# Safety Data Sheet

## SECTION 1: Identification

### 1.1 GHS Product identifier

| | |
|---|---|
| Product name | **Great White** |
| Product number | 890 |
| Brand | Crown Chemical, Inc. |

### 1.2 Other means of identification

Great White

### 1.3 Recommended use of the chemical and restrictions on use

Super Strength Foaming Descaler for Car Wash Tunnels and Equipment

### 1.4 Supplier's details

| | |
|---|---|
| Name | Crown Chemical, Inc. |
| Address | 4701 W. 136th. St.<br>Crestwood, Illinois 60418<br>U.S.A. |
| Telephone | 708-371-6990 |
| Fax | 708-371-6992 |
| email | info@crown-chem.com |

### 1.5 Emergency phone number

800-535-5053

## SECTION 2: Hazard identification

### General hazard statement

Fatal if swallowed, in contact with skin or if inhaled. Causes severe skin burns and serious eye damage.

### 2.1 Classification of the substance or mixture

### GHS classification in accordance with: OSHA (29 CFR 1910.1200)

- Acute toxicity, dermal, Cat. 1
- Acute toxicity, inhalation, Cat. 2
- Acute toxicity, inhalation, Cat. 3
- Acute toxicity, oral, Cat. 2
- Eye damage/irritation, Cat. 1
- Skin corrosion/irritation, Cat. 1A

### 2.2 GHS label elements, including precautionary statements

### Pictogram

1. Skull and crossbones; 2. Corrosion

### Signal word

**Danger**

**Hazard statement(s)**

| | |
|---|---|
| H300 | Fatal if swallowed |
| H310 | Fatal in contact with skin |
| H314 | Causes severe skin burns and eye damage |

| | |
|---|---|
| H318 | Causes serious eye damage |
| H330 | Fatal if inhaled |
| H331 | Toxic if inhaled |

**Precautionary statement(s)**

| | |
|---|---|
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray. |
| P261 | Avoid breathing dust/fume/gas/mist/vapors/spray. |
| P262 | Do not get in eyes, on skin, or on clothing. |
| P264 | Wash hands & skin thoroughly after handling. |
| 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/eye protection/face protection. |
| P284 | [In case of inadequate ventilation] wear respiratory protection. |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor/... |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P302+P352 | IF ON SKIN: Wash with plenty of water/Take off immediately contaminated clothing and wash it before reuse. Call a poison control center or doctor for treatment advice if irritation persists. |
| 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. |
| P310 | Immediately call a POISON CENTER/doctor for treatment advice. |
| P311 | Call a POISON CENTER/doctor/... |
| P320 | Specific treatment is urgent (see … on this label). |
| P321 | Specific treatment (see details on label). |
| P330 | Rinse mouth. |
| P361+P364 | Take off immediately all contaminated clothing and wash it before reuse. |
| P363 | Wash contaminated clothing before reuse. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents and container in accordance with all local, state, national and international regulations. |

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

Fatal if swallowed, in contact with skin or if inhaled. Causes severe skin burns and serious eye damage.

**Hazardous components**

**1. Hydrofluoric acid (conc. less than 50%)**

| | |
|---|---|
| Concentration | 7 - 12 % (By Weight) |
| EC no. | 231-634-8 |
| CAS no. | 7664-39-3 |
| Index no. | 009-003-00-1 |
| - Acute toxicity, dermal, Cat. 1 | |
| - Acute toxicity, inhalation, Cat. 2 | |
| - Acute toxicity, oral, Cat. 2 | |
| - Skin corrosion/irritation, Cat. 1A | |
| H300 | Fatal if swallowed |
| H310 | Fatal in contact with skin |
| H314 | Causes severe skin burns and eye damage |
| H330 | Fatal if inhaled |
| SCLs/M-factors/ATEs | Skin Corr. 1A; H314: C ≥ 7 % |
| | Skin Corr. 1B; H314: 1 % ≤ C < 7 % |
| | Eye Irrit. 2; H319: 0,1 % ≤ C < 1 % |

