

PRODUCT IDENTIFICATION



Product Name: Drain Hammer - Sulfuric Acid Drain Cleaner

CAS Number: 7664-93-9

Molecular Formula: $\text{H}_2\text{O}_4\text{S}$

Molecular Weight: 98.08 g/mol

Grade: Technical Grade

Purity / Concentration: 100%

Synonyms: Sulfuric Acid Drain Opener, Drain Cleaner with Sulfuric Acid

PRODUCT OVERVIEW

Drain Hammer is a high-performance technical grade sulfuric acid drain cleaner, formulated to effectively dissolve organic blockages in plumbing systems. With a concentration of 93.57% and a specific gravity of 1.8279, this colorless, oily liquid provides the professional-strength acidity required for demanding industrial and maintenance applications.

Grade Significance: Technical grade sulfuric acid is specifically optimized for industrial and maintenance applications where performance and cost-effectiveness are prioritized over the stringent purity requirements of food or pharmaceutical grades.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (Titration)	%	93.57	91.8	94.2	Titration
Color (APHA/Hazen)	APHA	3	0	100.0	Spectrophotometry
Specific Gravity (20°C)	g/mL	1.8279	1.8259	1.8299	Hydrometer @ 20°C
Non-Volatile Residue	%	0.0030	—	0.01	Residue on Ignition
Arsenic Antimony As As	ppm	0.0050	0	0.01	ICP-MS
Heavy Metals As Pb	ppm	2	0	5	ICP-MS (as Pb)
Iron (Fe)	ppm	1.37	0	50	ICP-MS
Chloride Cl	ppm	0.05	0	0.2	ICP
Nitrate No3	ppm	0.1	0	0.5	ICP
Mercury Hg	ppm	0.01	0	5	ICP-MS
Sulfite So3	ppm	11.5	0	50	ICP
Turbidity	NTU	1	0	50	EPA 180.1

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	Colorless, oily liquid	Odor	Odorless
Form	Liquid	Boiling Point	276 °C (529 °F) (93% solution)
Melting / Freezing Point	-29.5 °C (-21 °F) freezing point (93% solution)	Flash Point	Not applicable (non-flammable)
Specific Gravity	1.835	Solubility	Miscible with water and organic solvents
Molecular Formula	H ₂ O ₄ S	Molecular Weight	98.08 g/mol
Vapor Pressure (20°C)	0.3 mmHg	Viscosity (25°C)	1.0 cP
Refractive Index (20°C)	1.406	Density (25°C)	1.84 g/mL
Partition Coefficient (log P)	-3.0	Decomposition Temp.	No decomposition below 300°C (decomposes with strong heating)

APPLICATIONS

1. **Plumbing and Facility Maintenance** — Used as a powerful drain opener to dissolve hair, grease, and other organic matter that causes severe pipe blockages.
2. **Wastewater Treatment** — Utilized as a chemical agent to adjust and lower pH levels in industrial wastewater streams to meet environmental compliance standards.
3. **Chemical Manufacturing** — Serves as a vital reagent in various synthesis processes that require a strong, high-purity mineral acid.
4. **Laboratory Analysis** — Acts as an essential dehydrating agent for complex laboratory synthesis and analytical procedures.

STORAGE & HANDLING

Due to its corrosive nature and potential for severe skin burns, this product must be stored in a cool, well-ventilated area away from incompatible materials. Proper containment is critical to prevent accidental spills, as the acid can damage metal surfaces and pose significant health risks if handled incorrectly.

- Store in a cool, dry, well-ventilated area away from incompatible materials.
- Use containers made of HDPE or glass to prevent corrosion.
- Avoid exposure to moisture and direct sunlight to maintain product integrity.
- Wear appropriate personal protective equipment (PPE) including gloves and goggles when handling.
- Ensure proper ventilation in storage and usage areas to mitigate fume accumulation.

AVAILABLE PACKAGING

- 1 Quart
- 1 Gallon
- 5 Gallon
- 15 Gallon
- 55 Gallon
- 275 Gallon
- 330 Gallon

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H290: May be corrosive to metals
- H314: Causes severe skin burns and eye damage
- H350: May cause cancer

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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