1 Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Trade Name: **TW #1 HD**

Product Type: Heavy Duty Acid Detergent

1.2 Recommended Use: Pre-Soak, Wheel & Aluminum Cleaning

1.3 Details of the supplier of the safety data sheet

Company: Woltco Inc.
700 Main Street
Coopersville, MI. 49040

Phone: 1-616-837-7373

1.4 Emergency Information

Contact Info: CHEMTREC: 1-800-424-9300 (24 HOUR RESPONSE)

2 Hazards Identification

2.1 Classification of the substance or mixture

Skin Corrosion: Category 1 Carcinogenicity: Category 1A

Eye Corrosion: Category 1

Acute Toxicity (Oral): Category 3

2.2 Label Elements

Symbol(s)

Signal Word: DANGER

Hazard Statements: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled.
H314 - Causes severe skin burns and eye damage

Precautionary Statements: P262 - Do not get in eyes, on skin or clothing.
P280 - Wear protective gloves and eye protection.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER / doctor.
P302 - IF ON SKIN: Rinse area with water for several minutes. Apply calcium gluconate gel to the affected area (not around eyes). Get medical attention if condition is severe.
P304 - IF INHALED: Remove person to fresh air. Get medical attention if breathing is difficult.
P305 - IF IN EYES: Rinse cautiously with water, remove contact lens if any. Continue rinsing.
P337+P313: If eye irritation persists. Get medical attention or advice.

HMIS-ratings (scale 0-4) **Definitions: 0-least, 1-slight, 2-Moderate, 3-High, 4-Extreme**

HEALTH	3
FIRE	0
REACTIVITY	0
Protection	D

3 Composition/Information on Ingredients

3.1 Substances

CAS Number:	Component	% by weight (optional)
7732-18-5	Water	>50
111-76-2	2-Butoxyethanol	5 to 10
27176-87-0	Alkyl Sulfonic Acids	5 to 10
7664-39-3	Hydrofluoric Acid	1 to 5
7664-93-9	Sulfuric Acid	1 to 5
77-92-9	Citric Acid	
Proprietary	Surfactants	

Chemical characterization: Mixture of the above ingredients to form a single uniform solution.

4 First aid measures

4.1 Description of first aid measures

General Info: Remove any clothing soiled by this product and wash before re-using.

Inhalation: Ensure supply of fresh air and keep person(s) calm and comfortable for breathing. WARNING: It may be hazardous to the person admistering mouth-to-mouth resisitation given this material is toxic and corrosive and they may also need to seek medical attention after administering CPR.

Eye contact: Flush immediately with water. Remove contact lens if any and continue flushing. Get medical help quickly.

Skin contact: Remove all contaminated clothing immediately. Rinse area for several minutes with water then apply some calcium gluconate gel to the affected area and get medical help if soreness or irritation persists.

Ingestion: Do not induce vomiting. If person is conscious give 1-2 glasses of water or milk and seek medical attention. If not available give several anti-acid tablets (ex: tums). Do not delay medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Overexposure to this product can lead to hypocalcemia.

4.3 Indication of any immediate medical attention and special treatment needed

Info for doctor: For large burns on skin (greater than 25 square inches) or for ingestion and for significant inhalation exposure, severe systemic effects may occur. Monitor and correct for hypocalcemia, cardiac arrhythmias, hypomagnesemia and hyperkalemia. In some cases renal dialysis may be indicated. For certain burns, especially of the digits, use of intra-arterial calcium gluconate may be indicated. For inhalation exposures, treat as chemical pneumonia. Monitor for hypocalcemia. 2.5% calcium gluconate in normal saline by nebulizer or by IPPB with 100% oxygen may decrease pulmanary damage. Bronchodilators may also be administered. (information given above is advice for severe cases of Hydrofluoric Acid poisoning, adjust measures accordingly). Treat symptomatically.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable for use: foam, carbon dioxide, dry powder, water spray

Not suitable for use: water jet is not recommended.

