MATERIAL SAFETY DATA SHEET — 16 Sections

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier Win-ox			[WHMIS Classification] Acid
Product Use Metal Oxidizer			
Manufacturer's Name Kerry Kilmer		Supplier's Name	
Street Address 1155 C Arnold Dr. #170		Street Address	
City Martinez	Province	City	Province
Postal Code 94553	Emergency Telephone	Postal Code	Emergency Telephone
Date MSDS Prepared 4.2015	MSDS Prepared By Kerry Kilmer		Phone Number 925.370.0668

SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients *(specific)*	%	CAS Number	LD_{50} of Ingredient *(specify species and route*	LC_{50} of Ingredient *(specify species)*
Tellurium Dioxide	.8%	13494-80-9		
Selenium Dioxide	trace	7783-00-8		
Hydrochloric Acid	38%			
Water	59%			

SECTION 3 — HAZARDS IDENTIFICATION

Route of Entry X☐ Skin Contact x☐ Skin Absorption x☐ Eye Contact x☐ Inhalation x☐ Ingestion

[Emergency Overview]

WHMIS Symbols]

Potential Health Effects

Acute oral toxicity. Respiratory, skin and eye irritation. Concentrated solution may cause burns.

SECTION 4 — FIRST AID MEASURES

Skin Contact

Flush with water (min. 15 minutes). Wash area with mild soap and water. May use emollient. Remove contaminated clothing and wash before using again. Always wear (rubber/vinyl/latex) gloves. Seek medical attention.

Eye Contact

Flush eye(s) with running water (min. 15 minutes) and seek medical attention.

Inhalation

Move exposed person to fresh air immediately. Wear respirator mask at all times. Recommend HDX N95 Respirator Mask. NIOSH approved.

Ingestion

Do not induce vomiting. Loosen tight clothing like collar, tie, belt. Perform mouth-to-mouth resuscitation if person is not breathing. Seek immediate medical attention.

SECTION 5 — FIRE FIGHTING MEASURES

Flammable	If yes, under which conditions?
x ☐ Yes ☐	Combustible at high temperature

Means of Extinction

Any medium suitable for extinguishing fire. Small fire: use dry chemical powder. Large fire: Best to use carbon dioxide gas to exclude air. Otherwise water spray, fog or foam. Do not use water jet. Wear full protective clothing and self-contained breathing equipment.

Flashpoint (° C) and Method	Upper Flammable Limit (% by volume)	Lower Flammable Limit (% by volume)
Not available	Not available	Not available
Autoignition Temperature (°C)	**Explosion Data — Sensitivity to Impact**	**Explosion Data — Sensitivity to Static Discharge**
Not available	Not available	Not available

Hazardous Combustion Products

Contact with metals produces hydrogen can produce explosive mixture with air. Strong corrosive.

[NFPA]

Leak and Spill Procedures

Neutralize acid with strong bicarbonate soda solution or dry sand, earth or other clean inert materials. Do not use sawdust. Flush with large quantities of water. Dispose of all clean up materials at appropriate Hazardous Waste Site.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Handling Procedures and Equipment

Always use chemical in well-ventilated area and/or with adequate exhaust outlet. Wear protective respiratory and eye equipment, rubber/vinyl gloves, acid resistant clothing, face shields. Clean and wash equipment following use.

Storage Requirements

Store in cool, secure (locked) well-ventilated location away from other oxidizing agents. Keep away from heat. Keep away from sources of ignition. Empty container dust may pose fire risk & recommend disposal at Hazardous Waste Site. Ground all equipment containing material. Do not breathe dust. Keep container tightly closed.

SECTION 7 — HANDLING AND STORAGE

SECTION 8 — EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Limits ☐ ACGIH TLV ☐ OSHA PEL ☐ Other *(specify)*

Specific Engineering Controls *(such as ventilation, enclosed process)*

Use product in well ventilated area and/or where adequate ventilation outlet system is in place. Food should not be consumed in work area.

Personal Protective Equipment x☐ Gloves x☐ Respirator X☐ Eye ☐ Footwear X☐ Clothing ☐ Other

If checked, please specify type

Rubber/vinyl/latex gloves, N95 (rated) (HDX) Respirator Mask or P95 . Both are NIOSH approved. Safety goggles, protective clothing, face shields. Eye bath solution and safety shower nearby. Lab coat.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical State Dry chemical form to which hydrochloric acid is added.	Odour and Appearance Yellow solution, clear pungent odor	Odour Threshold (ppm) Not available
Specific Gravity 6.24 (water =1)	Vapour Density (air = 1) Not available	Vapour Pressure (mmHg) Not applicable
Evaporation Rate 100%	Boiling Point (° C) 990 degrees C	Freezing Point (° C) Not applicable
pH Not available	Coefficient of Water/Oil Distribution Not available	[Solubility in Water] Not available

SECTION 10 — STABILITY AND REACTIVITY

Chemical Stability X ☐ Yes ☐ No	If no, under which conditions?

Incompatibility with Other Substances ☐ Yes ☐ No

If yes, which ones?
Not available

Reactivity, and under what conditions?

Fumes of HCl and Hydrogen in contact with metals-chlorine form an oxidizer. Hazardous polymerization will not occur.

Hazardous Decomposition Products

Fumes of HCl and Hydrogen in contact with metals-chlorine form an oxidizer. Hazardous polymerization will not occur.

SECTION 11 — TOXICOLOGICAL INFORMATION

Effects of Acute Exposure

Very hazardous in case of ingestion. Do not induce vomiting. Seek immediate medical assistance.

Effects of chronic exposure

Very hazardous in case of ingestion. Garlic odor to breath/sweat, metallic taste, nausea, loss of appetite, dermatitis, respiratory problems. May affect liver and lungs. Developmental toxicity not available.

Irritancy of Product Hazardous in case of skin contact, eye contact, or inhalation – an irritant.

Skin sensitization Hazardous	Respiratory sensitization Hazardous
Carcinogenicity-IARC Carcinogenic effects not available.	Carcinogenicity - ACGIH Carcinogenic effects not available.
Reproductive toxicity Reproductivity effects not available	Teratogenicity Teratogenic effects not available.

Embrotoxicity	Mutagenicity
Embrotoxic effects not available	Mutagenic effects not available
Name of synergistic products/effects Synergistic effects not available	

SECTION 12 — ECOLOGICAL INFORMATION

[Aquatic Toxicity] Not available.

SECTION 13 — DISPOSAL CONSIDERATIONS

Waste Disposal Dispose of product at Hazardous Waste Site only

SECTION 14 — TRANSPORT INFORMATION

SECTION 15 — REGULATORY INFORMATION

[WHMIS Classification]	[OSHA]
Not controlled under WHMIS	

DO NOT dispose of product in any environmental/public/aquifer water systems. Hazardous Waste Site only.

Special Shipping Information Dispose all used/unused containers of product at Hazardous Waste Site.

	PIN

TDG	[DOT]
[IMO]	[ICAO]

[SERA]	[TSCA]

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

SECTION 16 — OTHER INFORMATION

Not a DOT controlled material (US). Special provisions for transport not applicable. Fed/St regulations: TSCA 8 (b) inventory: Tellurium (majority of product mixture)