

1. Identification

Product identifier ARISTONIC® ACID 9800

Other means of identification

Product Code 538010

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 (8 AM to 5 PM Eastern)
1-800-707-4568

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 Not classified.

Environmental hazards Hazardous to the aquatic environment, acute Category 2 hazard

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement Toxic to aquatic life.

Precautionary statement

Prevention Avoid release to the environment.

Response Wash hands after handling.

Storage Store away from incompatible materials.

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

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Benzenesulfonic Acid, Di-C10-18-alkyl Derivs.		93820-54-3	90 - 100

Byproducts

Chemical name	Common name and synonyms	CAS number	%
Sulfuric Acid		7664-93-9	0 - < 2.5

Impurities

Chemical name	Common name and synonyms	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	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Prevent product from entering drains. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. 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. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	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)

Byproducts	Type	Value
Sulfuric Acid (CAS 7664-93-9)	PEL	1 mg/m3
Impurities	Type	Value
Sulphur Dioxide (CAS 7446-09-5)	PEL	13 mg/m3 5 ppm

US. ACGIH Threshold Limit Values

Byproducts	Type	Value	Form
Sulfuric Acid (CAS 7664-93-9)	TWA	0.2 mg/m3	Thoracic fraction.
Impurities	Type	Value	
Sulphur Dioxide (CAS 7446-09-5)	STEL	0.25 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Byproducts	Type	Value
Sulfuric Acid (CAS 7664-93-9)	TWA	1 mg/m3
Impurities	Type	Value
Sulphur Dioxide (CAS 7446-09-5)	STEL	13 mg/m3 5 ppm
	TWA	5 mg/m3 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.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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 Sulphurous.

Odor threshold Not available.

pH 2 - 3

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	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Specific gravity	0.96

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	No adverse effects due to inhalation are expected.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Benzenesulfonic Acid, Di-C10-18-alkyl Derivs. (CAS 93820-54-3)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Inhalation		
LC50	Rat	> 1.9 mg/l, 4 h

Components	Species	Test Results
Oral LD50	Rat	> 5000 mg/kg
Byproducts	Species	Test Results
Sulfuric Acid (CAS 7664-93-9)		
Acute Inhalation LC50	Rat	375 mg/m3, 4 h
Oral LD50	Rat	2140 mg/kg
Impurities	Species	Test Results
Sulphur Dioxide (CAS 7446-09-5)		
Acute Inhalation LC50	Hamster	50 ppm, 4 h
	Rat	1260 ppm, 4 Hours

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

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
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

Sulfuric Acid (CAS 7664-93-9)	1 Carcinogenic to humans.
Sulphur Dioxide (CAS 7446-09-5)	3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Sulfuric Acid (CAS 7664-93-9)	Known To Be Human Carcinogen.
-------------------------------	-------------------------------

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	Toxic to aquatic life.
--------------------	------------------------

Components	Species	Test Results
Benzenesulfonic Acid, Di-C10-18-alkyl Derivs. (CAS 93820-54-3)		
Aquatic <i>Acute</i>		
Algae	EC50	Algae > 1000 mg/l, 96 h
Crustacea	EC50	Daphnia > 1000 mg/l, 48 h
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus) 1.2 mg/l, 96 h

Byproducts		Species	Test Results
Sulfuric Acid (CAS 7664-93-9)			
Aquatic			
<i>Acute</i>			
Algae	EC50	Algae	> 100 mg/l, 72 h
Crustacea	EC50	Daphnia	> 100 mg/l, 48 h
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>)	16 - 28 mg/l, 96 h
<i>Chronic</i>			
Crustacea	NOEC	Daphnia	0.15 mg/l, 35 d
Fish	NOEC	Fish	0.025 mg/l, 65 d

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

Persistence and degradability

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

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Sulfuric Acid (CAS 7664-93-9) Listed.

SARA 304 Emergency release notification

Sulfuric Acid (CAS 7664-93-9) 1000 LBS

Sulphur Dioxide (CAS 7446-09-5) 500 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

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

SARA 302 Extremely hazardous substance

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

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Sulfuric Acid	7664-93-9	0 - < 2.5

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)

Sulfuric Acid (CAS 7664-93-9)

Sulphur Dioxide (CAS 7446-09-5)

Safe Drinking Water Act (SDWA)

Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Sulfuric Acid (CAS 7664-93-9) 6552

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Sulfuric Acid (CAS 7664-93-9) 20 %WV

DEA Exempt Chemical Mixtures Code Number

Sulfuric Acid (CAS 7664-93-9) 6552

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Sulphur Dioxide (CAS 7446-09-5) High priority

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)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCs)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	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 09-02-2014

Revision date 02-08-2018

Version #	05
HMIS® ratings	Health: 0 Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 0 Flammability: 0 Instability: 0
Disclaimer	The Pilot Chemical Corp. product referred to in this document is sold pursuant to Pilot Chemical Corp.'s Standard Terms and Conditions ("Terms"); however, the information contained in this document shall not be considered part of said Terms. Although the information is believed to be accurate and reliable as of the date compiled, PILOT CHEMICAL CORP. MAKES NO GUARANTEE, REPRESENTATION, OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE ACCURACY, RELIABILITY, SUFFICIENCY, SUITABILITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF ANY INFORMATION IN THIS DOCUMENT OR THE PRODUCT TO WHICH THIS DOCUMENT RELATES. Users should make their own investigations, tests and determinations as to the information's completeness and the product's suitability for their particular purposes. It is the user's responsibility to ensure that all activities comply with applicable laws. Pilot Chemical Corp. makes no warranty or representation that the information or product may be used without infringing the intellectual property rights of Pilot Chemical Corp or others. This document is provided gratuitously for guidance only and Pilot Chemical Corp. assumes no liability for its use.
Revision information	This document has undergone significant changes and should be reviewed in its entirety.