

SAFETY DATA SHEET

1. Identification

Product identifier Stainless Weld Heat Tint Remover

Other means of identification Not available.

Recommended use Stainless weld chromium oxide and heat tint remover

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Protocol Environmental Solutions Inc.

Address 105B 81 Golden Drive

Coquitlam, BC V3K 6R2

Canada

Telephone 604-464-0660 E-mail Not available.

Distributed by Praxiar, Inc.

39 Old Ridgebury Rd

Danbury, CT 06810-5100 US

On-site Emergency 1-800-645-4633

Emergency phone number Chemtrec 1-800-424-9300

2. Hazard(s) identification

Physical hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Health hazards Skin corrosion/irritation Category 1A

Serious eye damage/eye irritation Category 1

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Environmental hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

OSHA defined hazards This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Label elements



Signal word Danger

Hazard statement Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory

irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective

gloves/protective clothing/eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all

contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise Other hazards which do not result in classification:

classified (HNOC)

Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. Inhalation could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. In extreme cases, tooth

erosion could result.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Alumina Hydrate	Aluminium hydroxide	21645-51-2	15 - 30
NITRIC ACID	Hydrogen nitrate	7697-37-2	10 - 16
Magnesium Fluoride	Magnesium difluoride	7783-40-6	5 - 10
Magnesium Nitrate	Magnesium Dinitrate Magnesium dinitrate hexahydrate	10377-60-3	5 - 10

The exact concentrations of the above listed chemicals are being withheld as a trade secret as allowed by 29CFR1910.1200.

4. First-aid measures

Inhalation

If inhaled: Remove person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If breathing stops, provide artificial respiration. Get medical attention immediately.

Skin contact

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Duration of rinsing should be at least 15 minutes. Get medical attention

immediately. Wash contaminated clothing before reuse.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Duration of rinsing should be at least 15 minutes. Get medical

attention immediately.

Ingestion

Rinse mouth. Do not induce vomiting. Never give anything by mouth to a victim who is unconscious or is having convulsions. Seek immediate medical attention/advice.

Most important symptoms/effects, acute and

symptoms/effects, ac

Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring. Symptoms may include redness, blistering, pain and swelling. Direct contact with concentrated solutions may be corrosive to the eyes and may cause severe damage including blindness. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause severe irritation to the nose, throat, and respiratory tract. Symptoms may include coughing, choking and wheezing. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

om During fire, gas

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

and precautions for firefighter Fire fighting Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Ventilate the contaminated area. Use water spray to cool unopened containers. Move containers from fire area if you can do so without risk. Do not scatter spilled material with high pressure water streams, Prevent fire extinguishing water from contaminating surface water or the ground water system.

Specific methods
General fire hazard

Cool containers exposed to flames with water until well after the fire is out.

General fire hazards Hazardous combustion products

equipment/instructions

No unusual fire or explosion hazards noted.

Carbon oxides. Nitrogen oxides (NOx). Chlorine.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Ventilate the contaminated area. Evacuate area. Cover any spilled material with non-combustible absorbent material, such as vermiculite or sand, then place absorbent material into a container for later disposal. Neutralize the spilled material before disposal. Contaminated absorbent material may pose the same hazards as the spilled product. Prevent entry into waterways, sewer, basements or confined areas.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the SDS. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Avoid breathing mist or vapor. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. Do not use in areas without adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. When using, do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep containers tightly closed in a dry, cool and well-ventilated place. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

