

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

SECTION 1: Identification

1.1 Product Identifier

Trade Name Fuhry
Product Number 10-10115

1.2 Relevant Identified Uses

Relevant Identified Uses Acidic Presoak

1.3 Details of the Supplier of the Safety Data Sheet

Car Wash Technologies 322 19th St SW Forest Lake, MN 55025 United States

Telephone: (651) 272-5459

1.4 Emergency Telephone Number

(651) 272-5459.

SECTION 2: Hazard(s) Identification

2.1 Classification of the Substance

Classification Acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Hazard Statement	Hazard Class	Category
H301	acute toxicity (oral)	3
H310	acute toxicity (dermal)	2
H332	acute toxicity (inhal.)	4
H314	skin corrosion/irritation	1B
H318	serious eye damage/eye irritation	1
H350	carcinogenicity	1A

Employ good industrial hygiene practice

2.2 Label Elements







Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Signal Word **DANGER**

United States: en Page: 1 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

- Hazard Statements

H301 Toxic if swallowed. H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled. H350 May cause cancer.

- Precautionary Statements

P201 Obtain special instructions before use.

P260 Do not breathe dusts or mists.

P262 Do not get in eyes, on skin, or on clothing.

P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing.

P301+P310 If swallowed: Immediately call a poison center/doctor. P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P321 Specific treatment (see on this label).

P352 Wash with plenty of water.

P362 Take off contaminated clothing and wash before reuse.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container to industrial combustion plant.

2.3 Other Hazards

Hazards Not Otherwise Classified

Harmful to aquatic life with long lasting effects (GHS category 3: aquatic toxicity - acute and/or chronic).

SECTION 3: Composition/Information on Ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Description of the Mixture

Name of Substance	CAS No	Wt%
Water	7732-18-5	50 - < 75
Dodecylbenzenesulfonic acid	68584-22-5 27176-87-0	10 - < 25
Sulfuric acid	7664-93-9	5 – < 10
Ammonium hydrogen fluoride	1341-49-7	5 – < 10
Sodium Xylenesulfonate	1300-72-7	1-<5
Hydrofluoric acid	7664-39-3	1-<5
Ammonium fluoride	12125-01-8	<1

United States: en Page: 2 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

SECTION 4: First-Aid Measures

4.1 Description of First-Aid Measures

General Notes

Do not leave affected person unattended. Remove victim out of the danger area. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following Inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following Skin Contact

Wash with plenty of soap and water.

Following Eye Contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart.

Following Ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Seek medical advice immediately. Even if victim feels no complaints, medical treatment is necessary. Medical treatment necessary.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

RUB WITH A GEL CONTAINING CALCIUM GLUCONATE.
RINSE COPIOUSLY WITH A CALCIUM GLUCONATE SOLUTION.

SECTION 5: Fire-Fighting Measures

5.1 Extinguishing Media

Suitable Extinguishing Media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO2)

5.2 Special Hazards Arising from the Substance or Mixture

Contact with metals may emit flammable hydrogen gas.

5.3 Fire-Fighting Measures

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel

Remove persons to safety.

For Emergency Responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental Precautions

Do not empty into drains, surface water or soil. If the product has entered a water course, sewer or soil, inform the responsible authority.

United States: en Page: 3 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

6.3 Methods and Material for Containment and Cleaning Up

Advice on How to Contain a Spill

Prevent entry to sewers and public waters. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Advice on How to Clean Up a Spill

Collect spillage. Ensure good ventilation and exhaustion. Place in appropriate containers for disposal.

6.4 Reference to Other Sections

Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

Measures to Prevent Fire as well as Aerosol and Dust Generation

Use local and general ventilation. Use only in well-ventilated areas.

- Handling of Incompatible Substances or Mixtures
- Do not mix with alkali.

- Keep Away From

Caustic solutions

Advice on General Occupational Hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Ventilation Requirements

Keep any substance that emits harmful vapors or gases in a place that allows these to be permanently extracted.