**2. Sulfuric acid**

| | |
|---|---|
| Concentration | 8 - 13 % (By Weight) |
| CAS no. | 7664-93-9 |

- Skin corrosion/irritation, Cat. 1A

| | |
|---|---|
| H314 | Causes severe skin burns and eye damage |
| SCLs/M-factors/ATEs | Skin Corr. 1A; H314: C ≥ 15 %<br>Skin Irrit. 2; H315: 5 % ≤ C < 15 %<br>Eye Irrit. 2; H319: 5 % ≤ C < 15 % |

**3. Butoxyethanol**

| | |
|---|---|
| Concentration | 4 - 9 % (By Weight) |
| CAS no. | 111-76-2 |

- Flammable liquids, Cat. 4
- Acute toxicity, dermal, Cat. 4
- Acute toxicity, inhalation, Cat. 4
- Acute toxicity, oral, Cat. 4
- Skin corrosion/irritation, Cat. 2
- Eye damage/irritation, Cat. 2A

| | |
|---|---|
| H227 | Combustible liquid |
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| SCLs/M-factors/ATEs | Oral: ATE = 1200 mg/kg |

**Trade secret statement (OSHA 1910.1200(i))**
The specific chemical identities and/or actual concentrations for one or more components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i).

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

| | |
|---|---|
| General advice | Both liquid and vapor are extremely corrosive and destructive to tissue. Specialized medical treatment is required for all exposures. Do not breathe fumes, mist or vapors, which are extremely corrosive to nasal passages, respiratory tract and mucous membranes. Do not get in eyes, on skin or on clothing. Product can absorb through the skin and cause internal damage. Wear protective rubber gloves when handling this product. Wash hands, forearms and face thoroughly after handling. Wear chemical splash goggles which seal to the face when using this product. Wear NIOSH approved respiratory protection at all times when using this product. Do not eat, drink or smoke when using this product. Use only outdoors in a well ventilated area. Keep only in original container. |
| If inhaled | Remove person to fresh air and keep comfortable for breathing. Immediately call a poison control center or doctor for treatment advice. If breathing has stopped, an authorized person should begin artificial respiration at once, until the victim is able to breathe easily himself. |
| In case of skin contact | Immediately wash the burned area with plenty of water for 15 minutes. Remove contaminated clothing while continuing to wash. After at least 5 minutes of washing, immerse the burned area in a solution of 0.13% iced aqueous Benzalkonium Chloride or 2.5% Calcium Gluconate gel until pain is relieved. Call a poison control center or doctor for treatment advice. |

| | |
|---|---|
| In case of eye contact | Immediately flush the eyes with large amounts of gently flowing water. Hold the eyelids open and away from the eye to allow thorough flushing. If the person is wearing contact lenses, the lenses should be removed, if possible. Flushing should not be interrupted, and the lenses should only be removed by a person qualified to do so. Victim should be taken to a doctor as soon as possible, preferably an eye specialist. Ice water compresses may be applied to the eyes during transportation. Avoid rubbing eyes. |
| If swallowed | Do NOT induce vomiting. Immediately have victim drink several large glasses of water or milk to dilute the acid. Do not give emetics or baking soda. Never give anything by mouth to an unconscious person. Give victim several ounces of milk of magnesia, any antacid containing calcium or grind up and administer up to 30 antacid tablets with water. Ingestion of HF is a life threatening emergency. Immediately call a poison control center or doctor for treatment advice. |

### 4.2 Most important symptoms/effects, acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary
Treat exposure symptomatically. In all cases of eye contact, ingestion, or inhalation, contact a doctor or Poison Control Center immediately.

## SECTION 5: Fire-fighting measures

### 5.1 Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Specific hazards arising from the chemical
Sulfuric acid: No data available.

### 5.3 Special protective actions for fire-fighters
Wear self-contained breathing apparatus for firefighting if necessary.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
Initiate spill containment procedures immediately using containment or absorbtion methods. Keep people away from area. Put on appropriate protective equipment (see Section 8).

