



**MANMEG**  
CHEMICAL

# PROFILE

**MANMEG**  
CHEMICAL

✉ corpsec@manmegchemical.co.id

☎ +62 21 226 38787

📍 Head Office: Jl. Keamanan Raya No. 51A, Jakarta 11130, Indonesia

# CORPORATE OVERVIEW

## OUR COMMITMENT

### VISION

To become a trusted and leading industrial chemical distribution company in Indonesia by delivering reliable supply solutions, quality products, and sustainable industrial partnerships.

### MISSION

- To provide high-quality industrial chemical products with consistent and stable supply.
- To support industrial growth through reliable distribution, responsive service, and efficient logistics solutions.
- To build long-term partnerships based on integrity, professionalism, and customer trust.
- To continuously expand product capabilities and market reach across diverse industrial sectors.
- To contribute to sustainable industrial development through responsible business practices and operational excellence.

## OVERVIEW

PT MANMEG Sentosa Chemical is an industrial chemical distribution and supply company focused on delivering reliable chemical solutions for manufacturing, mining, water treatment, energy, and industrial processing sectors across Indonesia.

With a commitment to product quality, supply consistency, and professional service, the company provides a broad range of industrial chemicals and specialty materials tailored to meet the operational requirements of modern industries. Supported by responsive logistics, technical understanding, and strategic sourcing capabilities, MANMEG Chemical aims to become a trusted long-term partner for industrial growth and sustainable development.

## BUSINESS PHILOSOPHY

We believe that consistency and dependable supply are the foundation of industrial trust. Our commitment is to ensure customers receive the right products, at the right quality, and at the right time.

We conduct business with transparency, professionalism, and ethical responsibility in every partnership and transaction.

We view every customer and supplier relationship as a long-term collaboration that creates mutual growth and sustainable value.



# OPEN LETTER

At PT MANMEG Sentosa Chemical, we are committed to delivering reliable industrial chemical solutions that support the growth of manufacturing, mining, water treatment, and various industrial sectors across Indonesia.

With a focus on quality, stable supply, and long-term partnerships, we continuously strive to provide professional service, dependable sourcing, and efficient logistics solutions tailored to customer requirements.

We believe integrity, consistency, and operational excellence are the foundation of sustainable business growth, and we look forward to building strong partnerships for the future.



**Thomas Alfiantino**  
**President Director**



# GROUND CALCIUM CARBONATE

## GRADES / SPECIFICATIONS

Ultra-fine Grades:  $D_{50} \leq 0.5 \mu\text{m}$ - $3.2 \mu\text{m}$ ,  $D_{97} \leq 4.0 \mu\text{m}$ - $15.0 \mu\text{m}$

Super-fine Grades:  $D_{50} \leq 4.0 \mu\text{m}$ - max  $15 \mu\text{m}$ ,  $D_{97} \leq 20.0 \mu\text{m}$ - $75.0 \mu\text{m}$

Chemical Purity:  $\text{CaCO}_3 \geq 98\%$

Physical Standards: Brightness  $\geq 95\%$ , Whiteness  $\geq 98\%$



## Plastics Industry

- Serves as an ideal functional filler for PVC, PE, and PP applications.
- Significantly reduces raw material costs while improving rigidity, impact strength, and thermal stability.
- Ultra-fine powder ensures excellent dispersion and a flawless surface finish.



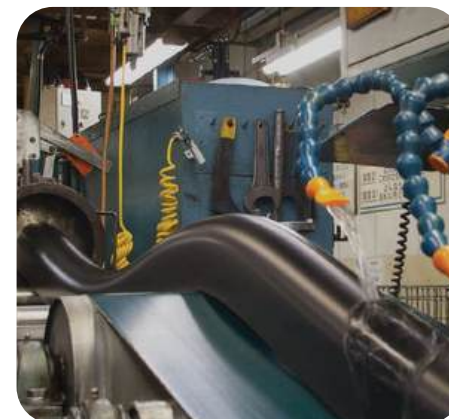
## Paint & Coatings Industry

- Improves paint opacity, gloss, and weather resistance in architectural and industrial sectors.
- Acts as a premium extender, allowing formulators to significantly reduce the use of costly Titanium Dioxide  $\text{TiO}_2$  without compromising coverage quality.



## Paper Industry

- Acts as an excellent coating and filling pigment that maximizes paper brightness and opacity.
- Enhances ink absorption for better printability.
- Offers a cost-effective alternative to expensive wood fibers.



## Rubber Industry

- Designed to reinforce rubber products, including tires, cables, and footwear.
  - Functions as a semi-reinforcing filler that optimizes vulcanization and improves tear resistance.
- Ensures long-lasting durability while keeping compounding costs low.



## LIGHT CALCIUM CARBONATE

### GRADES / SPECIFICATIONS

Ultra-fine Grades:  $D_{50} \leq 1.7 \mu\text{m}$ ,  $D_{97} \leq 1.7 \mu\text{m}$

Super-fine Grades:  $D_{50} \leq 6.0 \mu\text{m}$ ,  $D_{97} \leq 25.0 \mu\text{m}$

Chemical Purity:  $\text{CaCO}_3 \geq 98.50\%$ , Whiteness  $\geq 98\%$



### Plastics Industry

- Acts as a functional filler for PVC, PE, and PP, improving rigidity, impact strength, and thermal stability.



