

SODIUM BISULFATE

from **JONES-HAMILTON CO.**

Consistent quality and unparalleled safety across diverse applications



PROUDLY MADE IN THE USA



The Basics of Sodium Bisulfate

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Sodium bisulfate is stable in a dry environment, but is hygroscopic and will absorb moisture from the air in a humid environment. If added to any liquid, it will quickly dissolve and lower pH.

Chemical and Physical characteristics

Off-white globular, dry bead Readily soluble in water

Formula: NaHSO4

Molecular Wt: 120

Melting Point: 350 F

Density: 1.33 g/cc or 82 lbs per cubic foot pH of 1% solution: 1.5

pKa: 1.99



GET TO KNOW SODIUM BISULFATE – SBS TECH GRADE



SBS Tech Grade (sodium bisulfate) is a strong, dry, non-hazardous mineral acid used to lower pH in a variety of applications. Known for its safety – in transportation, storage and handling – this technical grade acidifier can effectively substitute more expensive, hazardous options and is on the **EPA Safer Choice Safer Chemical Ingredient List (SICL)**.

Why SBS Tech Grade

- Made in the USA
- Economical
- · Environmentally friendly, biodegradable and non-toxic
- Easy to handle (does not fume)
- · Safe to store (can be swept up with a broom if spilled)
- ·Classified as a non-hazardous material (DOT or OSHA)
- 1-0-1 hazard rating by the National Fire Protection Agency

Consistency and Quality in Every Batch



SBS Tech Grade is manufactured using systems certified to ISO 9001:2015 standards without the use of crude oil. The quality of the raw materials and control of the manufacturing process results in high product integrity. SBS Tech Grade is NSF approved, and contains no chlorine, fluorine, phosphates or organic compounds.

Packaging options:

- 50 lb. and 55kg. bags
- 2,000 lb. and 1,000 kg. supersacks
- Bulk truck and hopper cars



THE PIONEERS AND REVOLUTIONARIES OF SODIUM BISULFATE APPLICATIONS

Jones-Hamilton Co. began producing sodium bisulfate in 1955 and has since become the global leader in production and application development with unmatched expertise on all aspects of the product. We work hard to keep costs low and find more applications for a safe, effective product that can take the place of more expensive, hazardous options.

ONE PRODUCT, 30+ DIVERSE APPLICATIONS

Jones-Hamilton has helped develop more than 30 applications across diverse industries for **SBS Tech Grade**. Explore a sampling of the applications where customers have found sodium bisulfate to be a safe, affordable and effective solution.

The Safer Choice for pH Management in Pools and Spas

Sodium bisulfate is a safer alternative to hydrochloric acid for pH and alkalinity reduction in home and institutional swimming pools and spas.

Why Go Dry?

As a dry, granular acid, using sodium bisulfate in pools and spas outperforms the alternative in safety, ease of use, management, transportation and more.

No Fumes

By eliminating fumes, you reduce risk to:

- Users decreases the danger to eyes, lungs and skin
- · Vehicles and equipment won't corrode metals during transport and application



Non-Hazardous, Fewer Regulations

Unlike other acids, sodium bisulfate is classified as a non-hazardous material and thus requires less local, state and federal regulatory control than other pH lowering chemicals. It has also been named to the EPA Safer Chemical Ingredients List (SCIL).

Splash-Free

Say goodbye to the risk of dangerous splashes with sodium bisulfate. As a dry, granular acid, it is less reactive than other acids if spilled, and can be easily removed from skin with plain water or simply swept up from surfaces and returned to its container.

Easy to Apply

No special equipment, no hazard placards, no warehouse risk. Sodium bisulfate can be transported, stored and applied safely. Simply keep it in a covered container and apply as directed.

Economical

Start with an affordable price point, subtract the risk of unexpected costs due to spills and fuming, and add in the value of consistent availability. That's the formula for a high value product.





effectively remove:

- •Rust
- •Scale

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- •Oxides

- Oxides
 Machining oils
 Fingerprints
 Buffing compounds
 Stenciling inks
 Dirt that has collected due to extended storage



Metal Finishing: A Shining Example of SBS Tech Efficacy

As the major component in dry acid bath formulations, sodium bisulfate baths will clean steel, copper, brass, zinc, aluminum, nickel, magnesium, titanium and stainless steel. Typical uses include:

- Pickling
- Scale removal
- Rust removal
- Etching

When preparing metals for subsequent plating, painting, or storage, Sodium bisulfate is preferred over other acids for numerous reasons.

No fuming

Sodium bisulfate solutions do not fume.

