

# MATERIAL SAFETY DATA SHEET

Manufacturer: ProChem, Inc.  
826 Roosevelt Road  
Rockford, IL 61109

Phone: (815) 398-1788  
Fax: (815) 398-1810  
E-Mail: Prochem1@aol.com

**24 HR. EMERGENCY PHONE CHEM-TREC 1-800-424-9300**

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## SECTION 1 Product Identification

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**CHEMICAL NAME: VANADIUM (II) CHLORIDE**  
**PRODUCT NUMBER: 3760**  
**CAS REGISTRY NUMBER: 10580-52-6**  
**FORMULA:  $\text{VCl}_2$**

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## SECTION 2 Composition and Information on Ingredients

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INGREDIENT:	CAS#	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	10580-52-6	100	0.05 mg/m <sup>3</sup>	0.05 mg/m <sup>3</sup>

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## SECTION 3 Hazards Identification

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**EMERGENCY OVERVIEW: CORROSIVE Causes Burns Harmful by Inhalation, in contact with skin and eyes, and if swallowed.**

**PRIMARY ROUTES OF EXPOSURE:** Inhalation, Ingestion, Skin and eye contact.

**EYE CONTACT:** Strong corrosive and irritating effect. Causes burns.

**SKIN CONTACT:** Corrosive effect on skin. Causes burns.

**INHALATION:** Corrosive and destructive to mucous membranes and respiratory tract.

**INGESTION:** Corrosive effect, burns, perforation.

**SUBACUTE TO CHRONIC TOXICITY:** Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

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## SECTION 4 First Aid Measures

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**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for several minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate medical attention.

**SKIN EXPOSURE:** Wash affected area with copious amounts of water for several minutes. Remove contaminated clothes if necessary. Seek medical assistance immediately.

**INHALATION:** Remove victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. If not breathing administer CPR. Seek immediate medical assistance.

**INGESTION:** Do not induce vomiting. Seek medical assistance immediately.

## SECTION 5

## Firefighting Measures

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**FLASH POINT:** No Data

**AUTOIGNITION TEMPERATURE:** Not applicable

**EXPLOSION LIMITS:** Not applicable

**EXTINGUISHING MEDIUM:** Use CO<sub>2</sub>, dry chemical powder, appropriate foam. **DO NOT USE WATER.**

**SPECIAL FIREFIGHTING PROCEDURES:** If this product is involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** Hydrogen chloride gas, vanadium/vanadium oxides.

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** None known

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## SECTION 6

## Accidental Release Measures

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**SPILL AND LEAK PROCEDURES:** Keep unprotected persons away. Wear adequate protective equipment, isolate spill, keeping away from ignition sources. Absorb with inert material ( dry lime, soda ash, sand) , sweep up and place in a well-marked container for disposal. Ventilate area.

**DISPOSAL:** Dispose of in accordance with all waste disposal regulations.

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## SECTION 7

## Handling and Storage

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**HANDLING AND STORAGE:** Keep in a tightly sealed container. May decompose on exposure to moist air. Store in a cool, dry, well-ventilated area away from oxidizing agents. . **CORROSIVE.** Causes burns. Do not breathe dust. Do not get in eyes, on skin, on clothing. Use with adequate ventilation. Avoid prolonged or repeated exposure. Handle and use in a controlled environment.

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## SECTION 8

## Exposure Controls and Personal Protection

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**EYE PROTECTION:** Always wear approved safety glasses w/side shields, or safety goggles when handling a chemicals substance in the laboratory.

**SKIN PROTECTION:** Wear appropriate chemical resistant gloves, rubber, neoprene

**VENTILATION:** Chemical fume hood.

**RESPIRATOR:** If ventilation if not available, a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29CFR 1910.34.

**ADDITIONAL PROTECTION: DANGER! CORROSIVE** Causes Burns. Avoid contact with skin, eyes. Do not inhale dust. Use with adequate ventilation. Use in a controlled environment. Avoid contact with oxidizing agents. Use adequate protection to avoid contact with skin, clothing, shoes. (Apron, labcoat, sleevelets). Eyewash and safety shower in area capable of sustained flushing. Do not eat, drink or smoke in area.

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## SECTION 9

## Physical and Chemical Properties

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**COLOR AND FORM:** Slightly green crystals

**MOLECULAR WEIGHT:** 121.85 AMU

**MELTING POINT (DEG. C.):** No Data

**SPECIFIC GRAVITY (WATER = 1):** No Data

**BOILING POINT:** No Data.

**VAPOR PRESSURE:** No Data

**VAPOR DENSITY (AIR = 1):** 3.230

**% VOLATILE BY VOLUME:** No Data

**SOLUBILITY IN WATER:** Decomposes

Page 2 (Vanadium (II) Chloride)

## **SECTION 10      Stability and Reactivity**

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**STABILITY:** Stable

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** Moisture; Humid conditions.

**INCOMPATIBILITY:** Oxidizing agents, water, moisture

**DECOMPOSITION PRODUCTS:** Hydrogen chloride gas, vanadium/vanadium oxides

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## **SECTION 11      Toxicological Information**

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**CARCINOGENIC EFFECTS:** No Data

**MUTAGENIC EFFECTS:** No Data

**TETRATOGENIC EFFECTS:** No Data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.  
To be used by qualified individuals only. For Research and Development purposes only.

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## **SECTION 12      Ecological Information**

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**ECOLOGICAL INFORMATION:** Do not allow product to reach ground water, water course or sewage system.

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## **SECTION 13      Disposal Considerations**

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**DISPOSAL:** Dispose of in according to local state and federal regulations.

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## **SECTION 14      Transportation Information**

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Corrosive solid, acidic, inorganic, n.o.s. (Vanadium Chloride), CLASS 8, UN3260, PG II, Corrosive label

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## **SECTION 15      Regulatory Information**

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**TSCA:** No Data

**SARA (TITLE 313):** No Data

**RCRA:** No Data

**RTECS NO:** YW1575000

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## **SECTION 16      Other Information**

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**DISCLAIMER:** The information herein is believed to be accurate and reliable as of the date compiled. However, ProChem, Inc. makes no representation, warranty, or guarantee of any kind with respect to the information in this document or any use of the product based on the information.

**DATE PREPARED:** 02/09

Page 3 (Vanadium (II) Chloride)