

MATERIAL SAFETY DATA SHEET

1 Product and Company Identification

Product Name: **Oxygen Trap**

Company Name:

VICI[®] Metronics Inc
26272 Twelve Trees Ln NW
Poulsbo, WA 98370

Emergency Contact Number

1-877-737-1887 or 1-360-697-9199

2 Composition

Ingredient	CAS No.	Wt%	ACGIH TLB-TWA	OSHA PEL-TWA
Copper	7440-50-8	< 50	1 mg/m ³ Dust and mist as CU	1 mg/m ³ Dust and mist as CU
Zinc oxide	1314-13-2	< 30		15 mg/m ³ Total dust 5 mg/m ³ Respirable dust as Al
Aluminum oxide (non-fibrous)	1344-28-1	< 30	10 mg/m ³	15 mg/m ³ Total dust 5 mg/m ³ Respirable dust as Al

Abbreviations:

N/E - None established

CAS - Chemical Abstracts Service

ACGIH - American Conference of Governmental Industrial Hygienists

TLV - Threshold Limit Value

OSHA - Occupational Safety and Health Administration - USA

TWA - Time Weighted Average

PEL - Permissible Exposure Limit

STEL - Short-Term Exposure Limit

Emergency Overview

This product is in a sealed container. Exposure can only take place if the integrity of the container is compromised. In case the container is opened, the contained product can cause irritation to the eyes, skin, or upper respiratory system.

Potential Health Effects

Primary Routes of Exposure: The product is in a sealed container. As long as the container is not opened, exposure should not take place.

Skin Contact: Prolonged or repeated exposures may cause dermatitis or an allergic skin reaction.

Skin Absorption: This product will probably not be absorbed through human skin.

Eye Contact: Dust and/or product may cause eye discomfort and/or irritation seen as tearing and reddening.

Ingestion: This product is slightly toxic by ingestion.

Inhalation: Inhalation of product and/or dust may cause irritation of the respiratory system.

Target Organ: Prolonged or repeated exposure may cause lung injury or cancer.

Carcinogenicity Classification

International Agency for Research on Cancer (IARC)
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U.S. National Toxicology Program (NTP)
??

U.S. Occupational Safety and Health Administration (OSHA)
??

Skin Contact: Wash affected area with soap and water. If irritation develops, obtain medical attention.

Eye Contact: Flush with water for at least 15 minutes. If irritation occurs, obtain medical attention.

Ingestion: Drink one or two glasses of water. If gastrointestinal symptoms develop, obtain medical attention.

Inhalation: Remove affected person to fresh air. If respiratory problems develop, obtain medical attention.

Notes to Physician: Hydrocarbons and other materials that contact the product during normal use can be retained on the product. The retained materials may be hazardous. Identify the retained material and treat accordingly.

Flash Point: Unused material will not burn.

Extinguishing Media: Use media appropriate for surrounding fire.

Fire and Explosion Hazards: Used material may contain materials of a hazardous nature. The user of this product must identify the hazards of the retained material and inform the fire fighters of these hazards.

6**Accidental Release Measures**

Large Spill: Isolate the affected areas. Confine entry into the affected area to those persons properly protected. Special attention should be given to eye, skin, and respiratory protection because recovery of dry product is expected to generate dust. Sweep, shovel, or vacuum spilled product into appropriate containers. (Do not use a vacuum if material has contacted a hydrocarbon material.)

Small Spill: Sweep or vacuum spilled product into appropriate container. (Do not use a vacuum if material has contacted a hydrocarbon.) Product should be disposed in accordance with all applicable government regulations. See section 13 of MSDS, Disposal Information.

7**Handling and Storage**

The product is in sealed containers. In the event the seal on the container is breached, store the product in tightly closed, properly labeled containers. Store out of direct sunlight. Store in dry area.

8**Exposure Controls and Personal Protection**

Respiratory Protection: Product is in a sealed container. As long as the seal on the container is not breached, respiratory protection is not needed. If the container seal is breached and natural ventilation is inadequate, use mechanical ventilation, other engineering controls, or a toxic dust respirator (in USA - NIOSH/MSHA approved) to prevent inhalation of product dust.

Skin Protection: Use gloves to avoid prolonged or repeated skin contact.

Eye Protection: Safety glasses or goggles as necessary to prevent eye contact.

9**Physical and Chemical Properties**

These data do not represent technical or sales specifications.

