Safety Data Sheet
Rust Remover Plus™

SDS Revision Date: **09/24/2015**

1. Identification

1.1. Product identifier

Product Identity	Rust Remover Plus™
Alternate Names	Concrete Cleaner, Rust Remover Plus™

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use	See Technical Data Sheet.
Application Method	See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name	Delux Cleaning Supply Inc. dba. PowerWash.com 2300 Cold Springs Rd Fort Worth, TX 76106
24 hour Emergency Telephone No.	Chem-Tel 800-255-3924
Customer Service: Delux Cleaning Supply Inc. dba. PowerWash.com	+1 817-625-4213

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Acute Tox. 3;H301	Toxic if swallowed.
Skin Corr. 1B;H314	Causes severe skin burns and eye damage.
Eye Dam. 1;H318	Causes serious eye damage.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Danger

H301 Toxic if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

[Prevention]:

P260 Do not breathe mist / vapors / spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

P321 Specific treatment (see information on this label).

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Ammonium bifluoride **CAS Number: 0001341-49-7**	**50 - 75**	**Acute Tox. 3;H301** **Skin Corr. 1B;H314**	**[1]**
Phosphoric acid **CAS Number: 0007664-38-2**	**10 - 25**	**Skin Corr. 1B;H314 (> 25%)** **Eye Irrit. 2; H319: 10% ≤ C < 25%** **Skin Irrit. 2; H315: 10% ≤ C < 25%**	**[1][2]**
Oxalic acid **CAS Number: 0000144-62-7**	**10 - 25**	**Acute Tox. 4;H312** **Acute Tox. 4;H302**	**[1][2]**
Trade Secret **CAS Number: Trade Secret**	**10-25**	**Acute Tox. 4;H302** **Aquatic Chronic 2;H411**	**[1]**

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.
[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit.
[3] PBT-substance or vPvB-substance.
*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	Acute: Skin: Major potential hazard. May cause severe burns with deep ulcerations. Eyes: May cause severe destruction and blindness. These effects can occur rapidly affecting all parts of the eye. Chronic: Skin: repeated or prolonged skin contact would be expected to cause drying, cracking and inflammation of the skin (dermatitis). INHALATION May irritate mucosal membranes. Under recommended conditions, vapor level will be to low to present inhalation hazard. INGESTION Harmful if swallowed. Will cause burns to mouth and throat. SKIN Causes skin burns. EYES Corrosive! Causes burns and permanent injury to eye tissue. Can cause blindness. See section 2 for further details.
Eyes	Causes serious eye damage.
Skin	Causes severe skin burns and eye damage.
Ingestion	Toxic if swallowed.

5. Fire-fighting measures

5.1. Extinguishing media

Use extinguishing media suitable for the surrounding fire. If water is used, care should be taken since it can generate heat and spattering.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: High temperatures and fires may produce such toxic oxides as those from carbon, sulfur, and phosphorous.

Do not breathe mist / vapors / spray.

5.3. Advice for fire-fighters

Use flooding quantities of water as fog or spray to keep fire exposed containers cool. Extinguish fire using agents suitable for surrounding fire.
VENTILATION: As necessary to maintain concentration in air below 2 mg/m3 at all times.

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6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Neutralize residual product in the spill area using sodium carbonate or sodium bicarbonate.

7. Handling and storage

7.1. Precautions for safe handling

Use smallest amounts possible in designated areas with adequate ventilation. Keep containers closed when not in use. Empty containers may contain hazardous residue. Avoid generating mists. Transfer solutions using equipment which is corrosion resistant. Cautiously transfer into sturdy containers made of compatible materials. Never return contaminated material to its original container. Never add water to solution, always add solution to water and provide agitation.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Do not store near chlorine-containing compounds.

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Protect from damage. Store away from incompatible materials. Avoid freezing.