Packaging Compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Occupational Exposure Limit Values (Workplace Exposure Limits)

Coun try	Name of Agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceil- ing-C [ppm]	Ceil- ing-C [mg/m ³]	Nota- tion	Sourc e
US	hydrogen fluoride	7664-39-3	REL	3 (10 h)	2.5 (10 h)			6 (15 min)	5 (15 min)		NIOSH REL
US	hydrogen fluoride	7664-39-3	PEL	3						F	29 CFR 1910.10 00
US	hydrogen fluoride	7664-39-3	TLV®	0.5				2		F, H	ACGIH® 2024
US	hydrogen fluoride (hydrofluoric acid)	7664-39-3	PEL (CA)	0.4	0.33	1	0.83			F, H	Cal/OSH A PEL
US	sulfuric acid	7664-93-9	PEL		0.1		3				Cal/OSH

United States: en Page: 4 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

Occupational Exposur	e Limit Values (\	Vorkplace	Exposu	re Limits)	ļ

Coun try	Name of Agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/m	STEL [ppm]	STEL [mg/m ³]	Ceil- ing-C [ppm]	Ceil- ing-C [mg/m ³]	Nota- tion	Sourc e
			(CA)								A PEL
US	sulfuric acid	7664-93-9	REL		1 (10 h)						NIOSH REL
US	sulfuric acid	7664-93-9	PEL		1						29 CFR 1910.10 00
US	sulfuric acid	7664-93-9	TLV®		0.2					t	ACGIH® 2024

Notation

Ceiling-C ceiling value is a limit value above which exposure should not occur

F calculated as F (fluorine)
H absorbed through the skin

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period

(unless otherwise specified)

t thoracic fraction

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-

weighted average (unless otherwise specified

8.2 Exposure Controls

Appropriate Engineering Controls

General ventilation.

Individual Protection Measures (Personal Protective Equipment)

Eye/Face Protection

Wear eye/face protection.

Skin Protection

- Hand Protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Body Protection

Wear suitable protective clothing. Wear suitable face shield.

- Other Protection Measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory Protection

In case of inadequate ventilation wear respiratory protection.

Environmental Exposure Controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

United States: en Page: 5 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Appearance

Physical State	Liquid
Color	Light brown
Foam Color	White
Fragrance	Chemical

Other safety parameters

pH (value)	1 (acid)
Melting Point/Freezing Point	No Data Available
Initial boiling point and boiling range	No Data Available
Flash Point	>212 °F
Evaporation rate	No Data Available
Flammability (solid, gas)	No Data Available
Vapor pressure	No Data Available
Density	1.116 ^g / _{ml}

Solubility(ies)

- Water solubility	Miscible in Any Proportion
--------------------	----------------------------

Viscosity

Other Information	There Is No Additional Information		
Oxidizing Properties	None		
- Kinematic viscosity	No Data Available		

SECTION 10: Stability and Reactivity

10.1 Reactivity

9.2

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical Stability

See below "Conditions to avoid".

10.3 Possibility of Hazardous Reactions

No known hazardous reactions.

10.4 Conditions to Avoid

There are no specific conditions known which have to be avoided.

United States: en Page: 6 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

10.5 Incompatible Materials

Bases, Strong Oxidizers, Reducing Agents, Metals

Release of flammable materials with:

Light metals (due to the release of hydrogen in an acid/alkaline medium)

10.6 Hazardous Decomposition Products

Hazardous combustion products: see section 5.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

Test data are not available for the complete mixture.

Classification Procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification Acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute Toxicity

Toxic if swallowed. Fatal in contact with skin. Harmful if inhaled.

- Acute Toxicity Estimate (ATE)

Oral >136.7 mg/kg
Dermal >150.3 mg/kg
Inhalation: vapor 15.07 mg//4h

Skin Corrosion/Irritation

Causes severe skin burns and eye damage.

Serious eve damage/eve irritation

Causes serious eye damage.