### Paper Industry

- Maximizes paper brightness and opacity while enhancing ink absorption for better printability.



### Paint & Coatings

- Improves paint opacity and gloss, acting as a premium extender to reduce the use of costly Titanium Dioxide  $\text{TiO}_2$ .



### Rubber Industry

- Acts as a semi-reinforcing filler that optimizes vulcanization and improves tear resistance



# HYDRATED LIME

## GRADES / SPECIFICATIONS

### Chemical Composition:

Ca(OH)<sub>2</sub> Purity ≥ 92-96% Min (Depending on Grade)

MgO Content ≤ 0.3% Max

Fe<sub>2</sub>O<sub>3</sub> Content ≤ 0.02% Max

### Physical Standards:

Whiteness: ≥ 95-98%

Fineness: ≥ Available in mesh sizes from 200 to 400 (D97 ≤ 35 μm-75μm)

Moisture Content: ≤ 0.5%-1.0% Max



## Water Treatment

- Primarily utilized for pH adjustment, water softening, and the removal of impurities in both municipal and industrial wastewater systems.



## Flue Gas Desulfurization (FGD)

- Effectively neutralizes acidic pollutants and sulfur dioxide SO<sub>2</sub> emissions from power plants and industrial incinerators.



## Construction & Soil Stabilization

- Acts as a critical binder in mortars and plasters while improving the load-bearing capacity and stability of clay-rich soils.



## Chemical Manufacturing

- Serves as a vital raw material in the production of calcium salts, bleaching powder, and various organic chemicals.



# ZIRCONIUM OPACIFIER POWDER

## GRADES / SPECIFICATIONS

Zircon Flour: 45 $\mu$ m | 75 $\mu$ m

Zirconium Silicate Powder: D50  $\leq$  1.2  $\mu$ m | D97  $\leq$  5.0  $\mu$ m



## Ceramics & Glazes

- Enhances opacity and surface finish in ceramic tiles and sanitary ware
- Essential raw material for glossy, matte, and opaque frit formulations
- Widely used in porcelain and high-end ceramic production



## Foundry & Refractory

- Provides excellent thermal resistance for casting molds
- Improves durability in high-temperature environments
- Suitable for refractory linings and industrial furnace applications



## Advanced & Technical Applications

- Used in precision casting and specialty coatings
- Applicable in automotive, aerospace, and advanced manufacturing sectors
- Supports high-performance requirements due to its stability and purity



## RUTILE SAND

### GRADES / SPECIFICATIONS

Premium Rutile Sand: Guaranteed TiO<sub>2</sub> purity levels of 87%, 90%, 92% min.



### Chemicals & Coatings

- Primary raw material for titanium dioxide (TiO<sub>2</sub>) pigment production
- Used in welding electrode coatings
- Suitable for high-performance industrial coatings



### Aerospace & Advanced Metals

- Used in the production of titanium slag and titanium metal
- Applicable in industries requiring high strength-to-weight performance
- Supports advanced metallurgical processing



### Heavy Metallurgy

- Used in ferro titanium production
- Applied in specialty steel manufacturing
- Enhances material strength and durability



# LIMESTONE

## GRADES / SPECIFICATIONS

CaO:  $\geq 53.0\%$ , CaCO<sub>3</sub>:  $\geq 94.5\%$ , SiO<sub>2</sub>:  $\leq 2.0\%$ , MgO:  $\leq 1.2\%$   
Particle Size: As per customer requirement  
Total Under & Oversize:  $\leq 10\%$



## Steelmaking

Grey Limestone is used as a fluxing material in steelmaking to remove impurities such as silica, phosphorus, and sulfur. Its high CaCO<sub>3</sub> content and low impurity levels support efficient slag formation and stable refining performance



## Lime Production

Grey Limestone is an ideal raw material for quicklime (CaO) production, offering high reactivity and consistent calcination performance. It contributes to stable kiln operation and improved production efficiency.



## Cement Manufacturing

Grey Limestone plays a key role in clinker production by supplying a stable source of CaO. Its consistent chemical composition helps optimize raw mix design, improve kiln efficiency, and ensure uniform clinker quality.



## Construction & Aggregates

Widely used as aggregates and building material, providing high mechanical strength, durability, and cost efficiency. Suitable for various infrastructure and construction applications.