5.2 Special hazards arising from the substance or mixture

Product will react violently with soft metals in neat form forming hazardous gases (eg. Zinc).

5.3 Advice for fire-fighters

This product will not burn. Treat area as for surrounding fire. Wear self-contained breathing apparatus pressure demand, (MSHA/NIOSH approved or equivalent) and full protective gear. Product is corrosive and toxic.

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment and keep all unprotected persons far away! Ensure adequate ventilation during clean up.

6.2 Environmental precautions:

Do not allow to enter drains or waterways.

Do not purposely discharge into the subsoil/soil. Dilute with large quantities of water.

6.3 Methods and material for containment and clean up:

Take up with absorbent material (universal binder, diotematious earth). For large spills dike area then scoop or pump product into plastic containers for disposal. Small amounts of this product can be rinsed with large amounts of water into a sanitary sewer system. *Neutralizing with a 20% soda ash solution prior to clean up can reduce disposal hazards.

7 Handling & Storage

7.1 Precautions for safe handling

Advice on safe handing: No special measures are necessary if stored and handled as prescribed.

Handling: Caps should be tight and outside of container free of residue before moving.

Hygiene measures: Do not eat or drink when using this product. Wash hands after using. Remove soiled or soaked clothing immediately. Avoid contact with eyes and skin and do not inhale.

General measures: Avoid contact with any part of the body, clothing and do not inhale vapors or mists.

7.2 Conditions for safe storage, including any incompatibilities

Prevention of fire and explosion

Information: No special measures required.

Storage

Information: Store with lids tightly sealed. Keep at room temperature, out of direct sunlight. Keep locked up. Best if used within 2 years of manufacturer date.

8 Exposure Controls/Personal Protection

8.1 Control parameters:

Components with limit values that require monitoring at the work place:

Component	CAS-No.	Statutory basis/list	Value type	Value
Hydrofluoric Acid	7664-39-3	OSHA PEL	TLV	3 ppm ceiling
			TWA	3 ppm, 8 hours / (STEL) 6 ppm (15 minutes)
Sulfuric Acid	7664-93-9	OSHA PEL	TWA	1 mg/m3
2-butoxyethanol	111-76-2	ACGIH	TLV	20 ppm, 8 hours (all forms)
		OSHA PEL	TWA	240 mg/m3 8 hours (skin)
				TWA: 50 ppm, 8 hours (Skin)

8.2 Exposure controls

Engineering controls

Appropriate controls: Good general ventilation (local exhaust) should be sufficient to control airborne levels.

Personal protective equipment

Eye Protection: Use chemical resistant goggles, face shield or safety glasses with side shields.

Hand Protection: Rubber gloves

Body Protection: A chemical resistant apron or body suit is always suggested to protect clothing and skin.

Respiratory Protection: Select a NIOSH approved respirator for acid mists. Ensure good ventilation when using.

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Product State:	Liquid	Auto Ingniting:	Product is not selfigniting
Color:	Yellow	Vapor Density:	Not Determined
Odor:	Sharp Pungent	Vapor Pressure:	Not Determined
pH:	1.0-2.0	Evaporation Rate:	Not Determined
Boiling Point:	>212°F	Viscosity:	Not Determined
Freeze Point:	<32°F	Decomposition Temp:	Not Determined
VOC's % by wgt:	<10	Partition Coefficient (n-octanol/water)	Not Determined
Phosphorous %:	None		
Specific Gravity:	1.03-1.07	Flash Point °F:	>180
Solubility:	Soluble		

10 Stability and Reactivity

10.1 Reactivity: Product is not reactive under normal conditions.

10.2 Chemical Stability: Stable under normal conditions.

10.3 Possibility of hazardous reactions Under proper storage and handling no reactions are possible.

10.4 Conditions to avoid: None known.

10.5 Incompatible materials: Strong oxidizers and bases.

10.6 Hazardous decomposition products: Sulfur Dioxide, Halogenated Compounds, Carbon Dioxide

11 Toxicological Information

11.1 Information on toxicological effects

Acute toxicity of known ingredients:

7664-39-3 = Hydrofluoric Acid

Inhalation LD50: 5,100 ppm/5 min (rat) / 1,300 ppm/60 min (rat)

Skin: 2% solution was corrosive after 1 hour exposure but not after 1 minute exposure.

