

1. Identification

Product identifier	ARISTONIC® ACID H	
Other means of identification		
Product Code	518040	
Recommended use	Industrial Intermediate	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	Pilot Chemical Company	
Address	2744 East Kemper Road Sharonville, OH 45241 United States	
Telephone	(513) 326-0600 1-800-707-4568	(8 AM to 5 PM Eastern)
E-mail	sdsinfo@pilotchemical.com	
Emergency phone number	CHEMTREC International:	1-703-527-3887
CHEMTREC USA:	1-800-424-9300	

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
OSHA defined hazards	Not classified.	

Label elements



Signal word	Danger	
Hazard statement	Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage.	
Precautionary statement		
Prevention	Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.	
Response	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. Immediately call a poison center/doctor. Wash contaminated clothing before reuse.	
Storage	Store locked up.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 3
Hazard(s) not otherwise classified (HNOC)	Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.	

Supplemental information 55% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 55% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Alkylbenzene Sulfonic Acid 1		Trade Secret	Trade Secret
Alkylbenzene Sulfonic Acid 2		Trade Secret	Trade Secret
Alkylbenzene Sulfonic Acid 3		Trade Secret	Trade Secret

Impurities

Chemical name	CAS number	%
Sulphur Dioxide	7446-09-5	0 < 0.25

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments Occupational Exposure Limits for impurities are listed in Section 8. Additional compounds which may be formed during processing are listed in Section 8.

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage**Precautions for safe handling**

Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Impurities	Type	Value
Sulphur Dioxide (CAS 7446-09-5)	PEL	13 mg/m ³
		5 ppm

US. ACGIH Threshold Limit Values

Impurities	Type	Value
Sulphur Dioxide (CAS 7446-09-5)	STEL	0.25 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Impurities	Type	Value
Sulphur Dioxide (CAS 7446-09-5)	STEL	13 mg/m ³
		5 ppm
	TWA	5 mg/m ³ 2 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection**Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance**

Viscous.

Physical state	Liquid.
Form	Liquid.
Color	Brown.
Odor	Pungent Rotten-egg like. Sulphurous.
Odor threshold	Not available.
pH	< 2
Melting point/freezing point	Not available.
Initial boiling point and boiling range	212 °F (100 °C) (decomposes)
Flash point	Cleveland Open Cup , None to decomposition
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Dispersable; may gel
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	8.85 lb/gal
Specific gravity	1.06

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components	Species	Test Results
Alkylbenzene Sulfonic Acid 1		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Inhalation		
LC50	Rat	> 1.9 mg/l, 4 h
Oral		
LD50	Rat	> 5000 mg/kg

Alkylbenzene Sulfonic Acid 3

Acute

Dermal

LD50

Rat

> 2000 mg/kg

Oral

LD50

Rat

1470 mg/kg

Impurities	Species	Test Results
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Sulphur Dioxide (CAS 7446-09-5)

Acute

Inhalation

LC50

Hamster

50 ppm, 4 h

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye irritation Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity IARC has concluded that "occupational exposure to strong inorganic mists containing sulfuric acid is carcinogenic for humans (Group 1)".

IARC Monographs. Overall Evaluation of Carcinogenicity

Sulphur Dioxide (CAS 7446-09-5)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

12. Ecological information

Ecotoxicity Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Components	Species	Test Results	
Alkylbenzene Sulfonic Acid 1			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	> 1000 mg/l, 96 h
Crustacea	EC50	Daphnia	> 1000 mg/l, 48 h

Components		Species	Test Results
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	1.2 mg/l, 96 h
Alkylbenzene Sulfonic Acid 2			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	> 100 mg/l, 96 h
Crustacea	EC50	Daphnia	> 100 mg/l, 48 h
Alkylbenzene Sulfonic Acid 3			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	0.91 mg/l, 96 h
Crustacea	EC50	Daphnia	7.6 mg/l, 48 h
Fish	LC50	Bluegill (Lepomis macrochirus)	1.67 mg/l, 96 h
<i>Chronic</i>			
Algae	NOEC	Algae	3.1 mg/l, 15 d
Crustacea	NOEC	Daphnia	< 3.4 mg/l, 28 d
Fish	NOEC	Fish	0.25 mg/l, 90 d

* Estimates for product may be based on additional component data not shown.

Persistence and degradability Not available.

Bioaccumulative potential

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number UN2586
UN proper shipping name Aryl sulfonic acids, liquid
Transport hazard class(es)
Class 8
Subsidiary risk -
Label(s) 8
Packing group III
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions IB3, T4, TP1
Packaging exceptions 154
Packaging non bulk 203
Packaging bulk 241

IATA

UN number UN2586

UN proper shipping name Arylsulphonic acids, liquid
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group III
Environmental hazards No.
ERG Code 8L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft Allowed.
Cargo aircraft only Allowed.

IMDG

UN number UN2586
UN proper shipping name ARYLSULPHONIC ACIDS, LIQUID
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group III
Environmental hazards
Marine pollutant No.
EmS F-A, S-B
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

DOT



IATA; IMDG



15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
 All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
 Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
 Not listed.

SARA 304 Emergency release notification
 Sulphur Dioxide (CAS 7446-09-5)

500 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - No
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Chemical name	CAS number	Reportable quantity	Threshold planning quantity	Threshold planning quantity, lower value	Threshold planning quantity, upper value
Sulfuric Acid	7664-93-9	1000	1000 lbs		
Sulphur Dioxide	7446-09-5	500	500 lbs		

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Sulphur Dioxide (CAS 7446-09-5)

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Sulphur Dioxide (CAS 7446-09-5)

US. Massachusetts RTK - Substance List

Sulphur Dioxide (CAS 7446-09-5)

US. New Jersey Worker and Community Right-to-Know Act

Sulphur Dioxide (CAS 7446-09-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Sulphur Dioxide (CAS 7446-09-5)

US. Rhode Island RTK

Sulphur Dioxide (CAS 7446-09-5)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 08-27-2014

Revision date 04-20-2015

Version # 04

NFPA ratings Health: 3
Flammability: 1
Instability: 0

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.