

# SAFETY DATA SHEET

Acid Soluble Oil



## Section 1. Identification

**Product name** : Acid Soluble Oil  
**Product code** : Not available.  
**Synonyms** : ASO, AFO (Alkylate Fuel Oil)

### Relevant identified uses of the substance or mixture and uses advised against

**Product use** : By-Product  
**Area of application** : Industrial applications.

**Manufacturer** : HollyFrontier Refining & Marketing LLC  
2828 North Harwood  
Suite 1300  
Dallas, Texas 75201  
USA  
Customer Service: (888) 286-8836

**Emergency telephone number** : CHEMTREC® (800) 424-9300  
CCN 201319

## Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : H226 FLAMMABLE LIQUIDS - Category 3  
H300 ACUTE TOXICITY (oral) - Category 2  
H310 ACUTE TOXICITY (dermal) - Category 1  
H331 ACUTE TOXICITY (inhalation) - Category 3  
H314 SKIN CORROSION - Category 1A  
H318 SERIOUS EYE DAMAGE - Category 1  
H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
H372 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

### GHS label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H226 - Flammable liquid and vapor.  
H300 + H310 - Fatal if swallowed or in contact with skin.  
H314 - Causes severe skin burns and eye damage.  
H331 - Toxic if inhaled.  
H336 - May cause drowsiness or dizziness.  
H372 - Causes damage to organs through prolonged or repeated exposure. (bones, teeth)

### Precautionary statements

- Prevention** : Wear protective gloves. Wear protective clothing. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not get in eyes, on skin, or on clothing. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
- Response** : IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Immediately call a POISON CENTER or doctor. Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Storage** : Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Do not taste or swallow. Wash thoroughly after handling.
- Hazards not otherwise classified** : Causes severe digestive tract burns.

### Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

Ingredient name	Other names	%	CAS number
Distillates (petroleum), alkylate	-	90	64741-73-7
Hydrofluoric acid	-	10	7664-39-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

### Section 4. First aid measures

#### Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician. Continue to rinse for at least 15 minutes.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Gently wash with plenty of soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** : Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye damage.

**Inhalation** : Toxic if inhaled. Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.

**Skin contact** : Causes severe burns. Fatal in contact with skin.

**Ingestion** : Fatal if swallowed. Severely corrosive to the digestive tract. Causes severe burns. Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

**Eye contact** : pain; watering; redness

**Inhalation** : nausea or vomiting; headache; drowsiness/fatigue; dizziness/vertigo; unconsciousness

**Skin contact** : pain or irritation; redness; blistering may occur

**Ingestion** : stomach pains

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments** : No specific treatment.

**Protection of medical responders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## **Section 5. Fire-fighting measures**

### Extinguishing media

**Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing media** : Do not use water jet.

### Specific hazards arising from the chemical

: Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

### Hazardous thermal decomposition products

: Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
halogenated compounds  
Hydrogen fluoride (HF).

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, waterways, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

### Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Distillates (petroleum), alkylate Hydrofluoric acid	None. <b>ACGIH TLV (United States, 3/2019). Absorbed through skin.</b> TWA: 0.5 ppm, (as F) 8 hours. C: 2 ppm, (as F) <b>OSHA PEL Z2 (United States, 2/2013).</b> TWA: 3 ppm 8 hours. <b>NIOSH REL (United States, 10/2016).</b> TWA: 3 ppm 10 hours. TWA: 2.5 mg/m <sup>3</sup> 10 hours. CEIL: 6 ppm 15 minutes. CEIL: 5 mg/m <sup>3</sup> 15 minutes. <b>OSHA PEL (United States, 5/2018).</b> TWA: 2.5 mg/m <sup>3</sup> , (as F) 8 hours.

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : Liquid. [Viscous]
- Color** : Brown. [Dark]
- Odor** : Repulsive.
- Odor threshold** : Not available.
- pH** : 2 to 5
- Melting point** : -12.222 to -6.6667°C (10 to 20°F) [Pour point]
- Boiling point** : 104°C (220°F)
- Flash point** : Closed cup: 26.667 to 51.667°C (80 to 125°F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : >1 [Air = 1]
- Specific gravity** : 0.9
- Density** : Not available.
- Solubility** : Insoluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): 0.229 cm<sup>2</sup>/s (22.9 cSt)
- Flow time (ISO 2431)** : Not available.
- Molecular weight** : Not applicable.

## Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.  
Under normal conditions of storage and use, hazardous polymerization will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
- Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials and alkalis.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), alkylate	LC50 Inhalation Vapor	Rat	>5.28 mg/l	4 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
Hydrofluoric acid	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Gas.	Rat	1276 ppm	1 hours
	LC50 Inhalation Gas.	Rat	638 ppm	4 hours
	LC50 Inhalation Vapor	Rat	1100 mg/m <sup>3</sup>	60 minutes

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hydrofluoric acid	Skin - Severe irritant	Rat	-	3 minutes 50 %	-

#### Carcinogenicity

Product/ingredient name	OSHA	IARC	NTP
Hydrofluoric acid	-	3	-

#### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Distillates (petroleum), alkylate	Category 3	-	Narcotic effects

#### Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Hydrofluoric acid	Category 1	-	bones, teeth

#### Aspiration hazard

Name	Result
Acid Soluble Oil	Not applicable
Distillates (petroleum), alkylate	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

##### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

##### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

##### Potential chronic health effects

**General** : Causes damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : No known significant effects or critical hazards.