### 6.2 Environmental precautions
Should not be released into the environment. See Section 12 for additional ecological information.

### 6.3 Methods and materials for containment and cleaning up
Do not allow spilled material to enter sewers, waterways or soil. Neutralize with water. Mop, sweep or otherwise collect spilled material and hold for disposal. Consult local government authorities for allowable disposal methods. After removal, rinse area completely with water to remove residue.

### Reference to other sections
For disposal see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling
Both liquid and vapor are extremely corrosive and destructive to tissue. Specialized medical treatment is required for all exposures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in a locked location inaccessible to small children. Keep container closed when not in use. Store in a well ventilated area between 60-100°F (15- 38°C).

### Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

**1. Hydrofluoric acid (conc. less than 50%) (CAS: 7664-39-3)**
PEL (Inhalation): See Annotated Z-2 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): See Annotated Z-2 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): See Annotated Z-2 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): See Annotated Z-2 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

**2. Sulfuric acid (CAS: 7664-93-9 EC: 231-639-5)**
PEL (Inhalation): 1 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 0.1 mg/m3, (ST) 3 mg/m3 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 1 mg/m3; USA (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

TLV® (Inhalation): 0.2 mg/m3, (Thor.); USA (ACGIH)
OSHA Annotated Table Z-1, www.osha.gov

TWA (Inhalation): 0.2 mg/m3; USA (ACGIH)
USA. ACGIH Threshold Limit Values (TLV)

TWA (Inhalation): 1 mg/m3; USA (OSHA)
USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

**3. Butoxyethanol (CAS: 111-76-2)**
PEL (Inhalation): 50 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 240 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 20 ppm (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 5 ppm (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 20 ppm, 97 mg/m3
California permissible exposure limits for chemical contaminants
(Title 8, Article 107)/Skin

TWA (Inhalation): 50 ppm, 240 mg/m3; USA (OSHA)
USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants/Skin designation
The value in mg/m3 is approximate

TWA (Inhalation): 5 ppm, 24 mg/m3; USA (NIOSH)
USA. NIOSH Recommended Exposure Limits/Potential for dermal absorption

TWA (Inhalation): 20 ppm; USA (ACGIH)
USA. ACGIH Threshold Limit Values (TLV)/Upper Respiratory Tract irritation Eye irritation Substances for which there is a Biological Exposure Index or Indices (see BEI® section) Confirmed animal carcinogen with unknown relevance to humans

TLV® (Inhalation): 20 ppm; USA (ACGIH)
OSHA Annotated Table Z-1, www.osha.gov

### 8.2 Appropriate engineering controls
Use with adequate ventilation to maintain exposure limits below listed thresholds.

### 8.3 Individual protection measures, such as personal protective equipment (PPE)

#### Eye/face protection
Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Thermal hazards
No data available.

#### Environmental exposure controls
Do not let product enter drains.

## SECTION 9: Physical and chemical properties and safety characteristics

#### Basic physical and chemical properties

| | |
|---|---|
| Appearance | Green Liquid |
| Odor | Characteristic |
| Odor threshold | No data available. |
| Melting point/freezing point | No data available. |
| Boiling point or initial boiling point and boiling range | No data available. |
| Flammability | None |
| Lower and upper explosion limit/flammability limit | No data available. |
| Flash point | None |
| Auto-ignition temperature | No data available. |
| Decomposition temperature | No data available. |
| pH | <2.0 (1% solution, 22°C) |
| Kinematic viscosity | No data available. |
| Solubility | 100% (in H2O, 22°C) |
| Partition coefficient n-octanol/water (log value) | No data available. |
| Vapor pressure | No data available. |
| Evaporation rate | No data available. |
| Density and/or relative density | 9.13±0.1 (lbs/gal, 22°C) |
| Relative vapor density | No data available. |

### Particle characteristics
No data available.

### Further safety characteristics (supplemental)
No data available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity
Product is highly reactive with alkalis. Reactions may produce hazardous conditions, including violent splattering of corrosive materials. Product is reactive with halogens (such as chlorine) and may release chlorine gas if mixed with these materials. NEVER mix this product with other chemicals. Mix this product ONLY with water.

