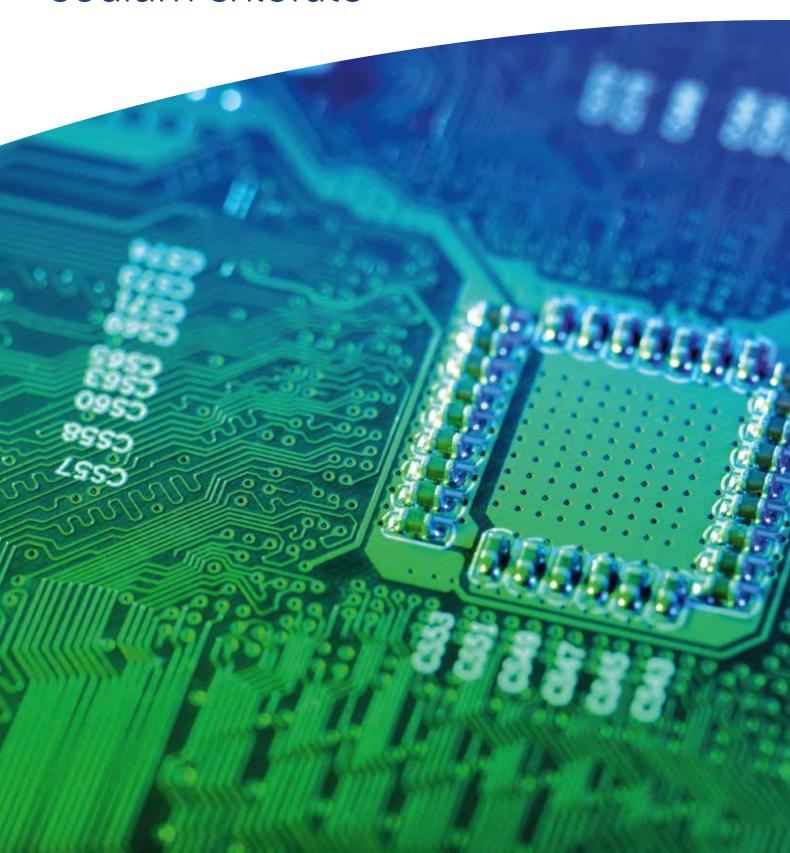
### Nouryon

## Specialty applications

Sodium chlorate





Nouryon provides on-site safety audits and product handling training for customers. A site audit is required prior to the first product delivery. Nouryon is also committed to following the American Chemistry Council Responsible Care Guidelines and is an ACC Responsible Care Partner Company.



# Industrial applications

Sodium chlorate is a versatile product and is used in a variety of applications.

It is the preferred intermediate for sodium perchlorate and sodium chlorite manufacture; other common industrial applications are for the surface treatment of metals and cupric chloride etch regeneration.

In the mining industry, sodium chlorate is used during the extraction process for a variety of metals. It is also a key ingredient in fireworks and used in the production of oxygen candles, utilized on aircraft and submarines, and by manufacturers of breathing apparatus for firefighters and mine rescue crews.

Sodium chlorate is also used as an intermediate in the generation of ferric chloride which is used as a flocculant in many industrial water treatment applications.

The major consumer of sodium chlorate remains the pulp and paper industry where it is used for chlorine dioxide generation; this use accounts for over 90% of all sodium chlorate produced worldwide.

Chlorine dioxide is a key bleaching agent and is used in the production of Elemental Chlorine-Free (ECF) bleached wood pulp for paper products all over the world. Other common applications for chlorine dioxide include use as a broad-spectrum biocide and primary disinfectant for potable and cooling water.

#### Safety First

Sodium chlorate is a powerful oxidizing agent available in both the crystal and solution forms manufactured and supplied by Nouryon. When handled correctly, associated risks are minimal.

Please refer to the latest product SDS in your local language for the most current regulatory information about the safety and handling of sodium chlorate. The PDS and Nouryon Sodium Chlorate Product Information Manual also have pertinent information; your Nouryon Representative will be able to provide you with these documents.

#### Characteristics and packaging

Sodium chlorate crystal is a white to off-white odorless crystalline solid. In aqueous solution, it is a clear, colorless to slightly yellow liquid. It is a very strong oxidizing agent and the crystals are very soluble in water. Sodium chlorate is available in various packaging types which are summarized in the table below.

For other packaging and unique needs, a member of our professional distributor network will be able to assist. Our distributors offer the same high-quality products and adhere to the ACC Responsible Care guiding principles.

#### Eka SC product forms and available packaging

| Product form | Railcars | Trucks | Supersacks |
|--------------|----------|--------|------------|
| Crystal      | •        | •      | •          |
| Solution     | •        | •      |            |

Please check with your Nouryon representative regarding the most appropriate packaging for your operations.

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## Nouryon

We are a global specialty chemicals leader. Industries worldwide rely on our essential chemistry in the manufacture of everyday products such as paper, plastics, building materials, food, pharmaceuticals, and personal care items. Building on our nearly 400-year history, the dedication of our 10,000 employees, and our shared commitment to business growth, strong financial performance, safety, sustainability, and innovation, we have established a world-class business and built strong partnerships with our customers. We operate in over 80 countries around the world and our portfolio of industry-leading brands includes Eka, Dissolvine, Trigonox and Berol.