Appearance: Material is in a sealed container

Odor: None

pH: Not applicable

% Volatile: 0%

Pour Point: Not applicable

Viscosity: Not applicable

Vapor Density: Not applicable

Specific Gravity: Not applicable

Apparent Bulk Density: 59 - 62 lbs/ft³

Solubility in Water: Insoluble

Boiling Point: Not applicable

Freezing Point: Not applicable

Melting Point: Not applicable

Vapor Pressure: Not applicable

10**Stability**

<i>Stability:</i>	Stable.
<i>Conditions to Avoid:</i>	None known.
<i>Hazardous Decomposition Products:</i>	Hydrocarbons and other materials that contact the product during normal use can be retained on the product. It is reasonable to expect that decomposition products will come from these retained materials of use.
<i>Hazardous Polymerization:</i>	Will not occur.
<i>Incompatible Materials:</i>	Do not expose to gas streams with an oxygen content above 550 ppm.

11**Toxicological Information**

<i>Acute Oral Toxicity:</i>	Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract. May cause headache, nausea, and vomiting. An oral LD ₅₀ is not available for this product. Copper oxide: LD ₅₀ is > 2000 mg/kg (rat) Zinc oxide: LD ₅₀ is > 5000 mg/kg (rat) Aluminum oxide: LD ₅₀ is > 2000 mg/kg (rat)
<i>Acute Dermal Toxicity:</i>	A dermal LD ₅₀ is not available for this product.
<i>Acute Inhalation Toxicity:</i>	An inhalation LC ₅₀ is not available for this product
<i>Irritation:</i>	No data for this product.

Additional Toxicological Information:

Aluminum oxide: Inhalation of finely divided particles may cause lung damage. Intrapleural TD_{LO}: 90 mg/kg (rat). Implant TD_{LO}: 200 mg/kg (rat). TD_{LO} is Toxic Dose Low.

12**Ecological Information**

This product is essentially insoluble in water. Although this product is not a hazardous waste under RCRA, 40 CFR 261, because of environmental concerns, care should be taken to minimize release to the environment. (See Section 13, Disposal Considerations.)

13**Disposal Information**

Dispose of the product in accordance with all applicable government regulations. This product (in its fresh unused state) is not listed by generic name or trademark name in the U.S. EPA's Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Regulations and does not possess any of the four identifying characteristics of hazardous waste (ignitability, corrosivity, reactivity, or toxicity).

14**Transportation Information**

<i>U.S. Department of Transportation Shipping Name:</i>	Not regulated.
<i>International Maritime Organization (IMO):</i>	Not regulated.

United States**TSCA** (*Toxic Substances Control Act*):

All the ingredients of this mixture are listed on the TSCA Chemical Substance Inventory.

CERCLA (*Comprehensive Environmental Response, Compensation, and Liability Act*) **Reportable Quantity**:

The following component(s) of this product is/are subject to release reporting under 40 CFR 302 when release exceeds the Reportable Quantity (RQ):

—None—

SARA (*Superfund Amendments and Reauthorization Act of 1986*) **Title III**:**Section 302** (Extremely Hazardous Substances):

The following component(s) of this product is/are subject to the emergency planning provisions of 40 CFR 355 when there are amounts equal or greater than the Threshold Planning Quantity (TPQ):

—None—

Section 313 (Toxic Chemicals):

The following component(s) have been specified as Toxic Chemicals under SARA Section 313 and may be subject to the Toxic Release Inventory (TRI) reporting requirements under 40 CFR 372:

Aluminum oxide
Copper oxide
Zinc oxide

State Community Right-to-Know Legislation

The following component(s) of this product are regulated under California's Proposition 65:

—None—

European Union (EU)*European Inventory of Existing Commercial Chemical Substances*:

All components of this preparation are included in EINECS/ELINCS.

Aluminum oxide (non-fibrous)	2156916
Copper oxide	2152691
Zinc oxide	2152225

Council of European Communities Directive on Classification, Packaging and Labelling of Dangerous Substances/Preparation (67/548/EEC & 88/379/EEC):

R43	May cause sensitization by skin contact.
R45	May cause cancer.
S22	Do not breathe dust.
S37/39	Wear suitable gloves and eye/face protection.
T	Toxic

Canada*Canadian Hazard Products Act*:

This product is classified as a material causing other toxic effects, carcinogenicity - Class D, Division 2, Subdivision A, under regulations pursuant to the Federal Hazardous Products Act (*e.g.* WHMIS).

Revision 2

Summary of Changes: Updated for three-year review cycle.

I.D./Form: MS0001

Supersedes: February 1996

Revision 3

Summary of Changes: Section 2.

I.D./Form: MS0001

Supersedes: December 2006

Revision 4

Summary of Changes: Section 1.

I.D./Form: MS0001

Supersedes: July 2007

HMIS™ - Hazardous Materials Identification System

HMIS™ Ratings	
HEALTH	1*
FLAMMABILITY	0
REACTIVITY	0

0 - minimal hazard

1 - slight hazard

2 - moderate hazard

3 - serious hazard

4 - severe hazard

* - may cause cancer