Printing date 05/08/2018 Reviewed on 05/08/2018

1 Identification

· Product identifier

· Trade name: WATER SPOT REMOVER

· Article number: C-30-Q

- · Application of the substance / the mixture Cleaning agent/ Cleaner
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

BAF Industries 8010 Dixie Highway

Florence, KY 41042 USA

Phone: 859-372-5900

- · Information department: msds_info@prowax.com
- · Emergency Telephone Number:

ChemTrec: 800-424-9300 Outside USA 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



Skull and crossbones

Toxic if swallowed.

Toxic in contact with skin.

Toxic if inhaled.



Corrosion

Causes severe skin burns and eye damage.

Causes serious eye damage.



May cause respiratory irritation.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms







GHS05

GHS06

GHS07

- · Signal word Danger
- · Hazard-determining components of labeling:

Benzenesulfonic acid, C10-16-alkyl derivs.

hydrogen fluoride (70%)

sulphuric acid

· Hazard statements

Toxic if swallowed, in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

May cause respiratory irritation.

(Contd. on page 2)

Printing date 05/08/2018 Reviewed on 05/08/2018

Trade name: WATER SPOT REMOVER

(Contd. of page 1)

· Precautionary statements

Avoid breathing mist/vapours/spray.

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

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

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.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Store in a well-ventilated place. Keep cool.

Store in a closed container.

Store locked up.

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:		
68584-22-5	Benzenesulfonic acid, C10-16-alkyl derivs.	2.5-10%
7664-93-9	sulphuric acid	2.5-10%
7664-39-3	hydrogen fluoride (70%)	≤2.5%

4 First-aid measures

- · Description of first aid measures
- · General information:

Immediately remove any clothing soiled by the product.

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Do not induce vomiting; immediately call for medical help.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.

(Contd. on page 3)

Printing date 05/08/2018 Reviewed on 05/08/2018

Trade name: WATER SPOT REMOVER

(Contd. of page 2)

· Advice for firefighters

· Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits

211 1111	in this time, the remaining constituent has no known exposure timus.		
7664	7664-93-9 sulphuric acid		
PEL	Long-term value: 1 mg/m³		
REL	Long-term value: 1 mg/m³		
TLV	Long-term value: 0.2* mg/m³ *as thoracic fraction		
7664	-39-3 hydrogen fluoride (70%)		

PEL Long-term value: 3 ppm REL Long-term value: 2.5 mg/m³, 3 ppm Ceiling limit value: 5* mg/m³, 6* ppm *15-min, as F

(Contd. on page 4)

Printing date 05/08/2018 Reviewed on 05/08/2018

Trade name: WATER SPOT REMOVER

(Contd. of page 3)

TLV Long-term value: 0.41 mg/m³, 0.5 ppm Ceiling limit value: 1.64 mg/m³, 2 ppm

as F; Skin; BEI

· Ingredients with biological limit values:

7664-39-3 hydrogen fluoride (70%)

BEI 3 mg/g creatinine

Medium: urine Time: prior to shift

Parameter: Flourides (background)

10 mg/g creatinine Medium: urine Time: end of shift Parameter: Flourides (backgrou

Parameter: Flourides (background)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

LIS A

Printing date 05/08/2018 Reviewed on 05/08/2018

Trade name: WATER SPOT REMOVER

(Contd. of page 4)

9 Physical and chemical proper	ties
· Information on basic physical and c	chemical properties
· General Information	menticus properties
· Appearance:	
Form:	Liquid
Color:	Light beige
· Odor:	Acrid
· Odor threshold:	Not determined.
· pH-value at 20 °C (68 °F):	<1
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
· Flash point:	301 °C (573.8 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	>300 °C (>572 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
· Density at 20 °C (68 °F):	$1.0278 \text{ g/cm}^3 (8.577 \text{ lbs/gal})$
Relative density	Not determined.
Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/wate	e r): Not determined.
· Viscosity:	
Dynamic:	Not determined
Kinematic:	Not determined.
· Solvent content:	
Water:	87.2 %
VOC content:	0.00 %
Solids content:	5.8 %
· Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.