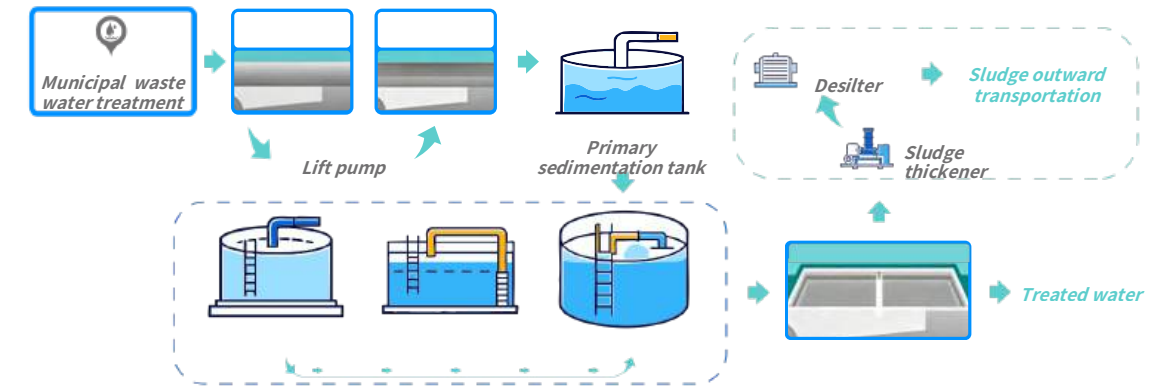


# WASTE WATER TREATMENT PAM

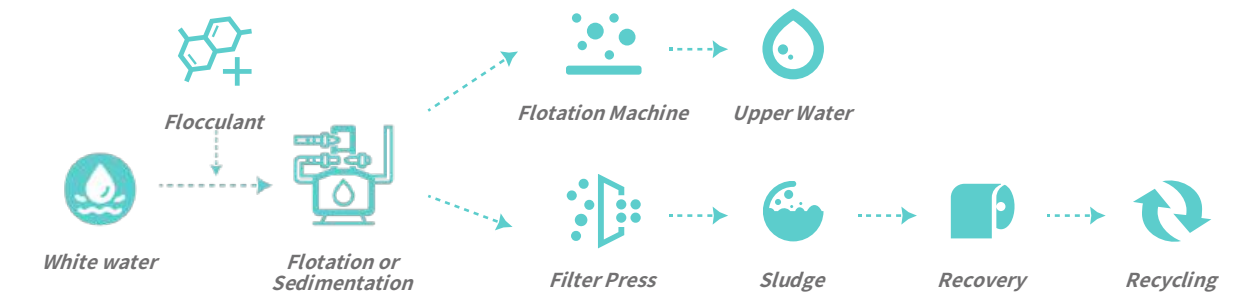
## GRADES / SPECIFICATIONS

The solid content of dry powder is generally  $\geq 88\%$   
 The solid content of emulsion is generally about 30% - 50%  
 Product Specification: as per customer requirement

## Municipal Wastewater Treatment



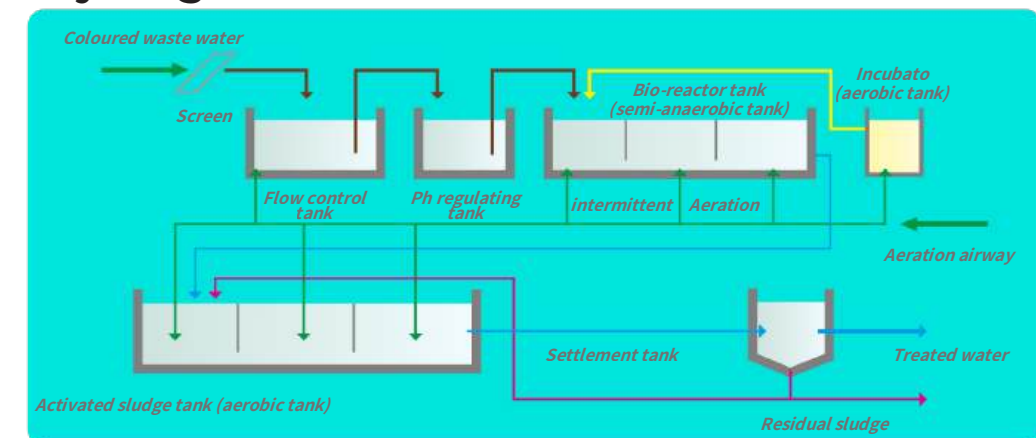
## Paper Industry Wastewater Treatment Process



## Sugar Industry Treatment Process



## Dyeing Plant Treatment Process





# OIL & GAS FIELD PAM

## GRADES / SPECIFICATIONS

Product Specification: as per customer requirement

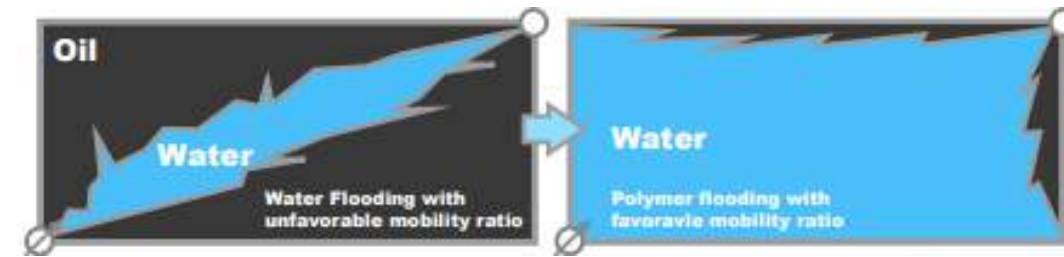
Drilling Fluid Additives: Partially Hydrolyzed Poly-Acrylamide

- Polymers, defined as large molecules comprised of small, identical recurring units, are widely used in water-based muds. The products are known as PHPA, HPAM in drilling application.

Viscosifier & Shale Inhibitor Category

- Viscosifier and Shale Inhibitor are polyacrylamide-based polymers that provide excellent viscosity and suspension properties in water-based mud systems. These products inhibit shale hydration, prevent dispersion, and maintain wellbore stability.

