool, dry, well-ventilated area. Store away from strong oxidizing materials. Avoid exposure to direct sunlight. Do not double stack. Material compaction may occur at storage temperatures > 35°C and double stacking.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye Protection:

Wear safety glasses or goggles to protect against exposure.

Skin Protection:

Normal work coveralls. Launder contaminated clothing before reuse.

Gloves:

Use gloves as a standard industrial handling procedure. All cleanable impervious

glove types are acceptable.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Use in a well ventilated area. Use approved NIOSH respiratory protection if TLV

exceeded or if overexposure is likely. Appropriate respiratory protection shall be worn when applied engineering controls are not adequate to protect against inhalation exposure. Firefighting: Use a Positive Pressure Demand Full Face Self

Contained Breathing Apparatus.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to

within their exposure limits during the use of this product. If air is to be recirculated, it

must be filtered properly.

Airborne Exposure Limits: Tellurium Compounds: ACGIH TLV-TWA: OSHA PEL-TWA: NIOSH REL-TWA:

0.1 mg/m3 NIOSH IDLH: 25 mg/m3 CANADA: MEXICO: ARGENTINA:

COLOMBIA: VENEZEULA: TWA = 0.1 mg/m³ CHILE: TWA = 0.08 mg/m³ White Mineral Oil: OSHA PEL/8Hr TWA = 5 mg/m³. ACGIH TLV/8Hr TWA = 5 mg/m³.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Orange to yellow powder

Odor: SLIGHT

pH: Not Applicable
Specific Gravity: 1.48 @ 20°C
Density: 1480 kg/m³

Bulk Density: 320 - 360 kg/m³ @ 20°C

Melting Point (°F/C):

Boiling Point (°F/C):

Vapor Pressure:

Vapor Density (Air=1):

Volatile by Volume:

Solubility in Water:

226°F / 108°C

Not Determined

Negligible @ 20°C

Not Determined

<0.5% by weight

<0.1 mg/l @ 23°C

Other Solubility: Soluble in: Benzene Carbon Disulfide Organic liquids, including fats and oils

Chloroform

Viscosity: Not Applicable.

Other Data: Tellurium Content = 16.5 - 19.0 %

Molecular Weight: 721

Molecular Formula: C20-H40-N4-S8-Te

10. STABILITY AND REACTIVITY

Chemical Stability: Stable when stored at room temperature in closed, original container. Stable under

normal conditions of handling, use and transportation.

Hazardous Polymerization: WILL NOT OCCUR

Conditions to Avoid: Avoid contact with heat, sparks, open flame, and static discharge. Avoid contact with

strong oxidants such as liquid chlorine and concentrated oxygen. Storage temperatures >35°C and double stacking will cause material compaction.

Materials to Avoid: Strong oxidizers Acids.

Hazardous Decomposition

Carbon monoxide. Oxides of nitrogen. Oxides of sulfur. Toxic metal fumes Toxic

Products: metal oxide fumes

Additional Guidelines: Not Applicable

11. TOXICOLOGICAL INFORMATION

Acute Oral LD50 (mg/kg): >5000 mg/kg (Rat)
Acute Dermal LD50 (mg/kg): Not Determined
Acute Inhalation LC50 (mg/l): Not Determined

Target Organs / Principle Routes of Exposure: Dermal - skin. Inhalation. Eyes.

11. TOXICOLOGICAL INFORMATION

Ingestion: May cause alcohol intolerance (Antabuse Effect). May cause headache, dizziness,

nausea, vomiting, gastrointestinal irritation. May cause metallic taste. May cause

weakness

Skin Contact: May cause skin defatting with prolonged exposure. May be absorbed through the

skin and product effects similiar to those caused by inhalation and/or ingestion.

Inhalation: Exposure to dust particles generated from this material may cause irritation of the

respiratory tract. Inhalation may cause alcohol intolerance

Causes mild eye irritation. Mild Eye Irritation: signs/symptoms can include redness, **Eve Contact:**

swelling, pain and tearing.

