



Safety Data Sheet acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

1 Identification

- **Product identifier**
- **Trade name: #669 METAL CLEANER**
- **Article number: J-09R**
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
ABCO Products of Sacramento
8255 Alpine Ave., SUITE A
Sacramento, CA 95826

Tel: 916-447-9931
- **Information department: Product safety department**
- **Emergency telephone number:**
CHEMTREC
800-424-9300 ACCT# 11787

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS06 Skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

Acute Tox. 1 H310 Fatal in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 Health hazard

Carc. 1A H350 May cause cancer.



GHS05 Corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**

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

- **Hazard pictograms**



GHS05



GHS06



GHS08

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 1)

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

hydrofluoric acid

sulphuric acid

· **Hazard statements**

Fatal if swallowed or in contact with skin.

Toxic if inhaled.

Causes severe skin burns and eye damage.

May cause cancer.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dusts or mists.

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

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

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

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

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.

IF exposed or concerned: Get medical advice/attention.

Take off immediately all contaminated clothing and wash it before reuse.

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

Store locked up.

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

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**

Health = 3

Fire = 0

Reactivity = 1

· **HMIS-ratings (scale 0 - 4)**

Health = 3

Fire = 0

Reactivity = 1

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** *Not applicable.*

· **vPvB:** *Not applicable.*

US

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 2)

3 Composition/information on ingredients

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

- **Dangerous components:**

7664-39-3	hydrofluoric acid	<25%
7664-93-9	sulphuric acid	<15%
	Proprietary	<5%

- **Additional information:**

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of 1910.1200 of 29 CFR 1910.1200 Trade Secrets.

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 eyes for at least several minutes under running water.
If easy to do so, remove contact lenses if worn.
Seek immediate medical advice.
- **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**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:**
Mouth respiratory protective device.

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 3)

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with the skin or eyes.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Avoid contact with the eyes, skin and clothing.

Ensure adequate ventilation.

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.

- **Protective Action Criteria for Chemicals**

- **PAC-1:**

7664-93-9	sulphuric acid	0.20 mg/m ³
	Proprietary	30 mg/m ³

- **PAC-2:**

7664-93-9	sulphuric acid	8.7 mg/m ³
	Proprietary	330 mg/m ³

- **PAC-3:**

7664-93-9	sulphuric acid	160 mg/m ³
	Proprietary	2,000 mg/m ³

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.**

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 4)

- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **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**
All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.
- **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.

7664-39-3 hydrofluoric acid

PEL	Long-term value: 1* mg/m ³ , 3 ppm as F, *sulfuric acid
REL	Long-term value: 2.5 mg/m ³ , 3 ppm Ceiling limit value: 5* mg/m ³ , 6* ppm *15-min, as F
TLV	Long-term value: 0.5 ppm Ceiling limit value: 2 ppm as F; Skin; BEI

7664-93-9 sulphuric acid

PEL	Long-term value: 1 mg/m ³
REL	Long-term value: 1 mg/m ³
TLV	Long-term value: 0.2* mg/m ³ *as thoracic fraction, A2

- **Ingredients with biological limit values:**

7664-39-3 hydrofluoric acid

BEI	3 mg/g creatinine Medium: urine Time: prior to shift Parameter: Fluorides (background)
	10 mg/g creatinine Medium: urine Time: end of shift Parameter: Fluorides (background)

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 5)

· **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

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:

Liquid

Color:

According to product specification

· **Odor:**

Acidic

· **Odor threshold:**

Not determined.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 6)

· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· 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):	40 hPa (30 mm Hg)
· Density (Specific Gravity) at 20 °C (68 °F):	1.08083 g/cm ³ (9.01953 lbs/gal)
· Bulk density:	1,080 kg/m ³
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Water:	PROPRIETARY %
VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal
Solids content:	0.0 %
· 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 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 7)

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**· **Acute toxicity:**· **LD/LC50 values that are relevant for classification:**

ATE (Acute Toxicity Estimate)

Oral	LD50	22.1 mg/kg
Dermal	LD50	22.1 mg/kg
Inhalative	LC50/4 h	2.21 mg/l

· **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

Very toxic

Danger through skin absorption.

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 for Research on Cancer)**

7664-93-9 sulphuric acid

1

· **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.

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 8)

- **Additional ecological information:**

- **General notes:**

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

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

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

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

- **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, IMDG, IATA**

UN1790

- **UN proper shipping name**

- **DOT**

Hydrofluoric acid

- **IMDG, IATA**

HYDROFLUORIC ACID

- **Transport hazard class(es)**

- **DOT**



- **Class**

8 Corrosive substances

- **Label**

8, 6.1

- **IMDG**



- **Class**

8 Corrosive substances

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 9)

· Label	8/6.1
· IATA	
 	
· Class	8 Corrosive substances
· Label	8 (6.1)
· Packing group	
· DOT, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Corrosive substances
· Hazard identification number (Kemler code):	86
· EMS Number:	F-A, S-B
· Segregation groups	Strong acids
· Stowage Category	D
· Stowage Code	SW1 Protected from sources of heat. SW2 Clear of living quarters.
· Handling Code	H2 Keep as cool as reasonably practicable
· Segregation Code	SG36 Stow "separated from" SGG18-alkalis. SG49 Stow "separated from" SGG6-cyanides
· Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1790 HYDROFLUORIC 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

(Contd. on page 11)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 10)

· **Section 313 (Specific toxic chemical listings):**

7664-93-9 sulphuric acid

· **TSCA (Toxic Substances Control Act):**

7732-18-5 water, distilled, conductivity or of similar purity

ACTIVE

7664-93-9 sulphuric acid

ACTIVE

Proprietary

*

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **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.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

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 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

hydrofluoric acid

sulphuric acid

· **Hazard statements**

Fatal if swallowed or in contact with skin.

Toxic if inhaled.

Causes severe skin burns and eye damage.

May cause cancer.

(Contd. on page 12)

Safety Data Sheet

acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 11)

Precautionary statements

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Do not breathe dusts or mists.
 Do not get in eyes, on skin, or on clothing.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves/protective clothing/eye protection/face protection.
 If swallowed: Immediately call a poison center/doctor.
 Specific treatment (see on this label).
 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.
 IF exposed or concerned: Get medical advice/attention.
 Take off immediately all contaminated clothing and wash it before reuse.
 Store in a well-ventilated place. Keep container tightly closed.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations:**Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
 Exceptions can be made by the authorities in certain cases.

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

16 Other information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

Department issuing SDS: Environment protection department.

Contact: -

Date of preparation / last revision 09/16/2025 / -

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 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)
 NFPA: National Fire Protection Association (USA)
 HMIS: Hazardous Materials Identification System (USA)
 VOC: Volatile Organic Compounds (USA, EU)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic

(Contd. on page 13)

Safety Data Sheet
acc. to OSHA HCS

Printing date 09/16/2025

Reviewed on 09/16/2025

Trade name: #669 METAL CLEANER

(Contd. of page 12)

*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. 2: Acute toxicity – Category 2**Acute Tox. 1: Acute toxicity – Category 1**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**Carc. 1A: Carcinogenicity – Category 1A**** Data compared to the previous version altered.**