Material Safety Data Sheet
Vanadium(III) chloride

MSDS\# 43898

MSDS Name:
Catalog Numbers:
Synonyms:

Company Identification:

Company Identification: (USA)

For information in the US, call:
For information in Europe, call:
Emergency Number, Europe:
Emergency Number US:
CHEMTREC Phone Number, US:
CHEMTREC Phone Number, Europe:

Section 1 - Chemical Product and Company Identification
Vanadium(III) chloride
AC197000000, AC197000250, AC197001000
Vanadium trichloride.

Acros Organics BVBA
Janssen Pharmaceuticalaan 3a
2440 Geel, Belgium
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410
800-ACROS-01
+32 14575211
+32 14575299
201-796-7100
800-424-9300
703-527-3887

Section 2 - Composition, Information on Ingredients

CAS\#:
Chemical Name:
\%:
EINECS\#:

Hazard Symbols:


Risk Phrases:

7718-98-1
Vanadium trichloride
97
231-744-6

C

142234
Section 3 - Hazards Identification
EMERGENCY OVERVIEW

Danger! Harmful if swallowed. Causes burns by all exposure routes. Reacts violently with water. Target Organs:
Respiratory system, gastrointestinal system, eyes, skin.
Potential Health Effects
Eye: Causes eye burns.
Skin: Causes skin burns.
Ingestion: Harmful if swallowed. Causes gastrointestinal tract burns.
Inhalation: Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.
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 immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:
Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is
Inhalation: difficult, give oxygen. 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:

## Section 5 - Fire Fighting Measures

General Will react with water to form toxic and corrosive fumes. Non-combustible, substance itself does not Information: burn but may decompose upon heating to produce corrosive and/or toxic fumes.
Extinguishing Do NOT use water directly on fire. Use foam, dry chemical, or carbon dioxide. Media:
Autoignition
Temperature:
Fot available
Flash Point: Not applicable.
Explosion Limits:
Lower:
Not available
Explosion Limits:
Upper:

NFPA Rating: ; Special Hazard: -W-
Section 6 - Accidental Release Measures
General
Information:
Use proper personal protective equipment as indicated in Section 8.
Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing
Spills/Leaks: apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

## Section 7 - Handling and Storage

Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.
Handling: Do not allow contact with water. Use only in a chemical fume hood. Do not use with metal spatula or other metal items.

Storage:
Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container. Keep under a nitrogen blanket. Corrosives area. Water free area.

Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: Vanadium trichloride: None listed
Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use only under a chemical fume hood.
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.

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Chemical Stability:
Conditions to Avoid:
Incompatibilities with Other Materials
Hazardous Decomposition
Products
Hazardous Polymerization

Section 9 - Physical and Chemical Properties
Physical State: Powder
Color: purple - pink
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: 250 deg C(decom)
Decomposition Temperature:
Solubility in water: Reacts
Specific Gravity/Density: $3.0000 \mathrm{~g} / \mathrm{cm} 3$
Molecular Formula: Cl 3 V
Molecular Weight: 157.30
Section 10 - Stability and Reactivity
Decomposes when heated. Decomposes on exposure to air and light. Reacts violently with water.
Incompatible materials, light, dust generation, excess heat, exposure to moist air or water.

Water, metals, strong oxidizing agents.
Hydrogen chloride, carbon monoxide, carbon dioxide, vanadium oxide (VOx) gases.
Has not been reported.
Section 11 - Toxicological Information
RTECS\#: CAS\# 7718-98-1: YW2800000
RTECS:
LD50/LC50:
CAS\# 7718-98-1: Oral, mouse: LD50 $=24 \mathrm{mg} / \mathrm{kg}$;
Oral, rat: LD50 $=350 \mathrm{mg} / \mathrm{kg}$;
Carcinogenicity: Vanadium trichloride - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other:
The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information.

Section 12 - Ecological Information
Other: Do not empty into drains.
Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14 - Transport Information
US DOT
Shipping Name: VANADIUM TRICHLORIDE
Hazard Class: 8
UN Number: UN2475
Packing Group: III
Canada TDG
Shipping Name: Not available
Hazard Class:

UN Number: Packing Group:

## Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: C
Risk Phrases:
R 14 Reacts violently with water.
R 22 Harmful if swallowed.
R 34 Causes burns.
Safety Phrases:
S 6A Keep under nitrogen.
S 7/8 Keep container tightly closed and dry.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 43B In case of fire, use fire-fighting equipment on basis of sodium chloride, sodium bicarbonate (never use 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\# 7718-98-1: Not available

## Canada

CAS\# 7718-98-1 is listed on Canada's NDSL List
Canadian WHMIS Classifications: E, 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.
CAS\# 7718-98-1 is listed on Canada's Ingredient Disclosure List

## US Federal

TSCA
CAS\# 7718-98-1 is listed on the TSCA
Inventory.
Section 16 - Other Information
MSDS Creation Date: 9/02/1997
Revision \#6 Date 7/20/2009 '00'04-15:13:08

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantibility 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.