Aggravated Conditions: Alcohol consumption problems. Pulmonary disorders. Central nervous system

disorders. Liver disorders.

Carcinogenicity Comment: This product, or one of its ingredients present at 0.1% or more, is NOT listed as a

carcinogen or suspected carcinogen by NTP, IARC or OSHA. NOTE: May react with

nitrosating agents during rubber vulcanization to form nitrosamines. Some

nitrosamines are suspect human carcinogens. Ingestion of the product may result in vomiting.

Other Information:

Primary Irritation Effect:

Slightly irritating

Carcinogenicity: Negative in standard tests using bacteria and/or yeast cells. Genotoxicity:

Reproductive/Developmental

Not Determined.

Toxicity:

12. ECOLOGICAL INFORMATION

Acute Fish Toxicity: Not determined. Similar compounds show at least moderate toxicity to freshwater

Acute Crustaceans Toxicity:

Not determined. Similar compounds show at least moderate toxicity to daphnids. Not determined. Similar compounds are at least moderately toxic to algae.

Acute Algae Toxicity: Octanol/Water Coefficient:

Chemical Fate Information:

Other Information:

Log P = 4.39 [Calculated]. Not Determined.

Similar compounds exhibit at least moderate toxicity to aquatic species.

DISPOSAL CONSIDERATIONS

Disposal of Waste Method: This product, if disposed as received, is a non-hazardous waste. Bury in a licensed

landfill or burn in an approved incinerator according to federal, state, and local regulations. Federal, state and local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of

disposal selected.

Contaminated Packaging: If empty container retains product residues, all label precautions must be observed.

> Transport with all closures in place. Return for reuse or dispose according to national or local regulations. Do NOT reuse container. Dispose of container

according to national or local regulations.

TRANSPORT INFORMATION 14.

DOT: Not Regulated

DOT Reportable Quantity (lbs): None

See DOT ICAO/IATA: IMDG: See DOT

Marine Pollutant:

No

TDG (Canada): See DOT

Remarks: None

15. REGULATORY INFORMATION

Worldwide Inventory Status

Listed USA (TSCA): Canada (DSL): Listed

Not Applicable. Listed on the DSL. Canada (NDSL):

European Union (EINECS/ELINCS): Listed Japan (ENCS): Listed Listed Korea (ECL): Listed Australia (AICS):

Not Determined New Zealand (NZ):

Listed Phillipines (PICCS): Listed. China (CLECS):

US Regulatory Rules

SARA Section 302: Not Applicable / None Immediate Delayed SARA 311/312 Hazard Catagories:

Not Applicable / None SARA 313 Chemical: Not a RCRA waste. **RCRA Status:**

Other Regulations:

NONE California Proposition 65:

Listed under the category "Tellurium Compounds". New Jersey Right-to-Know List: Listed under the category "Tellurium Compounds". Pennsylvania Right to Know List: Florida Right to Know:

Minnesota Right to Know:

Massachusetts Right to Know Law:

Not Regulated For Use in food contact applications under 21 FDA Status 21 CFR:

CFR.

Canadian Regulations

D2B TOXIC MATERIALS / Materials Causing Other Toxic **WHMIS Hazard Class:**

Effects

Not Listed. [Canada] NPRI:

OTHER INFORMATION 16.

Hazard Rating Systems:

HMIS Classification: HEALTH 1, FLAMMABILITY 1, REACTIVITY 0 HEALTH 1, FLAMMABILITY 1, REACTIVITY 0

NFPA Rating:

New MSDS format. The following has been revised since the last issue of this MSDS:

WHMIS Ingredient Disclosure List (Canada): "Tellurium Compounds" WHMIS Additional Information: Concentration threshold = 1%. The generic category "Tellurium Compounds"

appears on the hazardous chemicals lists or Right-to-Know lists of several states in

the USA.

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END OF MSDS