<b>Mutagenicity</b>	: No known significant effects or critical hazards.
<b>Teratogenicity</b>	: No known significant effects or critical hazards.
<b>Developmental effects</b>	: No known significant effects or critical hazards.
<b>Fertility effects</b>	: No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
Oral	50 mg/kg
Dermal	50 mg/kg
Inhalation (gases)	6380 ppm
Inhalation (vapors)	5.5 mg/l

## Section 12. Ecological information

### Toxicity

Not available.

### Persistence and degradability

**Conclusion/Summary** : Based on CONCAWE assessment of kerosenes.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Distillates (petroleum), alkylate	-	-	Inherent

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Distillates (petroleum), alkylate	>4	-	high

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations


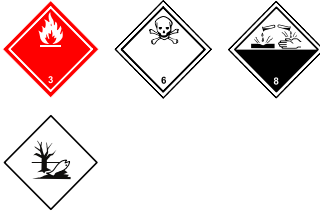

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



**United States - RCRA Toxic hazardous waste "U" List**

Ingredient	CAS #	Status	Reference number
Hydrogen fluoride (C,T); Hydrofluoric acid (C,T)	7664-39-3	Listed	U134

**Section 14. Transport information**

	DOT Classification	IMDG	IATA
<b>UN number</b>	UN3286	UN3286	UN3286
<b>UN proper shipping name</b>	Flammable liquid, toxic, corrosive, n.o.s. (Distillates (petroleum), alkylate, Hydrofluoric acid)	FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (Distillates (petroleum), alkylate, Hydrofluoric acid)	Flammable liquid, toxic, corrosive, n.o.s. (Distillates (petroleum), alkylate, Hydrofluoric acid)
<b>Transport hazard class(es)</b>	3 (6.1, 8) 	3 (6.1, 8) 	3 (6.1, 8) 
<b>Packing group</b>	I	I	I
<b>Environmental hazards</b>	No.	Yes.	Yes. The environmentally hazardous substance mark is not required.

**Additional information****DOT Classification**

: **Reportable quantity** 1000 lbs / 454 kg [133.26 gal / 504.44 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

**Limited quantity** No.

**Packaging instruction** Exceptions: None. Non-bulk: 201. Bulk: 243.

**Quantity limitation** Passenger aircraft/rail: Forbidden. Cargo aircraft: 2.5 L.

**Special provisions** T14, TP2, TP13, TP27

**IMDG**

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**Emergency schedules** F-E, S-C

**Special provisions** 274

**IATA**

: The environmentally hazardous substance mark may appear if required by other transportation regulations.

**Quantity limitation** Passenger and Cargo Aircraft: Forbidden. Packaging instructions: Forbidden. Cargo Aircraft Only: 2.5 L. Packaging instructions: 360. Limited Quantities - Passenger Aircraft: Forbidden. Packaging instructions: Forbidden.

**Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

## Section 15. Regulatory information

**U.S. Federal regulations** : **Commerce control list precursor:** Hydrofluoric acid  
**United States inventory (TSCA 8b):** All components are active or exempted.  
**Clean Water Act (CWA) 311:** Hydrofluoric acid  
**Clean Air Act (CAA) 112 regulated toxic substances:** Hydrofluoric acid

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

### SARA 302/304

#### Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Hydrofluoric acid	10	Yes.	100	10.4	100	10.4

**SARA 304 RQ** : 1000 lbs / 454 kg [133.3 gal / 504.4 L]

### SARA 311/312

**Classification** : FLAMMABLE LIQUIDS - Category 3  
 ACUTE TOXICITY (oral) - Category 2  
 ACUTE TOXICITY (dermal) - Category 1  
 ACUTE TOXICITY (inhalation) - Category 3  
 SKIN CORROSION - Category 1A  
 SERIOUS EYE DAMAGE - Category 1  
 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3  
 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1  
 HNOC - Corrosive to digestive tract [severe]

#### Composition/information on ingredients

Name	%	Classification
Distillates (petroleum), alkylate	90	FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
Hydrofluoric acid	10	HNOC - Defatting irritant CORROSIVE TO METALS - Category 1 ACUTE TOXICITY (oral) - Category 2 ACUTE TOXICITY (dermal) - Category 1 ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION - Category 1A SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HNOC - Corrosive to digestive tract [severe]

### SARA 313

	Product name	CAS number	%
<b>Form R - Reporting requirements</b>	Hydrofluoric acid	7664-39-3	10
<b>Supplier notification</b>	Hydrofluoric acid	7664-39-3	10

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

**Massachusetts** : The following components are listed: HYDROGEN FLUORIDE; HYDROFLUORIC ACID

- New York** : The following components are listed: Hydrofluoric acid; Fluoric acid
- New Jersey** : The following components are listed: HYDROGEN FLUORIDE; FLUORIC ACID
- Pennsylvania** : The following components are listed: HYDROFLUORIC ACID
- California Prop. 65**

This product does not require a Safe Harbor warning under California Prop. 65.

#### International regulations

##### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

##### Montreal Protocol

Not listed.

##### Stockholm Convention on Persistent Organic Pollutants

Not listed.

##### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

##### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

## Section 16. Other information

#### National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

#### Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
ACUTE TOXICITY (oral) - Category 2	Calculation method
ACUTE TOXICITY (dermal) - Category 1	Calculation method
ACUTE TOXICITY (inhalation) - Category 3	Calculation method
SKIN CORROSION - Category 1A	Calculation method
SERIOUS EYE DAMAGE - Category 1	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method

**Date of issue/Date of revision** : 02/28/2020

**Date of previous issue** : 05/24/2019

**Version** : 3

**Key to abbreviations**

: ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
UN = United Nations

✔ Indicates information that has changed from previously issued version.

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named manufacturer, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.