

MATERIAL SAFETY DATA SHEET CHROME TIN ZIRCONIUM VANADIUM TAN  
~~OXIDE~~

SECTION I - MANUFACTURER IDENTIFICATION:

Mason Color Works, Inc.  
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Phone: (330) 385-4400  
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EMERGENCY PHONE NUMBERS:

**POISON CONTROL CENTER - 1-800-872-5111**  
**CHEMTREC - 1-800-424-9300**

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Date Prepared: 11/97

SECTION II - IDENTIFICATION OF PRODUCT:

CHEMICAL FAMILY - Inorganic

PRODUCT NAMES - Fawn 6104 (K-4404)

CHEMICAL ABSTRACT NUMBER (CAS) 68187-01-9,68186-95-8,68187-12-2,10101-52-7

CHEMICAL NAME - Chrome Tin Zirconium Vanadium Tan

CHEMICAL FORMULA -  $\text{CaO} \cdot \text{SnO} \cdot \text{SiO}_2 \cdot \text{Cr}_2\text{O}_3 + (\text{Zr}, \text{V})\text{O}_2$

MATERIAL OR COMPOUND?

This product is a blend of various metal oxides, salts and some compounds which are interfused by high calcination to form the finished product. Section III, Hazardous Ingredients Identity/Information, and Section IV, Symptoms of Overexposure, pertain to individual components. Section V through Section X are in reference to the finished product.

**THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET MUST BE PROVIDED TO EVERY EMPLOYEE WHO IS EXPOSED TO THIS PRODUCT IN ANY WAY. WE RECOMMEND THE USER READS AND UNDERSTANDS THE CONTENTS HEREIN BEFORE USING THIS MATERIAL. PLEASE KEEP ON FILE FOR FUTURE REFERENCE.**

**\*\*\*\*\*ATTENTION RETAILERS\*\*\*\*\***

**RETAILERS OF THIS PRODUCT ARE REQUIRED BY LAW TO SUPPLY THEIR CUSTOMERS WITH A COPY OF THIS MATERIAL SAFETY DATA SHEET WITH THEIR PURCHASE.**

**\*\*\*SARA 313**

**This product contains certain oxides and compounds which are subject to the reporting requirements of Superfund Amendment and Reauthorization Act (SARA) of 1986, Section 313 of The Emergency Planning and Community Right to Know Act and of 40 CFR, Part 372.**

SECTION III – HAZARDOUS INGREDIENTS IDENTITY/INFORMATION:

	ACGIH-TLVs	OSHA PELs	NOISHA RELs
<b>Chrome Oxide</b> – (Cr <sub>2</sub> O <sub>3</sub> ) Cas # 1308-38-9 (A4) – Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.	0.2 mg/m <sup>3</sup> (A4)	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>
<b>Tin Oxide</b> – (SnO) Cas # 21651-19-4	2.0 mg/m <sup>3</sup>	Not Established	2.0 mg/m <sup>3</sup>
<b>Vanadium Oxide</b> – (VO <sub>3</sub> ) Cas # 1314-62-1 (A4) – Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.	0.05 mg/m <sup>3</sup> (A4)	C* 0.5 mg/m <sup>3</sup> C** 0.1 mg/m <sup>3</sup> *Respirable dust **Fumes	C 0.05 mg/m <sup>3</sup> * *15 – min. total dust as V
<b>Zirconium Compound</b> – as (Zr) Cas # 1314-13-2	10 mg/m <sup>3</sup> (e)	15 mg/m <sup>3</sup> * 5 mg/m <sup>3</sup> ** *Total dust **Respirable dust	5mg/m <sup>3</sup> * C*15 min.

(A4) – Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of its carcinogenicity in humans and/or animals.

SECTION IV – SYPTOMS OF OVEREXPOSURE:

**Chrome Oxide** – Repeated prolonged exposure to trivalent compounds may cause delayed effects involving the respiratory system. Causes skin and eye irritation.

