

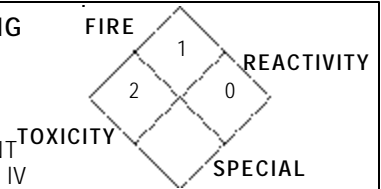


KLEENCO
FOR QUALITY, VALUE AND PERFORMANCE

KLEENCO PRODUCTS, INC.
• P.O. BOX 1786 • Bellevue, WA. 98009

TELEPHONE NUMBER
Reg. Phone
206-641-8888
For Emergency Assistance
Call Infotrac (800) 535-5053

HAZARD RATING
4 = EXTREME
3 = HIGH
2 = MODERATE
1 = SLIGHT
0 = INSIGNIFICANT
* = SEE SECTION IV



MATERIAL SAFETY DATA SHEET

PRODUCT NAME RUSTNOX	DATE ISSUED 04-21-93	CODE	DOT HAZARD
	PREPARED BY Dale R. Silbaugh	014-0315	Not Regulated
FORMULA Proprietary	CHEMICAL NAMES AND OR SYNONYMS Powdered Cleaning Compound		

I-COMPOSITIONAL INFORMATION/SARA III INFORMATION

INGREDIENTS	CAS NUMBER	OCCUPATION OSHA PEL	EXPOUSURE ACGIH TLV	LIMITS OTHER	VAPOR mm Hg	PRESSURE @ TEMP	WEIGHT PERCENT
Oxalique Acid	144-62-7	1MG/M3	1MG/M3	2MG/M3 STEL	Hazard Toxic-Corrosive		

No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and 40 CFR 342. **NOTE:** The precise composition of this mixture is proprietary. A more complete description will be provided to a physician in the event of a medical emergency.

II-PHYSICAL PROPERTY INFORMATION

APPEARANCE and ODOR Free flowing, dry white/yellow powder			
MELTING POINT Not Applicable	BOILING POINT Not Applicable	COATING V.O.C. Not Applicable	EVAPORATION RATE Slower than ether
SOLUBILITY IN WATER Complete	SPECIFIC GRAVITY (Water = 1) 1.2	VAPOR DENSITY Not Applicable	

III-FIRE AND EXPLOSION HAZARD INFORMATION

FLASH POINT Not Applicable	AUTO IGNITION TEMPERATURE Not Available	LOWER EXPLOSION LIMIT (%) Not Applicable	UPPER EXPLOSION LIMIT (%) Not Applicable
EXTINGUISHING MEDIA <input checked="" type="checkbox"/> FOAM <input checked="" type="checkbox"/> CO ₂ <input checked="" type="checkbox"/> DRY CHEMICAL <input checked="" type="checkbox"/> WATER SPRAY <input checked="" type="checkbox"/> OTHER Do not use a direct water stream.			
SPECIAL FIRE FIGHTING PROCEDURES For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Read the entire MSDS.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Extinguish all nearby sources of ignition since vapors decompose to hazardous products at high temperatures. Foam or water on molten oxalic acid may cause frothing.			

IV-HEALTH HAZARD INFORMATION

THRESHOLD LIMIT VALUE Not Established	ROUTE(S) OF ENTRY: <input checked="" type="checkbox"/> INHALATION See Health Hazards	<input checked="" type="checkbox"/> SKIN See Health Hazards	<input checked="" type="checkbox"/> INGESTION See Health Hazards
HEALTH HAZARDS (Acute and Chronic) CHRONIC EFFECTS OF EXPOSURE: Prolonged or repeated overexposure may result in delayed liver and/or kidney damage.			
CARCINOGENICITY: Not considered to be a carcinogen <input type="checkbox"/> NTP <input type="checkbox"/> IARC Monographs <input checked="" type="checkbox"/> OSHA Regulated			
SIGNS AND SYMPTOMS OF EXPOSURE INHALATION: Inhalation of dusts or vapors cause irritation of eyes and upper respiratory tract, ulceration of the mucous membranes of the nose an throat, epistaxis, headache, and nervousness. Prolonged and severe exposure can cause chronic cough, albuminuria, vomiting, pain in the back, and gradual emaciation and weakness. EYE CONTACT: Dusts may severely irritate or damage the eyes. SKIN CONTACT: Brief contact may burn the skin. Prolonged or repeated contact may cause dermatitis. SWALLOWING: Ingestion of a few grams may be fatal. Acute oxalic poisoning results from ingestion of a solution of the acid, causing severe corrosion of the mouth, throat, and digestive tract with vomiting, abdominal pain, collapse, and possibly convulsions. Death may follow quickly.			
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE None reported.			
EMERGENCY AND FIRST AID PROCEDURES EYES: If this chemical contacts the eyes, immediately wash the eyes with large amounts of water and continue flushing for 15 minutes, occasionally lifting the lower and upper lids. Get medical attention immediately. Contact lenses should not be worn when working with this chemical. SKIN: If this chemical contacts the skin, immediately wash the skin with strong solution of epsom salts. Remove contaminated clothing and shoes; wash before reuse. Get medical attention if irritation persists after washing. INHALATION: Remove to fresh air. If breathing has stopped, perform mouth-to-mouth resuscitation. Keep the affected person warm and at rest. Get immediate medical attention. INGESTION: Do not induce vomiting. If conscious, five lots of water or milk, or dilute solution of any soluble calcium or magnesium salt. Get immediate medical attention. Do not give anything by mouth to an unconscious or convulsing person.			