Incompatible materials: Avoid contact with strong alkalis

Store away from oxidizers and alkalines.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000144-62-7	Oxalic acid	OSHA	TWA 1 mg/m3
		ACGIH	TWA: 1 mg/m3STEL: 2 mg/m3
		NIOSH	TWA 1 mg/m3 ST 2 mg/m3
		Supplier	No Established Limit
0001341-49-7	Ammonium bifluoride	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0007664-38-2	Phosphoric acid	OSHA	TWA 1 mg/m3
		ACGIH	TWA: 1 mg/m3STEL: 3 mg/m3
		NIOSH	TWA 1 mg/m3 ST 3 mg/m3
		Supplier	No Established Limit
Trade Secret	Trade Secret	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000144-62-7	Oxalic acid	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0001341-49-7	Ammonium bifluoride	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007664-38-2	Phosphoric acid	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
Trade Secret	Trade Secret	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Full face shield and goggles when there is potential for contact.
Skin	Wear appropriate personal protective equipment to prevent skin contact. Acid resistant rubber gloves and apron. Use neoprene or rubber gloves or PVC.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	An eyewash fountain should be located in areas where the product is used. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Clear Liquid
Odor	Salty odor
Odor threshold	Not determined
pH	1%
Melting point / freezing point	Not Available
Initial boiling point and boiling range	212 degrees F
Flash Point	Not Available
Evaporation rate (Ether = 1)	0
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** None **Upper Explosive Limit:** None
Vapor pressure (Pa)	Not Available
Vapor Density	Not Available
Specific Gravity	1.05
Solubility in Water	100%
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	None
Decomposition temperature	Not Available
Viscosity (cSt)	Not Available
Percent Volatile (by volume)	0 (@ 20 C)

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid contact with glass, autos, polished stone and decorative metal surfaces.

Do not store near chlorine-containing compounds.

10.5. Incompatible materials

Avoid contact with strong alkalis

10.6. Hazardous decomposition products

High temperatures and fires may produce such toxic oxides as those from carbon, sulfur, and phosphorous.

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ammonium bifluoride - (1341-49-7)	147.00, Rat - Category: 3	No data available	No data available	No data available	No data available
Phosphoric acid - (7664-38-2)	No data available	No data available	No data available	No data available	No data available
Oxalic acid - (144-62-7)	7,500.00, Rat - Category: NA	20,000.00, Rat - Category: NA	No data available	No data available	No data available
Trade Secret- (Trade Secret)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	3	Toxic if swallowed.
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ammonium bifluoride - (1341-49-7)	Not Available	Not Available	Not Available
Phosphoric acid - (7664-38-2)	Not Available	Not Available	Not Available
Oxalic acid - (144-62-7)	24.00, Lepomis macrochirus	136.90, Daphnia magna	Not Available
Trade Secret- (Trade Secret)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN3264	UN3264	UN3264
14.2. UN proper shipping name	UN3264, Corrosive liquid, acidic, inorganic, n.o.s., (Ammonium Hydrogen Difluoride, Phosphoric Acid), 8, III	Corrosive liquid, acidic, inorganic, n.o.s., (Ammonium Hydrogen Difluoride, Phosphoric Acid)	Corrosive liquid, acidic, inorganic, n.o.s., (Ammonium Hydrogen Difluoride, Phosphoric Acid)
14.3. Transport hazard class(es)	**DOT Hazard Class:** 8	**IMDG:** 8 **Sub Class:** Not Applicable	**Air Class:** 8
14.4. Packing group	III	III	III

14.5. Environmental hazards

IMDG Marine Pollutant: No;

14.6. Special precautions for user

No further information

15. Regulatory information

Regulatory Overview	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
Toxic Substance Control Act (TSCA)	All components of this material are either listed or exempt from listing on the TSCA Inventory.
WHMIS Classification	D1B E

US EPA Tier II Hazards

Fire: No
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs (lbs):

Ammonium bifluoride (100.00)

Phosphoric acid (5,000.00)

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Ammonium bifluoride

Oxalic acid

Phosphoric acid

Pennsylvania RTK Substances (>1%):

Ammonium bifluoride

Oxalic acid

Phosphoric acid

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

The information contained herein is furnished without warranty of any kind. The above information is believed to be correct but does not purport to be all inclusive and should be used only as a guide. Users should make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

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