(Contd. on page 6)

Printing date 05/08/2018 Reviewed on 05/08/2018

Trade name: WATER SPOT REMOVER

(Contd. of page 5)

· Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Strong caustic effect on skin and mucous membranes.
- · on the eye:

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Toxic

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· Carcinogenic categories

· IARC (International Agency f	for Research on Cancer)
--------------------------------	-------------------------

7664-93-9 sulphuric acid

· NTP (National Toxicology Program)

7664-93-9 sulphuric acid

K

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

Printing date 05/08/2018 Reviewed on 05/08/2018

Trade name: WATER SPOT REMOVER

(Contd. of page 6)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information	
· UN-Number · DOT, ADR, IMDG, IATA	

UN2922

· UN proper shipping name

Corrosive liquids, toxic, n.o.s. (Hydrofluoric acid, Sulfuric acid)

ADR

2922 Corrosive liquids, toxic, n.o.s. (Hydrofluoric acid, Sulfuric acid)

acid)

· IMDG, IATA CORROSIVE LIQUID, TOXIC, N.O.S. (HYDROFLUORIC ACID, SULPHURIC ACID)

- · Transport hazard class(es)
- $\cdot DOT$





· Class
· Label
8 Corrosive substances
8, 6.1

 $\cdot ADR$





· Class· Label8 Corrosive substances8+6.1

 \cdot IMDG





Class
Label
8 Corrosive substances
8/6.1

 \cdot IATA





· Class
· Label
8 Corrosive substances
8 (6.1)

· Packing group

· DOT, ADR, IMDG, IATA

II

(Contd. on page 8)

Printing date 05/08/2018 Reviewed on 05/08/2018

Trade name: WATER SPOT REMOVER

	(Contd. of page
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Corrosive substances
Danger code (Kemler):	86
EMS Number:	F- A , S - B
Segregation groups	Acids
Stowage Category	B
Stowage Code	SW2 Clear of living quarters.
Transport in bulk according to Annex	II of
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 1 L
	On cargo aircraft only: 30 L
ADR	
Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
IMDG	
Limited quantities (LQ)	1L
Excepted quantities (\widetilde{EQ})	Code: E2
· · ·	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 2922 CORROSIVE LIQUIDS, TOXIC, N.O. (HYDROFLUORIC ACID, SULFURIC ACID), 8 (6.1), II

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

7664-93-9 sulphuric acid

· Section 313 (Specific toxic chemical listings):

7664-93-9 sulphuric acid

- · TSCA (Toxic Substances Control Act) All ingredients are listed
- · TSCA new (21st Century Act) (Substances not listed)

7664-39-3 hydrogen fluoride (70%)

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

(Contd. on page 9)

Printing date 05/08/2018 Reviewed on 05/08/2018

Trade name: WATER SPOT REMOVER

(Contd. of page 8)

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

7664-93-9 sulphuric acid

A2

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms







GHS05

GHS06 GHS07

· Signal word Danger

· Hazard-determining components of labeling:

Benzenesulfonic acid, C10-16-alkyl derivs.

hydrogen fluoride (70%)

sulphuric acid

· Hazard statements

Toxic if swallowed, in contact with skin or if inhaled.

Causes severe skin burns and eye damage.

May cause respiratory irritation.

· Precautionary statements

Avoid breathing mist/vapours/spray.

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

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

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.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Absorb spillage to prevent material damage.

Store in a well-ventilated place. Keep cool.

Store in a closed container.

Store locked up.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision 05/08/2018 / 13

· Abbreviations and acronyms:

ICAO: International Civil Aviation Organisation

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

(Contd. on page 10)

Printing date 05/08/2018 Reviewed on 05/08/2018

Trade name: WATER SPOT REMOVER

(Contd. of page 9)

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit

Acute Tox. 3: Acute toxicity – Category 3

Skin Corr. 1A: Skin corrosion/irritation – Category 1A Eye Dam. 1: Serious eye damage/eye irritation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

* * Data compared to the previous version altered.

USΔ