Respiratory or Skin Sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ Cell Mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

May cause cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Name of Substance	CAS No	Classification	Number
Sulfuric acid	7664-93-9	1	

<u>Legend</u>

1 Carcinogenic to humans

National Toxicology Program (United States): Report on Carcinogens

Name of Substance	CAS No	Classification	Number
Sulfuric acid	7664-93-9	Known to be a human carcinogen	9th Report on Carcinogens

Reproductive Toxicity

Shall not be classified as a reproductive toxicant.

United States: en Page: 7 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

Specific Target Organ Toxicity - Single Exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific Target Organ Toxicity - Repeated Exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration Hazard

Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological Information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

12.2 Persistence and Degradability

No Data Available.

12.3 Bioaccumulative Potential

No Data Available.

12.4 Mobility in Soil

No Data Available.

12.5 Other Adverse Effects

No Data Available.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

Sewage Disposal-Relevant Information

Do not empty into drains. Avoid release to the environment.

Waste Treatment of Containers/Packages

Only packagings which are approved (e.g. acc. to DOT) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport Information

14.1 UN Number, Proper Shipping Name, Class and Packing Group

Domestic Ground Non-Bulk Shipments

UN2922, CORROSIVE LIQUID, TOXIC, N.O.S., (AMMONIUM HYDROGENDIFLUORIDE / SULFURIC ACID) 8, (6.1), II

14.2 Special precautions for user

There Is No Additional Information.

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Reportable quantity (RQ) of Fuhry

3,015 lbs (Hydrofluoric acid) (Ammonium hydrogendifluoride)

United States: en Page: 8 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

SECTION 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations Specific for the Product in Question

National Regulations (United States)
Toxic Substance Control Act (TSCA)

all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities

Name of Substance	CAS No	Notes	Reportable quantity (pounds)	Threshold plan- ning quantity (pounds)
Sulfuric acid	7664-93-9		1,000	1000
Hydrofluoric acid	7664-39-3		100	100

⁻ Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings

Name of Substance	CAS No	Remarks	Effective date
Sulfuric acid	7664-93-9	acid aerosols including mists, va- pors, gas, fog, and other airborne forms of any particle size	12/31/1986
Hydrofluoric acid	7664-39-3		12/31/1986

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of Substance	CAS No	Final RQ pounds (Kg)
Sulfuric acid	7664-93-9	1000 (454)
Dodecylbenzenesulfonic acid	27176-87-0	1000 (454)
Hydrofluoric acid	7664-39-3	100 (45,4)
Ammonium fluoride	12125-01-8	100 (45,4)
Ammonium hydrogen fluoride	1341-49-7	100 (45,4)

Clean Air Act

Name of Substance	CAS No	Type of registra- tion	Basis for listing	Threshold quant- ity (lbs)
Hydrofluoric acid	7664-39-3	Toxic substance	a b	1000

Legend

a Mandated for listing by Congress.

b On EHS list, vapor pressure 10 mmHg or greater.

United States: en Page: 9 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Proposition 65 List of chemicals

Name of Substance	Name acc. to inventory	CAS No	Type of the toxicity	Date listed
Sulfur dioxide	sulfur dioxide	7446-09-5	development- al	07/28/2011
Ethane-1,2-diol	ethylene glycol (ethanediol)	107-21-1	development- al	06/18/2015
Cumene	cumene	98-82-8	cancer	04/05/2010
Benzene	benzene	71-43-2	cancer	02/26/1987
Benzene	benzene	71-43-2	development- al, male	12/25/1997
Toluene	toluene	108-88-3	development- al	12/31/1990
Ethylbenzene	ethylbenzene	100-41-4	cancer	06/10/2004

Right to Know Hazardous Substance List

- Cleaning Product Right to Know Act Substance List (CA-RTK)

Name of Substance	CAS No	Functionality	Authoritative Lists
Sulfuric acid	7664-93-9		IARC Carcinogens - 1 NTP 13th RoC - known OEHHA RELs Prop 65
Hydrofluoric acid	7664-39-3		CA TACs OEHHA RELs

- Toxic or Hazardous Substance List (MA-TURA)