Sulfuric Acid

Oral: LD50 (rat): 2140 mg/kg Inhalation LC50 (rat): 510 mg/m3

2-butoxyethanol

Oral: LD50 (rat): 470 mg/kg Dermal: LD50 (rabbit): 220 mg/kg Inhilation: LC50 (rat): 450 mg/L, 4 hours

(continued from page 3)

Acute Effects of this mixture:

Skin:	Contact will immediately cause a severe rash and burns. Overexposure could be deadly or cause bone cancer.
Eye:	Produces rapid severe eye irritation that can be damaging instantly upon contact .
Ingestion:	Can be fatal. Extremely harmful to mouth, throat, esophagus and all organs.
Inhalation:	Concentrated mists cause immediate respiratory discomfort; can lead to serious chronic complications and or could be fatal from overexposure.
Carcinogens:	Sulfuric Acid is a known suspect carcinogen according to OSHA.

*No other toxicological data is available on this mixture.

12 Ecological Information

12.1-12.6 **No ecological information is available nor has been performed on these sections.**

General Notes:

Do not allow large quantities of undiluted product enter the ground, waterways or waste water canals.
This product is harmful to aquatic life.

13 Disposal Considerations

13.1 **Waste treatment methods**

Product:	Follow local regulations for proper disposal and reporting of spills.
Contaminated packaging:	If empty contamined containers are recycled or disposed of, the receiver must be informed about possible hazards. Original labels must not be removed, lids closed and provide person collecting the container(s) with an SDS.

14 Transport Information

Not dangerous according to transport regulations

14.1	**UN number:**	UN2922
14.2	**UN proper shipping name:**	Corrosive Liquids, Toxic, NOS (Hydrofluoric Acid, Sulfuric Acid)
14.3	**Transport hazard class(es):**	8(6.1)
14.4	**Packing group:**	II
14.5	**Environmental hazards:**	Aquatic
14.6	**Special precautions for user:**	None known

15 Regulatory Information

Proposition 65 (Chemicals known to cause cancer)

Sulfuric Acid

Section 313 (specific toxic chemical listings)

Hydrogen Fluoride, Sulfuric Acid, 2-Butoxyethanol

Section 355 (extremely hazardous substances)

Hydrogen Fluoride, Sulfuric Acid

TSCA (Toxic Substances Control Act)

All ingredients are listed, registered or exempted.

16 Other Information

DISCLAIMER:

Information presented herein has been compiled from sources considered to be accurate and reliable, but is not guaranteed to be so. Since conditions of use are beyond our control we make warrantees, expressed or implied. If anything is added to this product the information presented here may be altered and could make this SDS invalid. This SDS shall not establish a legally valid contractual relationship.

LEGEND:

ACGIH: American Conference of Governmental Industrial Hygienists / CAS:Chemical Abstracts Services

CHEMTREC:Chemical Transportation Emergency Center / DOT:Department of Transportation

EHS:Extremely Hazardous Substances / EPA: Environmental Protection Agency

HMIS: Hazardous Materials Identification System / IARC:International Agency for Research on Cancer

LEL/UEL:Lower and Upper Explosive Limit / mg/m3:Milligrams per cubic meter / LD50:Lethal Dose 50%

NIOSH:National Institute of Occupational Health & Safety / NFPA:National Fire Protection Association

NTP:National Toxicology Program / OSHA:Occupational Safety & Health Administration

PEL:Permissable Exposure Limit / PPE:Personal Protective Equipment /

SARA:Super fund Amendments and Reauthorization Act / SDS:Safety Data Sheet / TLV:Threshold Limit Value

TWA:Time Weighted Average / TSCA:US Toxic Substrance Control Act