Components	Contaminants (29 CFR 1910.1000) Type	Value	
Magnesium Fluoride (CAS 7783-40-6)	PEL	2.5 mg/m3	and the second s
NITRIC ACID (CAS 7697-37-2)	PEL.	5 mg/m3	
·		2 ppm	
US. OSHA Table Z-2 (29 CFR 1910 Components	.1000) Туре	Value	Form
Magnesium Fluoride (CAS 7783-40-6)	TWA	2.5 mg/m3	Dust.
US. ACGIH Threshold Limit Value Components	s Type	Value	Form
Alumina Hydrate (CAS 21645-51-2)	TWA	1 mg/m3	Respirable fraction.
Magnesium Fluoride (CAS 7783-40-6)	TWA	2.5 mg/m3	
NITRIC ACID (CAS 7697-37-2)	STEL	4 ppm	
•	TWA	2 ppm	
US. NIOSH: Pocket Guide to Chen	nical Hazards		
Components	Туре	Value	
Magnesium Fluoride (CAS 7783-40-6)	TWA	2.5 mg/m3	
NITRIC ACID (CAS 7697-37-2)	STEL	10 mg/m3	
•		4 ppm	
	TWA	5 mg/m3	
		2 ppm	

Biological limit values

ACGIH Biological Exposu Components	Value	Determinant	Specimen	Sampling Time
Magnesium Fluoride (CAS 7783-40-6)	3 mg/l	Fluoride	Urine	*
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2 mg/l	Fluoride	Urine	*

* - For sampling details, please see the source document.

Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

Appropriate engineering controls

General ventilation normally adequate. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). A full face shield may also be necessary.

An eyewash station should be made available in the immediate working area.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves such as Neoprene or Nitrile. Advice should be sought from

glove suppliers.

Other

Wear suitable clothing such as coveralls.

Respiratory protection

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Advice should be sought from respiratory protection specialists.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Paste.

Physical state

Solid.

Form

Semi-liquid.

Color

Off-white

Odor

Slight.

Odor threshold

Not available.

рΗ

acidic

Melting point/freezing point

32 °F (0 °C)

Initial boiling point and boiling

> 212 °F (> 100 °C)

range

Flash point

Not available.

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

10.88 hPa estimated

Vapor density

Not available.

Relative density

Not available.

Solubility(ies)

Solubility (water)

Miscible

Partition coefficient (n-octanol/water)

Not available.

Auto-ignition temperature

Not available.

Decomposition temperature

Not available.

Viscosity

80000 - 150000 cP

10. Stability and reactivity

Reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Conditions to avoid

Contact with incompatible materials. Avoid heat, sparks, open flames and other ignition sources.

Do not use in areas without adequate ventilation.

Incompatible materials

Strong oxidizing agents. Cyanides. Peroxides. Alcohols. Alkalies.

Hazardous decomposition products

May attack light-alloy metals and liberate hydrogen gas. Refer to hazardous combustion products

in Section 5.

11. Toxicological information

Information on likely routes of exposure

Inhalation

May cause severe irritation to the nose, throat, and respiratory tract.

Skin contact

Causes skin burns.

Eye contact

Causes eye burns.

Ingestion

May cause severe irritation and corrosive damage in the mouth, throat and stomach.

Most important

symptoms/effects, acute and

delayed

Direct skin contact may cause corrosive skin burns, deep ulcerations and possibly permanent scarring. Symptoms may include redness, blistering, pain and swelling. Direct contact with concentrated solutions may be corrosive to the eyes and may cause severe damage including blindness, Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause severe irritation to the nose, throat, and respiratory tract. Symptoms may include coughing, choking and wheezing. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations, bleeding.

Information on toxicological effects

Acute toxicity

This product is not classified as an acute toxicity hazard. See below for individual ingredient acute toxicity data.

Components

Species

Test Results

Alumina Hydrate (CAS 21645-51-2)

Acute

Dermal

LD50

Rabbit

No data in literature

Inhalation

LC50

Rat

No data in literature

Oral

LD50

Rat

> 5000 mg/kg

Magnesium Fluoride (CAS 7783-40-6)

Acute

Dermal

LD50

Rabbit

No data in literature

Inhalation

LC50 Rat No data in literature

Oral

Rat LD50

2330 mg/kg

Magnesium Nitrate (CAS 10377-60-3)

Acute

Dermal

LD50

Rabbit

> 5000 mg/kg

Inhalation

Rat LC50

No data in literature

Oral

LD50

Rat

> 2000 mg/kg

NITRIC ACID (CAS 7697-37-2)

Acute

Dermal

LC50

Rabbit

No Data in Literature

SDS US

Components Species Test Results		Test Results
Inhalation		
LC50	Rat	No data in literature
Oral		
LD50	Rat	No Data in Literature

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation

Causes skin burns.