**Tin Oxide** – No information found on acute overexposure. Chronic exposure to tin oxide fumes or dust may result in Stannosis, a form of Pneumoconiosis.

**Vanadium Oxide** – Overexposure: heavy coughing, and shortness of breath are the first signs. Can be followed by pallor, loss of appetite, and increase or decreased red cell count.

**Zirconium Compound as Zr** – Chronic overexposure: may damage teeth, cause ulceration of mucous membranes. Acute: Strong irritant coughing, choking, corrosive tissue.

**SECTION V - EMERGENCY AND FIRST AID PROCEDURES:**

**EYE:** Flush thoroughly with water for 15 minutes.  
**SKIN:** Remove contaminated clothing, wash thoroughly with soap and water.  
**INHALATION:** Remove to fresh air. May give oxygen if needed.  
**INGESTION:** Induce vomiting if conscious.

**\*\*IF THESE FIRST AID PROCEDURES FAIL TO BRING RELIEF, CONSULT PHYSICIAN!!!**

**PRINCIPAL ROUTES OF ENTRY:** Inhalation and Ingestion

**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Dust from this product may cause irritation of the respiratory system. Overexposure may cause lung damage.

**INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE:**

Large amounts may cause irritation of the gastrointestinal tract, nausea, vomiting and diarrhea.

**SKIN AND EYE CONTACT:**

As nuisance dust. Prolonged or repeated contact may cause irritation.

**SECTION VI - SPECIAL PROTECTION INFORMATION:**

***Respiratory Protection:*** Use NIOSH/MSHA approved respiratory protection where airborne levels exceeds Occupational Exposure Limits.

***Personal Protective Equipment:*** Wear appropriate gloves and goggles to avoid skin and eye contact. Safety showers and eye stations must be present in work area.

***Ventilation:*** Use local exhaust or mechanical such as a dust collector to maintain dust levels below the Occupational Exposure Limits.

***Handling and Storage:*** Keep containers closed and dry when not in use. Avoid contact with eyes, skin and clothing.

***Other Precautions:*** Avoid breathing dust and use with adequate ventilation. Wash thoroughly after handling. No food or beverage should be consumed in work area.

**SECTION VII - PHYSICAL/CHEMICAL CHARACTERISTICS:**

Boiling Point - N/A  
 Appearance - Brown Powder  
 Vapor Pressure (mmHg) - N/A  
 Vapor Density (air=1) - N/A  
 %Volatile by volume - None

Solubility in water - Trace  
 Odor - Odorless  
 Specific Gravity (water=1) - N/A  
 Evaporation Rate - None

**SECTION VIII – REACTIVITY DATA:**

Stable – Yes

Hazardous Polymerization – will not occur

Incompatibility – (materials to avoid) – None

Hazard Decomposition Products – N/A

**SECTION IX – FIRE AND EXPLOSIVE DATA:**

Flash Point – N/A

Flammable Limits – N/A

Extinguishing Media – Carbon Dioxide, dry chemical or water spray.

Special Fire Fighting Procedures – Not a fire hazard. Wear self-contained breathing apparatus when large quantities are involved.

Unusual Fire and Explosion Hazard – None Expected.

**SECTION X – SPILL OR LEAK PROCEDURES:**

Contain spillage and scoop up or vacuum. Avoid dusting. Put in a appropriate container for disposal.

Waste disposal method – Dispose in accordance with Federal, State and Local Laws.

***DISCLAIMER***

***THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET IS BELIEVED TO BE ACCURATE AND RELIABLE AS OF THIS DATE. THE CONSUMER SHALL MAKE THIS MSDS AVAILABLE TO ANYONE WHO USES THIS PRODUCT IN ANY WAY AS REQUIRED BY THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD 1910.1200. Mason Color Works, Inc. ACCEPTS NO RESPONSIBILITY FOR THE HEALTH OR SAFETY OF ANY INDIVIDUAL WHO MISUSES THIS PRODUCT BY NOT COMPLYING WITH THE MANUFACTURERS INSTRUCTIONS CONTAINED HERIN.***