

SO₂Clean[®]

SO₂Clean[®] is a proprietary process for producing on-purpose sulfur dioxide (SO₂). SO₂ is a chemical compound used in water treatment, cyanide destruction, and surfactant manufacturing. It's also a reducing agent and a food preservative.

The conventional method for manufacturing SO₂ is to burn sulfur using ambient air. Instead, INEOS Calabrian reacts sulfur with pure oxygen. Since pure oxygen is more sterile than ambient air, the SO₂Clean[®] process results in ultra-pure SO₂.

ULTRA-PURE SO₂ WITH A LOWER ENVIRONMENTAL IMPACT

The SO₂Clean[®] process yields superior quality SO₂ with a low environmental footprint. The efficiency of the SO₂Clean[®] process helps companies meet rising corporate responsibility and sustainability targets.

Using the SO₂Clean[®] process, INEOS Calabrian produces ultra-pure SO₂ without unnecessary byproducts. Benefits include:

No process wastewater, so nothing is discharged into waterways

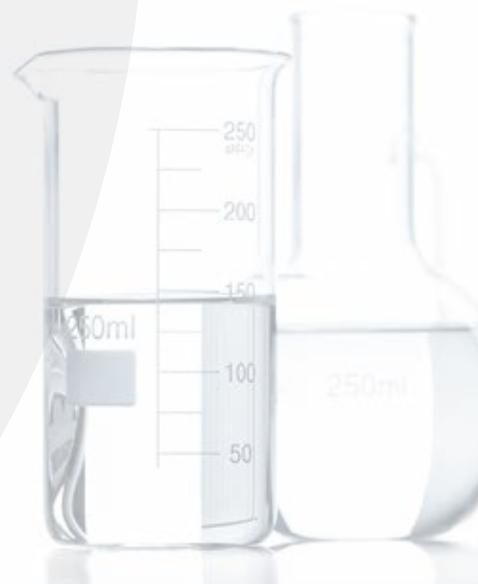
No NO_x due to nitrogen elimination

No SO₃ from excess oxygen

No byproducts that could become waste or limit production

Low acidity compared to conventional processes

Lower dependency on co-products, like sulfuric acid, SO₃ and ABS



A Safe and Secure SO₂ Solution. INEOS Calabrian is the leading North American manufacturer of on-purpose SO₂. Its proprietary SO₂Clean[®] process has been successfully and safely applied at Port Neches, Texas, and Timmins, Ontario, for more than three decades.

As a global company with multiple manufacturing sites and reactor trains, INEOS Calabrian can ensure continuity of your supply. **Contact INEOS Calabrian to discuss your SO₂ requirements or to explore on-site production, logistical or infrastructure challenges.**

APPLICATIONS FOR ULTRA-PURE SO₂

Applications include:

Food, Beverage and Pharmaceutical

bleaching agent and desiccant; able to meet or exceed food-grade standards and Kosher and Food Sanitation Foundation certifications

Water Treatment

oxygen scavenger and reducing agent for bichromate and chromium waste treatments

Mining and Metallurgy

cyanide destruction; mining iodine, gold, cobalt, manganese, copper, silver and nickel

Pulp and Paper

bleaching agent; chlorine removal; sulfite mill fortification; sulfite and bisulfite preparation

Oil and Gas

polar solvent; natural gas and oil desulfurization; sulfone and sulfolane preparation

Personal Care

diluent and surfactant

Other

glass, automotive, lithium battery recycling

Because SO₂ created by INEOS Calabrian is so pure, its derivatives – sodium bisulfite, sodium thiosulfate and sodium metabisulfite – meet or exceed quality standards across a range of industries.

Imagine what INEOS Calabrian's ultra-pure SO₂ can do for you.

Part of something bigger. INEOS is a global manufacturer of petrochemicals, specialty chemicals, and oil products. In fact, it's one of the top five chemical companies based on revenue, and one of the world's 50 biggest companies overall. INEOS businesses, like INEOS Calabrian, create raw materials that are used to advance nearly every aspect of modern life.



Responsible Care®
Good Chemistry at Work

INEOS BY THE NUMBERS

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INEOS CALABRIAN MAKES SO₂ WITH ZERO NITROGEN OXIDE, SULFUR TRIOXIDE, OR WASTEWATER



50

ONE OF THE WORLD'S 50 LARGEST COMPANIES OVERALL*



\$61B+

OVER \$61 BILLION IN ANNUAL SALES*



183

INEOS HAS 183 MANUFACTURING SITES ACROSS 26 COUNTRIES*



*Based on 2019 data

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