## MANMEG Chemical Polymer Category



<b>TYPE I</b> Conventional polymer	Salinity resistance < 6000mg / L or $Ca^{2+} + Mg^{2+} < 200mg / L$ , Thermal stable at temperature < 90 °C (194°F)
<b>TYPE II</b> Superior Polymer	Superior polymer refers to the salt resistant polymer with medium salinity $\geq 6000mg / L$ or $Ca^{2+} + Mg^{2+} \geq 200mg / L$ which is suitable for liquid preparation water.
<b>TYPE III</b> HE Polymer	Salinity resistance 250,000ppm, These polymer could resist 180 °C (356°F)
<b>TYPE IV</b> Nano microsphere polymer	It is designed to improve the sweep efficiency, especially workable in consolidated oil reservoir with low permeability and porosity. Applicable to salinity up to 300,000 ppm and 130 °C (266°F)

## MANMEG Chemical Fracking Category

### Dry Fine Powder

**Superiorities:** linear structure, ultra-high molecular weight, quick hydration speed (within 3min), high drag reduction rate, and excellent sand-carrying capacity even without crosslinker.

The high viscosity and strong salt tolerance properties support Nuoe FR unique performance in market.

### W/O Emulsion And W/W liquid Form

**Water-in-oil emulsion+organic zirconium cross-linking agent/inorganic aluminum cross-linking agent:** water-in-oil emulsion has a fast dissolution rate, and can be cross-linked at room temperature.

**Water-in-water emulsion + cross-linking agent:** hydrophobically associated low- molecular-weight water-in-water emulsion.

### High Efficiency Suspension

High effective suspension, content(50%), fast dissolving speed (less than 1min), no Fish eye dissolving, sufficient cross-linking, High drag reduction rate, high viscosity of cross-linked suspended sand, and stable performance.

### Acid Fracturing

Acid thickener, it has the characteristics of high temperature resistance, shear resistance, anti degradation with good viscosity increasing performance.