Name of Substance	CAS No	DEP CODE	PBT / HHS / LHS	PBT / HHS Threshold	De Minimis Concen- tration Threshold
Sulfuric acid	7664-93-9				1.0 %
Dodecylbenzenesulfonic acid	27176-87-0				1.0 %
Hydrofluoric acid	7664-39-3		HHS	1000 LBS	1.0 %
Ammonium fluoride	12125-01-8				1.0 %
Ammonium fluoride	7664-41-7				1.0 %
Ammonium hydrogen fluoride	1341-49-7				1.0 %
Ammonium hydrogen fluoride	7664-41-7				1.0 %

- Hazardous Substances List (MN-ERTK)

Name of Substance	CAS No	References	Remarks
Sulfuric acid	7664-93-9	A, N, O	
Hydrofluoric acid	16984-48-8	A, N, O	dust
Hydrofluoric acid	7664-39-3	A, N, O	

United States: en Page: 10 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

Name of Substance	CAS No	References	Remarks
Ammonium hydrogen fluoride	16984-48-8	A, N, O	dust

Legend

A American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices for 1992-93", available from ACGIH

dust If the substance poses an airborne particulate exposure hazard, the substance is followed by the word "dust."

N National Institute for Occupational Safety and Health (NIOSH), "Recommendations for Occupational Safety and Health Standards," August 1988, available from NIOSH, Publications Dissemination Office, Division of Standards Development and Technology Transfer

O Occupational Safety and Health Administration (OSHA), Safety and Health Standards, Code of Federal Regulations, title 29, part 1910, subpart Z, "Toxic and Hazardous Substances, 1990." General information: Minnesota Department of Labor and Industry, Occupational Safety and Health Division

- Hazardous Substance List (NJ-RTK)

Name of Substance	CAS No	Remarks	Classifications
Sulfuric acid	7664-93-9		CA CO R2
Dodecylbenzenesulfonic acid	27176-87-0		СО
Hydrofluoric acid	7664-39-3		CO R1
Ammonium fluoride	12125-01-8		
Ammonium hydrogen fluoride	1341-49-7		СО

<u>Legend</u>

CA Carcinogenic CO Corrosive

R1 Reactive - First DegreeR2 Reactive - Second Degree

- Hazardous Substance List (Chapter 323) (PA-RTK)

Name acc. to inventory	CAS No	Classification
SULFURIC ACID	7664-93-9	E
BENZENESULFONIC ACID, DODECYL-	27176-87-0	E
HYDROFLUORIC ACID	7664-39-3	E
AMMONIUM FLUORIDE ((NH4)F)	12125-01-8	E
AMMONIUM FLUORIDE ((NH4)(HF2))	1341-49-7	E

Legend

E Environmental hazard

- Hazardous Substance List (RI-RTK)

Name of Substance	CAS No	References
Sulfuric acid	7664-93-9	T, F
Hydrofluoric acid	7664-39-3	T, F
Hydrofluoric acid	7664-39-3	T, F

United States: en Page: 11 / 12

acc. to 29 CFR 1910.1200 App D

Fuhry

Revision Date: 12/16/2024

Name of Substance	CAS No	References
Ammonium fluoride	12125-01-8	F

<u>Legend</u>

F Flammability (NFPA®)
T Toxicity (ACGIH®)

Industry or Sector Specific Available Guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating
Chronic	*
Health	3
Flammability	1
Physical hazard	0
Personal protection	-

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard
Flammability	1
Health	3
Instability	0
Special hazard	

National inventories

Country	Inventory	Status
US	TSCA	all ingredients are listed (ACTIVE)

<u>Legend</u>

TSCA Toxic Substance Control Act

SECTION 16: Other Information, Including Date of Preparation or Last Revision

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Classification Procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Disclaimer

This information is based on the present state of our knowledge and does not constitute an assurance of product properties nor establishes contract legal rights. All data about health and safety are only for information. They should therefore not be construed as specifications. This SDS has been compiled and is solely intended for this product.

United States: en Page: 12 / 12