### 10.2 Chemical stability
Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions
None under normal use conditions.

### 10.4 Conditions to avoid
Heat, flames and sparks.

### 10.5 Incompatible materials
Sulfuric acid: Bases, Halides, Organic materials, Carbides, fulminates, Nitrates, picrates, Cyanides, Chlorates, alkali halides, Zinc salts, permanganates, e.g. potassium permanganate, Hydrogen peroxide, Azides, Perchlorates., Nitromethane, phosphorous, Reacts violently with:, cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide, phosphorous(III) oxide, Powdered metals

### 10.6 Hazardous decomposition products
Sulfuric acid: Hazardous decomposition products formed under fire conditions. - Sulphur oxides
In the event of fire: see section 5

## SECTION 11: Toxicological information

### Information on toxicological effects

### Acute toxicity
The ATE (dermal) of the mixture is: 41.53 mg/kg bw
The ATE (dusts-mists inhalation) of the mixture is: 0.41 mg/l
The ATE (gas inhalation) of the mixture is: 819.67 ppmV
The ATE (oral) of the mixture is: 41.36 mg/kg bw

### Skin corrosion/irritation
Causes severe skin burns.

### Serious eye damage/irritation
Risk of serious damage to eyes.

### Respiratory or skin sensitization
Irritation, pain, redness, blistering.

### Germ cell mutagenicity
No data available.

### Carcinogenicity
No data available.

### Reproductive toxicity
No data available.

### STOT-single exposure
Causes damage to organs.

### STOT-repeated exposure
Causes damage to organs through prolonged or repeated exposure

### Aspiration hazard
May be fatal if swallowed and enters airways.

### Additional information
Sulfuric acid: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.,spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Stomach - Irregularities - Based on Human Evidence
Butoxyethanol: *TOXICITY:
typ. dose mode specie amount units other
TCLo ihl hmn 195 ppm/8H
LD50 orl rat 1480 mg/kg
LC50 ihl rat 450 ppm/4H
LD50 ipr rat 220 mg/kg
LD50 ivn rat 340 mg/kg
LD50 orl mus 1230 mg/kg
LC50 ihl mus 700 ppm/7H
LD50 ipr mus 536 mg/kg
LDLo scu mus 500 mg/kg
LD50 ivn mus 1130 mg/kg
LD50 orl rbt 320 mg/kg
LD50 skn rbt 490 mg/kg
LD50 ivn rbt 280 mg/kg
LD50 orl gpg 1200 mg/kg
LD50 skn gpg 230 mg/kg
LD50 ipr rbt 220 mg/kg

*AQTX/TLM96: 1000-100 ppm

*SAX TOXICITY EVALUATION:
THR = HIGH human irritant via inhalation. HIGH via intravenous, oral and dermal routes. MODERATE via oral, intraperitoneal, inhalation, subcutaneous and dermal routes. MILD skin and eye irritant.

*CARCINOGENICITY: Not available

*TERATOGENICITY:
Reproductive Effects Data:
TCLo: ihl-rat 200 ppm/6H (6-15D preg)
TCLo: ihl-rat 25 ppm/6H (6-15D preg)
TDLo: orl-mus 9440 mg/kg (7-14D preg)
TCLo: ihl-rbt 200 ppm/6H (6-18D preg)
TCLo: ihl-rbt 100 ppm/6H (6-18D preg)

*STANDARDS, REGULATIONS & RECOMMENDATIONS:
OSHA: Federal Register (1/19/89) and 29 CFR 1910.1000 Subpart Z
Transitional Limit: PEL-TWA 50 ppm (skin) [610]
Final Limit: PEL-TWA 25 ppm (skin) [610]
ACGIH: TLV-TWA 25 ppm (skin) [610]
NIOSH Criteria Document: None

NFPA Hazard Rating: Health (H): 2
Flammability (F): 2
Reactivity (R): 0
H2: Materials hazardous to health, but areas may be entered freely with full-faced mask self-contained breathing apparatus which provides eye protection (see NFPA for details).
F2: Materials which must be moderately heated before ignition will occur (see NFPA for details).
R0: Materials which are normally stable even under fire exposure conditions and which are not reactive with water (see NFPA for details).