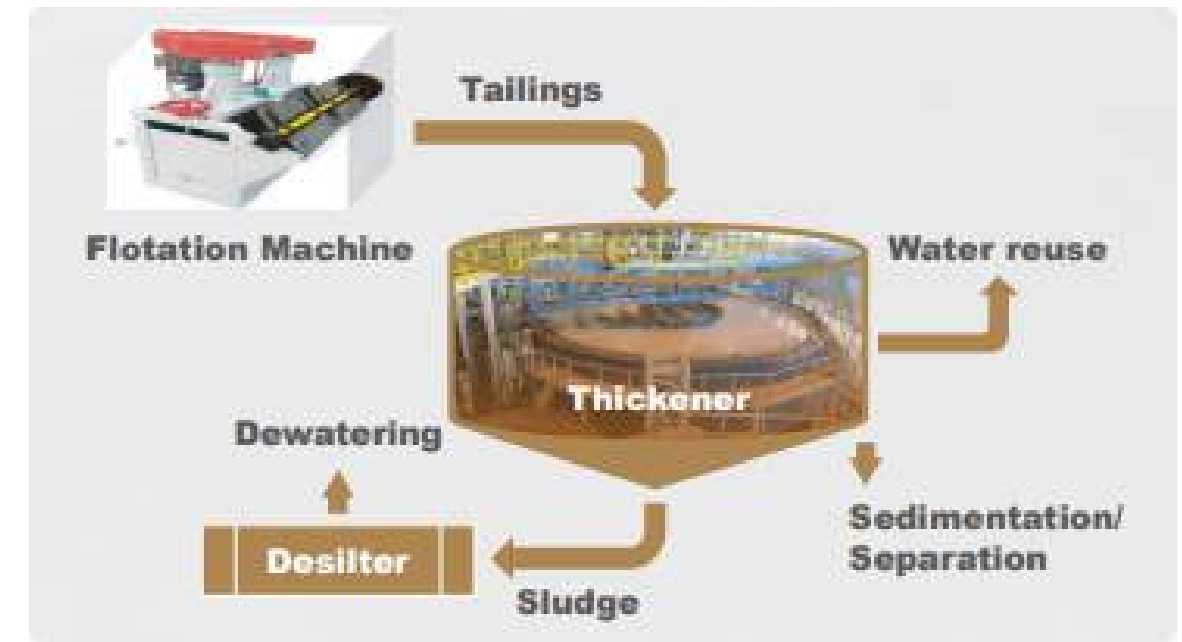
# MINERAL PROCESSING PAM

## GRADES / SPECIFICATIONS

Product Specification: as per customer requirement

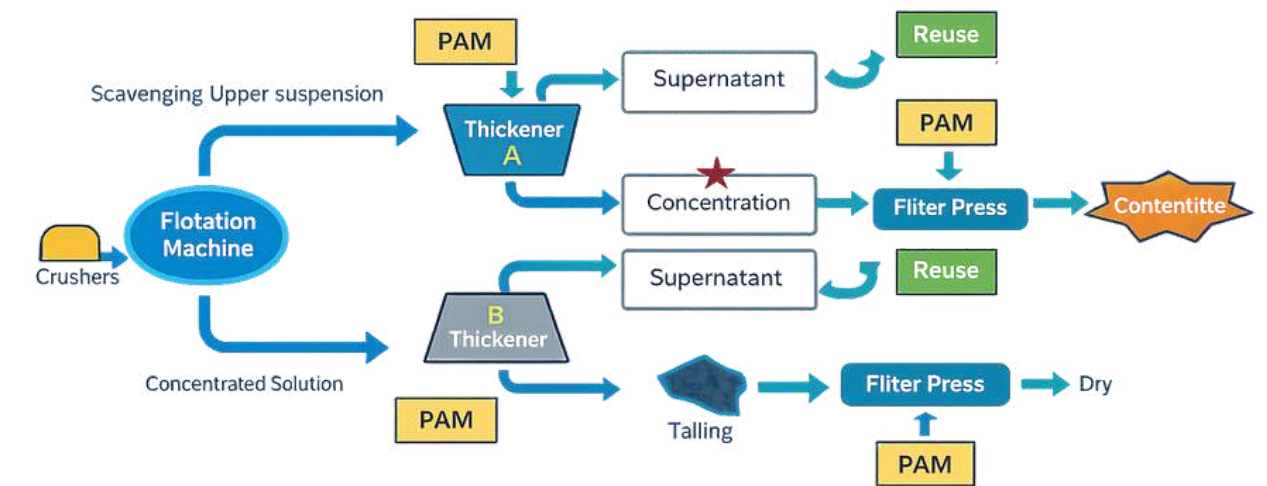
The special grade of polyacrylamide is oriented to different mineral processing needs, with good stability, strong adsorption and bridging ability, fast settling speed, and high resistance to temperature and salinity. We cover full mine-to-mineral processing and tailings management, and can tailor solutions to improve production yield and reduce costs.

## General Mining Dressing Flow Chart



## Product Application

- Thickening



- Tailing Treatment

can be used in various tailing water treatment with different concentrations such as copper ore, gold and silver ore, lead-zinc ore, nickel ore, etc.

- Concentrate Dewatering

In order to meet the subsequent smelting requirements of the concentrate or reduce the transportation cost, the flotation concentrate requires further dewatering treatment.



Painting Industry



Ceramic Industry



Food Industry



Personal Care Industry



Oil & Gas Field



Battery



Pharmaceutical



Construction

# POLYANIONIC CELLULOSE (PAC) CARBOXYMETHYL CELLULOSE (CMC)

## GRADES / SPECIFICATIONS

Product Specification: as per customer requirement providing full customization including specifications, performance, testing, particle size, and dispersibility.



## BILLIONS™ R-996

### GRADES / SPECIFICATIONS

TiO<sub>2</sub> ≥95% | Alumina & Zirconia Surface Treatment |  
Organic Treatment Included | Moisture ≤0.5% | Bulk  
Density 1.2 g/cm<sup>3</sup> | Oil Absorption 18g/100g | pH 7.0 |  
Specific Gravity 4.1 g/cm<sup>3</sup> | ISO 591: R2 | CAS: 13463-67-7  
| Pigment White 6



Industrial Coatings



Powder Coatings



Architectural Coatings



Plastics



Printing Inks



Rubber



## BILLIONS™ BLR-895

### GRADES / SPECIFICATIONS

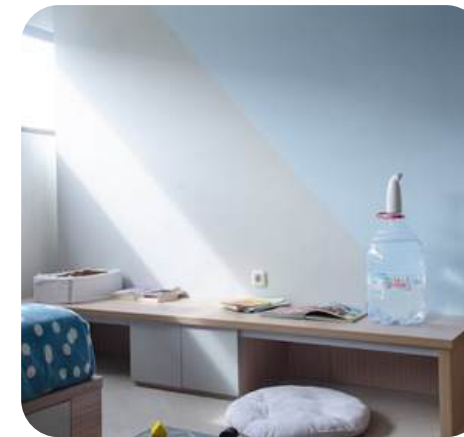
TiO<sub>2</sub> ≥94% | Alumina & Zirconia Surface Treatment |  
Organic Treatment Included | Moisture ≤0.5% | Bulk  
Density 1.3 g/cm<sup>3</sup> | Oil Absorption 16g/100g | pH 7.4 |  
Specific Gravity 4.1 g/cm<sup>3</sup> | ISO 591: R2 | CAS: 13463-67-7  
| Pigment White 6



Industrial Coatings



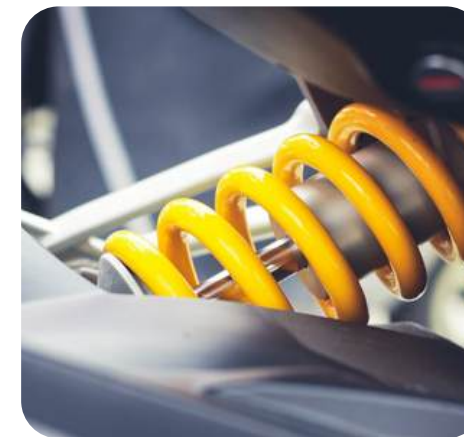
Powder Coatings



Interior Architectural















Exterior Architectural



Coil Coatings



Automotive Coatings

Organic Pigment	Code	Physical Data				Remarks
		Colour Index	Oil Absorption (g/100g)	Lightfastness	Heat Resistance (°C)	
Full Shade						
	Red 1120	P.R.112	55	7	180	Yellowish, Clariant FGR
	Red 1222	P.R.122	280	8	5	Clariant Pink E
	Red F5RK	P.R.170	220	6-7	5	Clariant F5RK
	Red 2543	P.R.254	280	8	5	Same as CINIC
	Yellow 1210	P.Y.12	55	4	3	Good gloss, Transparent
	Yellow 1380	P.Y.138	45	8	280	Lemon color Good lightfastness
	Green 7K	P.G.7	280	8	5	Yellowish
	Green 7H	P.G.7	280	8	5	Low FPV value Higher color strength
	Violet BL/ RL	P.V.23	70	7	220	Bluish / Reddish
	Orange RL70	P.O.34	50	6-7	200	Clariant RL70 High lightfastness
	Blue 1510C	P.B.15:1	65	7	240	Reddish, Clariant A2R
	Blue 7303/ 7300R	P.B.15:3	65	7	240	Semi-opaque/ solvent Base transparent