V - REACTIVITY INFORMATION

<input checked="" type="checkbox"/> STABLE	<input type="checkbox"/> UNSTABLE	CONDITIONS TO AVOID Heat, sparks, open flames, and temperature above 212°F.	
HAZARDOUS DECOMPOSITION PRODUCTS May liberate carbon monoxide and carbon dioxide, and toxic formic acid.			
HAZARDOUS POLYMERIZATION	<input type="checkbox"/> MAY OCCUR	<input checked="" type="checkbox"/> WILL NOT OCCUR	CONDITIONS TO AVOID Not applicable.
INCOMPATIBILITY (Materials to avoid) Alkalies, silver compounds, strong oxidizers, oleum.			

VI - SPILL OR LEAK PROCEDURE INFORMATION

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Stop the source of leak or release. Clean up releases as soon as possible, observing precautions in Special Protective Information. Contain liquid to prevent further contamination of soil, surface water or groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.
WASTE DISPOSAL METHODS	Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental authorities for approved disposal of this material.

VII - SPECIAL PROTECTION INFORMATION

VENTILATION TYPE	Local mechanical exhaust ventilation, capable of maintaining emissions at the point of use below the PEL.		
RESPIRATORY PROTECTION	If conditions generate dusts, wear a NIOSH approved respirator appropriate for those emission levels. Appropriate respirators may be a full facepiece air-purifying cartridge respirator with particulate filters, a self-contained breathing apparatus in the pressure demand mode, or a supplied-air respirator.		
PROTECTIVE GLOVES	Impervious	EYE PROTECTION	Wear eye protection to prevent any possibility of eye contact.
OTHER PROTECTIVE EQUIPMENT	Wear appropriate equipment to prevent any possibility of skin contact.		

VIII - STORAGE AND HANDLING INFORMATION

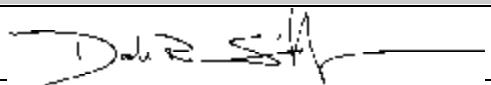
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE	Keep out of reach of children. Store in a cool dry place away from incompatible materials. Keep container tightly closed when not in use. Workers should wash immediately when skin becomes contaminated and at the end of each work shift. The following equipment should be available: Eyewash. Quick drench. It is generally recognized that contact lenses should not be worn when working with chemicals because contact lenses may contribute to the severity of the injury.
OTHER PRECAUTIONS	Read and follow label instructions. The label contains information necessary for the proper use of the product. Containers, even those that have been emptied, will retain product residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.

IX - TOXICITY INFORMATION

Oxalic Acid is a corrosive material. Oral toxicity: Rat LD50 = 375 mg/kg; Human LDLO = 71 mg/kg Dermal toxicity: Rabbit LD50 = 20,000 mg/kg Inhalation toxicity: No data found. CARCINOGENICITY: This material is not considered to be a carcinogen by the national toxicology program, the international agency for research on cancer, or the occupational safety and health administration.
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X - MISCELLANEOUS INFORMATION

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and the removal of the material from eyes, skin and clothing.

PRODUCT CODE 014-0315	NA = NOT AVAILABLE	DATE OF ISSUE 04-21-93	SUPERSEDES Any previous MSDS	SIGNED 
The information contained herein is based on data considered accurate. However no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained thereof. They are offered solely for your consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with applicable Federal, State and Local laws and regulations. KLEENCO PRODUCTS, INCORPORATED and its Distributors assume no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.				