

Section 1 - Product and Company Identification

Trade Name: RestoraClean 0988 (All Versions)

Product Code: RestoraClean 0988

Company:

Wolverine Coatings Corporation
5969 US Highway 221
Roebuck, SC 29376
+1 (864) 587-3144

Emergency Contact:

ChemTel 24 Hr. US Emergency Number:
+1 (800) 255-3924
ChemTel 24 Hr. Worldwide Emergency Number:
+1 (813) 248-0585

Product Use: Inorganic Acidic Cleaner

Not recommended for:

Section 2 - Hazards Identification

GHS Ratings:

Skin Corrosive	1A	Destruction of dermal tissue: Exposure < 3 min. Observation < 1 hour, visible necrosis in at least one animal
Eye Corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity >= 3, Iritis > 1.5

GHS Hazards

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

GHS Precautions

P260	Do not breathe dust/fume/gas/mist/vapours/spray
P264	Wash thoroughly after handling
P280	Wear protective gloves/protective clothing/eye protection/face protection
P310	Immediately call a POISON CENTER or doctor/physician
P321	Specific treatment (see label)
P363	Wash contaminated clothing before reuse
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P405	Store locked up
P501	Dispose of contents/container in accordance with all local, regional, national, and international regulations.

Signal Word: Danger



Section 3 - Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
2-butoxyethanol	111-76-2	5.00% - 10.00%
Hydrofluoric Acid	9664-39-3	5.00% - 10.00%
Sulfuric Acid	7664-93-9	1.00% - 5.00%
Nonylphenol Ethoxylate	9016-45-9	1.00% - 5.00%

Section 4 - First Aid Measures

Inhalation: If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Eye Contact: Immediately flush eyes for at least fifteen minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. If eye irritation persists: Get medical advice/attention.

Skin contact: Immediately remove contaminated clothing and shoes. Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: N/A

LEL:

UEL:

Extinguishing Media: Use carbon dioxide, foam, dry chemical, dry sand, water fog, or limestone powder extinguishing systems.

Unusual Fire and Explosion Hazards: None

Hazardous combustion products: Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See section 10 (Stability and Reactivity) for additional information.

Special Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus.

Fire Equipment: No Data

Section 6 - Accidental Release Measures

Spill And Leak Procedures: Avoid all personal contact. Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Spills should be contained, solidified, and placed in suitable containers for disposal.

Section 7 - Handling and Storage

Handling Precautions: Use good laboratory/workplace procedures. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Discard shoes contaminated with this product.

Storage Requirements: Keep away from heat, sparks, and open flames. Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use.

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS #	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
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2-butoxyethanol 111-76-2	PEL: 50ppm	TWA:20ppm	Not Established
Hydrofluoric Acid 9664-39-3	TWA: 2.5 mg/m ³ 8hr STEL: 6ppm 15min	C: 2ppm TWA: 0.5ppm, 8hr	Not Established
Sulfuric Acid 7664-93-9	TWA (vacated): 0.2mg/m ³ TWA: 1mg/m ³	TWA: 0.2mg/m ³	Not Established
Nonylphenol Ethoxylate 9016-45-9	Not Established	Not Established	Not Established

Ventilation: Good general mechanical ventilation and local exhaust is recommended.

Hygiene: Eye wash must be easily accessible. Wear protective clothing as necessary to prevent contact. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Gloves must be inspected regularly and prior to each use. Replace if necessary.

Personal Protective Equipment: Wear impervious protective gloves. Wear OSHA, NIOSH approved organic vapor respirator if ventilation is inadequate. Wear appropriate protective eyewear such as splash-proof, chemical resistant safety goggles.

Contaminated Gear: Take off all contaminated clothing immediately. Wash contaminated clothing before reuse.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance	Viscous liquid	Odor	Not Available
Physical State	Liquid	Vapor Density	2.55
Vapor Pressure	0.89	Boiling Range	20 to 290 °C
Specific Gravity (SG)	1.000	Lbs VOC/Gallon Less Water	0.00

Section 10 - Stability and Reactivity

Stability:

STABLE

Components of this mixture are incompatible with the following materials:

- Strong Oxidizers
- Combustible materials
- Organic materials
- Powdered metals
- Peroxides
- Strong Bases

This mixture is likely to exhibit the following combustion products:

- Carbon Dioxide, Carbon Monoxide
- Hydrogen
- Sulphur oxides

Hazardous polymerization will occur.