## CAUSTIC SODA (NaOH)

### GRADES / SPECIFICATIONS

Caustic Soda Liquid: NaOH Purity  $\geq 48.00\%$  wt | NaCl  $\leq 0.01\%$  wt |  $\text{Na}_2\text{CO}_3 \leq 0.12\%$  wt |  $\text{Fe}_2\text{O}_3 \leq 5$  ppm |  $\text{SiO}_2 \leq 20$  ppm |  $\text{SO}_4^{2-} \leq 0.01\%$  wt |  $\text{NaClO}_3 \leq 65$  ppm

Caustic Soda Flakes: NaOH  $\geq 98.0\%$  | Low Chloride  $\leq 0.025\%$  | Carbonate  $\leq 0.20\%$  | Iron  $\leq 8$  ppm | Silica  $\leq 20$  ppm | Sulphate  $\leq 0.01\%$  | Chlorate  $\leq 5$  ppm



 Alumina Industry



 Diapers Industry



 MSG Industry



 Nickel Industry



 Oil Industry



 Soap Industry



 Rayon Industry



 Textile Industry



# HYDROCHLORIC ACID (HCl)

## GRADES / SPECIFICATIONS

Hydrochloric Acid 32% | Low Free Chlorine  $\leq 75$  ppm |  
Low Iron Content  $\leq 10$  ppm



 **Steel & Metal Pickling**



 **Water Treatment**



 **Oil & Gas**



 **Rubber & Latex**



 **Food Processing**



 **Textile Dyeing & Finishing**



 **Industrial Cleaning & Descaling**



 **Mining & Mineral Processing**



# SODIUM HYPOCHLORITE (NaOCl)

## GRADES / SPECIFICATIONS

Available Chlorine Min. 10% | Excess NaOH 1-2% | Yellow Appearance



**Water & Drinking Water Disinfection**



**Wastewater & Effluent Treatment**



**Textile Bleaching & Whitening**



**Pulp & Paper Bleaching**



**Food & Beverage Sanitation**



**Swimming Pool Water Treatment**



**Hospital & Medical Facility Disinfection**



**Household & Industrial Cleaning Products**



# SULFURIC ACID (H<sub>2</sub>SO<sub>4</sub>)

## GRADES / SPECIFICATIONS

Available Concentrations: 10% | 15% | 36% | 40% | 50% | 60% | 70% | 75% | 98%



 Battery Manufacturing



 Fertilizer Production



 Metal Pickling & Surface Treatment



 Textile & Fiber Processing



 Water Treatment



 Rubber Processing & Latex



 Mining & Hydrometallurgy



 Chemical Synthesis



# ALUMINIUM SULFATE

## GRADES / SPECIFICATIONS

Aluminium Sulfate Liquid:  $\text{Al}_2\text{O}_3 \geq 8\%$  | Specific Gravity  $\geq 1.30$  | Water Insoluble Matter  $\leq 0.25\%$  | Fe  $\leq 0.01\%$  | Heavy Metal as Pb  $\leq 0.0010\%$  | As  $\leq 0.0002\%$  | pH  $\geq 3.0$

Aluminium Sulfate Powder:  $\text{Al}_2\text{O}_3 \geq 17\%$  | Particle Size  $< 2 \text{ mm}$ , 98% min | Bulk Density  $0.90\text{--}0.93 \text{ g/cm}^3$  | Water Insoluble Matter  $\leq 0.50\%$  | Fe  $\leq 0.01\%$  | Heavy Metal as Pb  $\leq 0.0010\%$  | As  $\leq 0.0002\%$  | pH  $\geq 3.0$

Aluminium Sulfate Lump:  $\text{Al}_2\text{O}_3 \geq 17\%$  | Particle Size  $< 12 \text{ mm}$ , 98% min | Bulk Density  $0.83\text{--}0.87 \text{ g/cm}^3$  | Water Insoluble Matter  $\leq 0.50\%$  | Fe  $\leq 0.01\%$  | Heavy Metal as Pb  $\leq 0.0010\%$  | As  $\leq 0.0002\%$  | pH  $\geq 3.0$

Aluminium Sulfate Granule:  $\text{Al}_2\text{O}_3 \geq 17\%$  | Particle Size  $1\text{--}3 \text{ mm}$  /  $1\text{--}12 \text{ mm}$  | Bulk Density  $0.84\text{--}0.89 \text{ g/cm}^3$  | Water Insoluble Matter  $\leq 0.50\%$  | Fe  $\leq 0.01\%$  | Heavy Metal as Pb  $\leq 0.0010\%$  | As  $\leq 0.0002\%$  | pH  $\geq 3.0$

