

PRODUCT IDENTIFICATION



Product Name: Sodium Chlorite Flakes 80% - Technical Grade

Product Code: None

CAS Number: Not Available

Molecular Formula: NaClO₂

Molecular Weight: 90.44 g/mo g/mol

Grade: Technical Grade

Purity / Concentration: Not Available

Synonyms: Sodium Chlorite Powder, Sodium Chlorite Crystals

PRODUCT OVERVIEW

Alliance Chemical's Sodium Chlorite Flakes 80% - Technical Grade are white to slightly yellow crystalline flakes, boasting an assay of 81.2%. This technical grade product is primarily used in general industrial and laboratory applications. It is crucial to note the product is an oxidizer and can cause severe skin burns and eye damage.

Grade Significance: Technical Grade Sodium Chlorite is suitable for industrial applications where a high degree of purity is not the primary requirement. While it meets certain specifications, it may contain trace impurities, making it a cost-effective option for applications that do not demand stringent purity levels.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	81.2	80	—	Titration with Sodium Thiosulfate
Water Content	%	0.8	—	1.5	Karl Fischer Titration
Iron (Fe)	ppm	5	—	10	ICP-OES
Sodium Chlorate Na ClO ₃	%	0.3	—	0.5	Ion Chromatography
Sodium Chloride Na Cl	%	17.5	—	19	Ion Chromatography

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

PHYSICAL & CHEMICAL PROPERTIES

Appearance	White to slightly yellow crystals/flakes; odorless	Form	Flakes / crystalline solid
Melting / Freezing Point	~190 °C (decomposes)	Flash Point	Not applicable
Solubility	Highly soluble; ~545 g/L at 20 °C	Molecular Formula	NaClO ₂
Molecular Weight	90.44 g/mo g/mol		

APPLICATIONS

1. **Textile Industry** — Sodium Chlorite is used as a bleaching agent for textiles, ensuring a uniform and brightened finish. The controlled oxidation process helps remove unwanted colors and impurities without damaging the fabric.
2. **Pulp and Paper Industry** — In pulp and paper manufacturing, Sodium Chlorite serves as a bleaching agent to produce high-quality, bright white paper. It selectively bleaches the pulp, removing lignin and other colored impurities, resulting in a cleaner and more refined paper product.
3. **Water Treatment** — Sodium Chlorite is utilized for disinfection purposes, particularly in controlling microbial growth in water systems. It effectively eliminates bacteria, algae, and other microorganisms, ensuring the water is safe for industrial use.
4. **Surface Treatment** — Used as a disinfectant and bleaching agent. Sodium Chlorite helps prepare surfaces for subsequent treatments by removing contaminants and improving adhesion.
5. **Laboratory Reagent** — Sodium Chlorite is employed in various laboratory settings as an oxidizing agent and reagent in chemical synthesis. Its controlled reactivity allows for precise chemical reactions and the production of specific compounds.
6. **Chemical Manufacturing** — As a raw material or intermediate in production, Sodium Chlorite is used in the synthesis of chlorine dioxide and other chlorine-based compounds. It is a crucial building block for manufacturing various industrial chemicals.

STORAGE & HANDLING

Proper storage of Sodium Chlorite Flakes 80% is crucial due to its oxidizing properties and potential hazards. It should be stored in a cool, dry, and well-ventilated area away from combustible materials to prevent fire hazards (H272). Exposure to moisture can lead to decomposition and the release of chlorine dioxide gas, which is toxic and corrosive, so keep the product sealed in its original packaging.

- Store in a cool, dry place away from direct sunlight.
- Use containers made of HDPE or glass to prevent reactions.
- Avoid contact with acids or reducing agents to prevent hazardous reactions.
- Ensure proper ventilation when handling to minimize inhalation risks.
- Wear appropriate personal protective equipment (PPE) including gloves and goggles.

AVAILABLE PACKAGING

- 100 Lbs.

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: **Danger**



Hazard Statements:

- H272: May intensify fire; oxidizer
- H302: Harmful if swallowed
- H314: Causes severe skin burns and eye damage

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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