*OTHER TOXICITY DATA:
Skin and Eye Irritation Data:
skn-rbt 500 mg open MLD
eye-rbt 18 mg
Standards and Regulations: DOT-IMO: Poison B; Label: St. Andrew's Cross, Flammable liquid
Status: "NIOSH Manual of Analytical Methods, 3rd. Ed."
Reported in EPA TSCA Inventory, 1983
EPA TSCA Section 8(e) Status Report 8EHQ-0483-0475
Meets criteria for proposed OSHA Medical Records Rule

## SECTION 12: Ecological information

### Toxicity
No specific data available for this mixture. Hydrofluoric & Sulfuric Acid is known to be toxic to aquatic life.

### Persistence and degradability
No data available on product.

### Bioaccumulative potential
No data available on product.

### Mobility in soil
No data available on product.

### Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

## SECTION 13: Disposal considerations

### Product disposal
Avoid disposal of this product. Use complete contents according to directions. Do not release contents into a municipal sewer except through normal dilution and usage. Do not release contents onto the ground or into any body of water. Dispose of empty container by offering for recycling if available, or into a landfill. Follow all applicable state and local regulations.

### Packaging disposal
Dispose of as unused product.

## SECTION 14: Transport information

### DOT (US)
UN Number: UN 2922
Class: 8
Packing Group: II
UN 2922, Corrosive Liquids, Toxic, N.O.S., 8, 6.1, PG II (Contains Hydrofluoric Acid, Sulfuric Acid)

Reportable quantity (RQ): Hydrofluoric Acid
Note: Certain package sizes of this product may qualify for exceptions to DOT's packaging, labeling and other requirements, and thus may have different DOT shipping names. For bulk shipments, see the shipping documents.

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

#### Massachusetts Right To Know Components
Hydrofluoric acid, CAS number: 7664-39-3
Sulfuric acid, CAS number: 7664-93-9
Ethylene glycol monobutyl ether, CAS: 111-76-2

#### New Jersey Right To Know Components
HYDROGEN FLUORIDE, CAS number: 7664-39-3
Sulfuric acid, CAS number: 7664-93-9
Ethylene glycol monobutyl ether, CAS: 111-76-2

#### Pennsylvania Right To Know Components
Hydrofluoric acid, CAS number: 7664-39-3
Sulfuric acid, CAS number: 7664-93-9
Ethylene glycol monobutyl ether, CAS: 111-76-2

#### SARA 302 Components
The following components are subject to reporting levels established by SARA Title III, Section 302:
Sulfuric acid, CAS number: 7664-93-9

#### SARA 313 Components
The following components are subject to reporting levels established by SARA Title III, Section 313:
Sulfuric acid, CAS number: 7664-93-9
Ethylene glycol monobutyl ether, CAS: 111-76-2

#### SARA 311/312 Hazards
Fire Hazard, Acute Health Hazard, Chronic Health Hazard

#### California Prop. 65 Components
WARNING! This product contains a chemical known to the State of California to cause cancer.
Sulfuric acid, CAS number: 7664-93-9

## SECTION 16: Other information

The information herein is believed to be correct, but is given without warranty or guaranty of any kind, express or implied. The hazards provided in this Safety Data Sheet apply to the product in its concentrated form, and may differ significantly after dilution.

### 16.1 Further information/disclaimer
DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Crown Chemical, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Crown Chemical, Inc. has been advised of the possibility of such damages.