Aluminium Sulfate Superfine Powder:  $\text{Al}_2\text{O}_3 \geq 17\%$  | Fine Powder Grade | Bulk Density  $0.90\text{--}0.93 \text{ g/cm}^3$  | Water Insoluble Matter  $\leq 0.50\%$  | Fe  $\leq 0.01\%$  | Heavy Metal as Pb  $\leq 0.0010\%$  | As  $\leq 0.0002\%$  | pH  $\geq 3.0$



Water & Drinking Water Treatment



Wastewater & Industrial Effluent Treatment



Oil & Fat Processing Industry



Fire Extinguishing Foam Production



Paper & Pulp Manufacturing



Textile Dyeing & Mordanting



Leather Tanning Industry



Mineral Ore Precipitation



# POLY ALUMINIUM CHLORIDE (PAC)

## GRADES / SPECIFICATIONS

PAC Drinking Grade Powder: Poly Aluminium Chloride Powder |  $\text{Al}_2\text{O}_3 \geq 29.5\%$  | Bulk Density  $\geq 0.65 \text{ g/cm}^3$  | pH 1% Solution 3.5–5.0

PAC Liquid 8%: Poly Aluminium Chloride Liquid |  $\text{Al}_2\text{O}_3 \geq 8.0\%$  | Specific Gravity  $\geq 1.16 \text{ g/cm}^3$  | Basicity 70–100% | pH 2% Solution 3.5–5.0

PAC Liquid 10%: Poly Aluminium Chloride Liquid |  $\text{Al}_2\text{O}_3 \geq 10.0\%$  | Specific Gravity  $\geq 1.22 \text{ g/cm}^3$  | Basicity 70–100% | pH 2% Solution 3.5–5.0

PAC Liquid 12%: Poly Aluminium Chloride Liquid |  $\text{Al}_2\text{O}_3 \geq 12.0\%$  | Specific Gravity  $\geq 1.27 \text{ g/cm}^3$  | Basicity 70–100% | pH 2% Solution 3.5–5.0

PAC Powder Putih: Poly Aluminium Chloride Powder | White Powder |  $\text{Al}_2\text{O}_3 \geq 29.5\%$  | Bulk Density  $\geq 0.65 \text{ g/cm}^3$  | pH 1% Solution 3.5–5.0





# AQUEOUS AMMONIA (NH<sub>4</sub>OH)

## GRADES / SPECIFICATIONS

Corrosive to some metals; volatile at room temperature (boiling point: 37.3 °C); Density: 0.91 g/ml; SG: 0.903; pH: 12,5



 Glass & Surface Cleaning



 Liquid Nitrogen Fertilizer



 Water Treatment



 Textile Industry



 Biogas Purification



 Coal Co-firing



# NITRIC ACID

## GRADES / SPECIFICATIONS

Nitric Acid - PA: Concentration: 65-70%, Specific gravity: 1.41 gr/ml

Nitric Acid - Technical: Purity: 57%-68%; Density: 1.3 – 1.4 Kg/L; HNO<sub>2</sub> = <50 ppm



Polyamide Manufacturing



Polyurethane Manufacturing



Sports Equipment Manufacturing



Iron Coating & Industrial Paints



Heavy Metal Analysis



Xantoprotein Test



Nuclear Industry



General Laboratory Use



# DEMINERALIZED WATER

## GRADES / SPECIFICATIONS

pH: 5-6, Freezing point: 0°C; Initial Boiling point: 100°C; Relative density: 1 g/cm<sup>3</sup>; Conductivity: max 1.5 µmhos, SiO<sub>2</sub> = max 0.3 ppm



**Boiler Feed  
Water Treatment**



**Cooling Media in  
Chilled Water Systems**



**Production Machinery  
Washing Solution**



**PCB (Printed  
Circuit Board) Cleaning**



**Chemical Diluent  
(Ethanol & Hydrogen Peroxide)**



**Solvent for Cosmetics &  
Pharmaceutical Industries**



## BENTONE 38 V CG

### GRADES / SPECIFICATIONS

Organoclay | LOI: 36.5 – 39.5% | Drying Loss: 0.10 – 3.00% | Particle Size: 95.00 – 100.00% thru 200 Mesh Sieve | Total Plate Count: 0 – 100 CFU/g



Paint & Coatings



Cosmetics & Personal Care



Oil & Gas



# CALCIUM CHLORIDE

## GRADES / SPECIFICATIONS

Flake Grade:  $\text{CaCl}_2$  Purity:  $\geq 74\%$  | Water Insoluble:  $\leq 0.10\%$  | pH: 6.0–11.0

Powder Grade:  $\text{CaCl}_2$  Purity:  $\geq 95\%$  | Water Insoluble:  $\leq 0.15\%$  | pH 5% Solution: 7.5–11.0



 De-icing



 Dust Control



 Concrete Acceleration



 Moisture Absorption / Humidity Regulation



 Oil & Gas Drilling Fluids



 Food Processing



 Refrigeration Systems



 Road Maintenance



# CALCIUM NITRATE

## GRADES / SPECIFICATIONS

Purity:  $\geq 98.0\%$  | Nitrate ( $\text{NO}_3^-$ ):  $\geq 11.5\%$  | Calcium (Ca):  $\geq 18.5\%$  | pH 5%  
Solution: 5.0–7.0



 Fertilizer Production



 Soil Structure Improvement



 Concrete Admixture  
(Accelerator)