No vapors

Vapors can corrode equipment. Since sodium bisulfate solutions do not fume, unintended corrosion to plant equipment is eliminated. The lack of vapors also mitigates the exposure of personnel to acids, minimizing the risk of irritation and/or injury.

Safe

Sodium bisulfate is a dry, granular solid, classified as non-hazardous by the DOT.

Convenient

Sodium bisulfate is provided in convenient 50 lb. or 2,000 lb. supersacks.

No excess heat

Dissolving sodium bisulfate results in a no heat reaction. While dilution of sulfuric acid or hydrochloric acid can cause extreme heat and splattering, solutioning sodium bisulfate results in a small drop in temperature. As a result, the danger of preparing an acid bath is greatly reduced.

GENERAL CLEANING

Toilet bowl cleaners were one of the first applications Jones-Hamilton found for **SBS Tech** Grade back in 1955. Today, manufacturers still rely on the product to aid in safe, effective cleaning. Sodium bisulfate can be found in:

- Dry dish detergents
- Surface cleaners
- Drain cleaners





A SAMPLE OF SBS TECH APPLICATIONS

Chemical Grout

Sodium bisulfate forms to chemical grout to help it solidify, allowing it to fill cracks in soil and rock to transform soft granular soil into a foundation capable of supporting a building.

Herbicide Adjuvant

The effectiveness of some agricultural pesticides is diminished when added to water with a high pH. Sodium bisulfate protects against product loss due to alkaline hydrolysis in spray solutions.

- · Enhances effectiveness of glyphosate herbicides
- · Recommended as an alternative to ammonium sulfate for use with many herbicides

Municipal Water Plants

Strong yet safe, sodium bisulfate can clean and shift pH of water at a relatively low addition rate. Users rely on SBS to:

- Clean water lines and cooling towers
- De-scale boilers and neutralize boiler blowdown water before discharge into city sewers

Construction / Industrial Truck Fleets

Sodium bisulfate reduces alkalinity in wash out ponds formed by concrete trucks after clean out.

Leather Tanning

When used in combination with quebacho tannin, sodium bisulfate acts as the acidifier in leather compounds. Once combined with fillers and other chemicals, the products act as a preservative and create the ideal pH for chemical penetration and reaction to occur, thereby acidifying the hides used for shoe sole leather.

Oil and Gas

Sodium bisulfate neutralizes alkaline soils for construction projects, such as mud drilling. When tilled into the soil as a direct additive, it can adjust soil pH to neutral/acceptable levels before building permits are approved.

AFFORDABLE REPLACEMENT FOR SULFAMIC ACID

Low cost, consistent availability and made in the USA: Three reasons sodium bisulfate is a popular substitute for sulfamic acid in many applications. Common uses include:

- Descaling solutions
- Compounding
- Water treatment
- Suitable for most low pH requirements



QUALITY, CONSISTENCY AND ACCOUNT-ABILITY IN CHEMICAL MANUFACTURING

Jones-Hamilton Co. is a U.S.-based chemical manufacturer of sodium bisulfate and hydrochloric acid. Since our inception in 1951, our responsible approach to delivering consistent, high-quality products has fueled our growth and cemented our reputation as a dependable supplier.

Strategically Located Manufacturing

Our manufacturing facility locations allows us to satisfy current demands and position us for significant future growth.

- Manufactured in the USA using systems certified to ISO 9001:2015 standards
- NSF approved

Diversity in Market Focus

We operate across a diverse industry group to deliver products that fulfill the unique demands of various applications. In addition to **SBS Tech Grade**, we manufacture various grades of sodium bisulfate marketed under different brand names for use in commercial animal production, animal feed, agriculture water, companion animal feed, human feed ingredients and more.

A Focus on Environmental Stewardship

We are dedicated to creating sustainable products that reduce the consumption of natural resources and lower emissions.

CLEAN MANUFACTURING PROCESS CRADLE-TO-USE PRODUCT TRACEABILITY GREENHOUSE GAS REDUCTION

A Culture of Shared Success

In 1984, **Jones-Hamilton Co.** became an employee-owned company – a decision that has proven to improve employee morale, commitment and dedication. For our customers this means more than 100 employees with an average tenure of 10 years continually focus on:

- Furthering innovation
- Enhancing customer service
- Developing supplier relations to ensure quality product and timely delivery



The Global Leader in Sodium Bisulfate

Jones-Hamilton is a global distributor of USA-made sodium bisulfate – a high-quality, consistent product.





888-858-4425 Jones-Hamilton.com



Proudly Made in the USA