Serious eye damage/eye

Causes eye burns.

irritation

Respiratory or skin sensitization

Respiratory sensitization

This product is not expected to cause respiratory sensitization.

Skin sensitizer

This product is not expected to cause skin sensitization.

Germ cell mutagenicity

No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity

No components present at greater than 0.1% are considered to be a carcinogen by IARC, ACGIH,

NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Magnesium Fluoride (CAS 7783-40-6)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Specific Target Organ Toxicity (STOT), Single Exposure: Category 3

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

Not classified as a specific target organ toxicity -repeated exposure.

Aspiration toxicity

Chronic effects

Not expected to be an aspiration hazard. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. In

extreme cases, tooth erosion could result.

12. Ecological information

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Test Results Components **Species**

Magnesium Nitrate (CAS 10377-60-3)

Aquatic Acute

Fish

LC50

Guppy (Poecilla reticulata)

1378 mg/l, 96 hours (potassium nitrate,

KNO3/L)

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Other adverse effects

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions

Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. Dispose of contents/container in accordance with local/ regional/national/international regulations.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

^{*} Estimates for product may be based on additional component data not shown.

Waste from residues / unused products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

Contaminated packaging

Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN3264 **UN number**

UN proper shipping name

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID, Magnesium Nitrate)

Transport hazard class(es)

Class 8 Subsidiary risk Label(s) 8 Packing group 11

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions

B2, IB2, T11, TP2, TP27

154 Packaging exceptions 202 Packaging non bulk 242 Packaging bulk

IATA

UN3264 **UN number**

Corrosive liquid, acidic, inorganic, n.o.s. (NITRIC ACID, Magnesium Nitrate) UN proper shipping name

Transport hazard class(es)

8 Class Subsidiary risk П Packing group No. **Environmental hazards** 8L **ERG Code**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Allowed. Passenger and cargo

aircraft

Cargo aircraft only Allowed.

IMDG

UN3264 **UN** number

UN proper shipping name Transport hazard class(es) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID, Magnesium Nitrate)

Class 8 Subsidiary risk П Packing group **Environmental hazards**

Marine pollutant No. F-A, S-B **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

DOT



IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

NITRIC ACID (CAS 7697-37-2)

Listed.

SARA 304 Emergency release notification

NITRIC ACID (CAS 7697-37-2)

1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value	
		1000	4000 II.			

NITRIC ACID

7697-37-2 1000

1000 lbs

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
NITRIC ACID	7697-37-2	10 - 16	
Magnesium Nitrate	10377-60-3	5 - 10	

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Nο

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

NITRIC ACID (CAS 7697-37-2)

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Magnesium Nitrate (CAS 10377-60-3) NITRIC ACID (CAS 7697-37-2)

US. New Jersey Worker and Community Right-to-Know Act

Magnesium Fluoride (CAS 7783-40-6) Magnesium Nitrate (CAS 10377-60-3)

NITRIC ACID (CAS 7697-37-2)

US. Pennsylvania Worker and Community Right-to-Know Law

Magnesium Fluoride (CAS 7783-40-6)

Material name: Stainless Weld Heat Tint Remover 1989 Version #: 01 | Issue date: 10-07-2014

SDS US

Magnesium Nitrate (CAS 10377-60-3) NITRIC ACID (CAS 7697-37-2)

US. Rhode Island RTK

Magnesium Nitrate (CAS 10377-60-3) NITRIC ACID (CAS 7697-37-2)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name On inven	tory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
		4 t - V

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing

16. Other information, including date of preparation or last revision

10-07-2014 Issue date

Version #

Prepared by: ICC The Compliance Center Inc. Disclaimer

http://www.thecompliancecenter.com

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Not available. **Bibliography**