Section 11 - Toxicological Information

Mixture Toxicity:

Inhalation Toxicity LC50: 45mg/L

Component Toxicity:

111-76-2 2-butoxyethanol

9664-39-3	Oral LD50: 1,300 mg/kg (Rat) Dermal LD50: 2,000 mg/kg (rat) Inhalation LC50: 5 mg/L (rat) Hydrofluoric Acid Inhalation LC50: 1,276 ppm (rat)
7664-93-9	Sulfuric Acid Oral LD50: 2,140 mg/kg (Rat) Inhalation LC50: 510 mg/m3 (Rat)
9016-45-9	Nonylphenol Ethoxylate Oral LD50: 2,000 mg/kg (Rat)

Routes of Entry:

Inhalation Skin Contact Eye Contact Ingestion

Exposure to this material may affect the following organs:

Respiratory System

The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing):

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
None			No Data

Section 12 - Ecological Information

Component Ecotoxicity:

2-butoxyethanol	LC50 1474mg/l fish 96hr; EC50 1550mg/l water flea 48hr; EC50 1840 mg/l algae 72hr
Sulfuric Acid	LC50 500mg/l fish 96h; EC50 29mg/l water flea 24h
Nonylphenol Ethoxylate	LC50 10mg/l fish 96 hr; EC50 10mg/l water flea 48hr; EC50 10mg/l algae 72hr

Section 13 - Disposal Considerations

Waste disposal Methods: Dispose in accordance with Federal, State and Local regulations.

Section 14 - Transport Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Corrosive liquids, N.O.S. (Contains Sulfuric, Hydrofluoric Acid)	1760	II	8
IATA				
IMDG				

Section 15 - Regulatory Information

Additional regulatory listings, where applicable:

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains the following chemicals which are listed by the State of California as carcinogenic or a reproductive toxin:

Sulfuric Acid 7664-93-9

Materials not included on the Canada DSL inventory:

Commonwealth of Massachusetts "Right to Know": This product contains the following toxic or hazardous substances which appear on the Massachusetts Substance List:

- Sulfuric Acid 7664-93-9
- 2-butoxyethanol 111-76-2
- Hydrofluoric Acid 9664-39-3

NJ "Right to Know": This product contains the following toxic or hazardous substances which appear on the New Jersey Substance List:

Sulfuric Acid 7664-93-9
2-butoxyethanol 111-76-2
Hydrofluoric Acid 9664-39-3

Pennsylvania "Right to Know": This product contains the following toxic or hazardous substances which appear on the Pennsylvania Substance List:

Sulfuric Acid 7664-93-9
Hydrofluoric Acid 9664-39-3
2-butoxyethanol 111-76-2

EPA SARA Title III Section 313 (40 CFR 372) components above 'de minimum' level:

Nonylphenol Ethoxylate 9016-45-9
Sulfuric Acid 7664-93-9
2-butoxyethanol 111-76-2
Hydrofluoric Acid 9664-39-3

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

Hydrofluoric Acid 9664-39-3

<u>Country</u>	<u>Regulation</u>	<u>All Components Listed</u>
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EU Risk Phrases

Safety Phrase

Toxic Substances Control Act (TSCA): All chemicals except those listed below appear in the Toxic Substances Control Act Chemical Substance Inventory:

- None

EPA SARA Title III Section 313 (40 CFR 372) components above 'de minimum' level:

Section 16 - Other Information

For further information, please contact the Product Safety director. The information and recommendations contained herein are, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Final determination of suitability of the chemical is the sole responsibility of the user. Users of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely. No representations or warranties, either expressed or implied of merchantability, fitness for a particular purpose, or any other nature, are made hereunder with respect to the information contained herein, or to the chemical to which the user refers.

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