 Wastewater Treatment &  
Odor Control



 Anti-freeze Solutions (Mining & Construction)



# CITRIC ACID (ANHYDROUS & MONOHYDRATE)

## GRADES / SPECIFICATIONS

Assay 99.5–100.5% | Heavy Metals:  $\leq 5$  mg/kg | Water Content: 7.5–8.8%



 **Food & Beverage**  
(Acidulant & Preservative)



 **pH Regulator**  
(Manufacturing & Cosmetics)



 **Chelating Agent**  
(Metal Ion Neutralization)



 **Cleaning Products**



 **Shelf Life & Stability Enhancement**



# COPPER SULPHATE PENTAHYDRATE

## GRADES / SPECIFICATIONS

$\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$  Content: 98% | Copper (Cu): 24% | Iron (Fe): 54.92 mg/kg | Water Insoluble: < 0.01%



 **Agriculture**  
(Fungicide & Disease Prevention)



 **Algaecide & Microorganism Control**



 **Water Treatment**



 **Electroplating**



 **Mining**  
(Ore Flotation Process)



 **Chemical Synthesis**



 **Laboratory Applications**



# DIAMMONIUM PHOSPHATE (DAP)

## GRADES / SPECIFICATIONS

Main Content:  $\geq 99\%$  | Phosphorus Pentoxide ( $P_2O_5$ ):  $\geq 53.0\%$  | Moisture:  $\leq 5.0\%$  | Heavy Metals (as Pb):  $\leq 0.001\%$  | pH 1% Solution: 7.6–8.2



**Agriculture (Nitrogen & Phosphorus Fertilizer)**



**Seedling & Root Development**



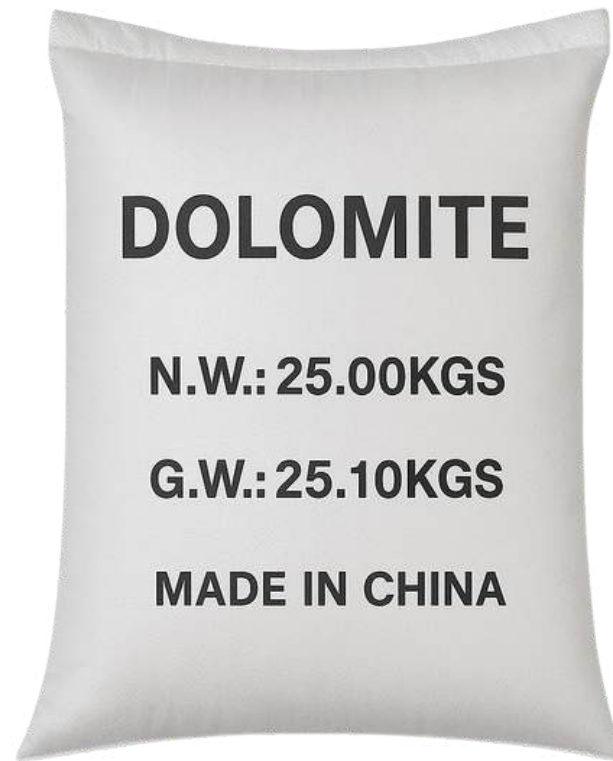
**Fire Retardant Formulations**



**Yeast Nutrient (Brewing Industry)**



**Industrial Wastewater Treatment**



## DOLOMITE

### GRADES / SPECIFICATIONS

Appearance: White to off-white fine powder, dry and free-flowing, with no visible contamination | CaO:  $\geq 29\%$  | MgO:  $\geq 18\%$  | SiO<sub>2</sub>:  $\leq 3\%$



**Agriculture (Soil  
Conditioner & Acidity  
Neutralizer)**



**Calcium & Magnesium  
Source for Plant Growth**



**Cement & Concrete  
Production**



**Construction  
(Strength & Durability  
Enhancement)**



**Metallurgical Flux  
(Iron & Steel Production)**



**Agriculture (Fertilizer & Soil Conditioner)**



**Iron Deficiency Correction in Plants**



**Water Treatment (Coagulation & Impurity Removal)**



**Iron Supplement Manufacturing**



**Anemia Treatment (Pharmaceutical)**

# FERROUS SULPHATE (MONOHYDRATE, PENTAHYDRATE & HEPTAHYDRATE)

## GRADES / SPECIFICATIONS

Monohydrate: Appearance: Greyish white to slightly yellow tinged powder | Purity as  $\text{FeSO}_4 \cdot \text{H}_2\text{O}$ : Min 91.0% | Iron (Fe): Min 30% | Lead (Pb): Max 0

Heptahydrate: Appearance: Green crystalline material | Purity as  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$ : Min 98% | Iron (Fe): Min 19.7% | Lead (Pb): Max 0



## MAGNESIUM OXIDE

### GRADES / SPECIFICATIONS

MgO Content: Min 90% | LOI: < 5%



 **Refractory Materials  
Production**



 **Ceramics  
Manufacturing**



 **Industrial Catalyst**



 **Fire-Resistant &  
Heat-Stable Materials**



 **Agricultural Soil  
Quality Improvement**



 **Nutritional Supplement  
(Magnesium Source)**



# MAGNESIUM SULFATE

## GRADES / SPECIFICATIONS

Purity:  $\geq 99.5\%$  | Magnesium (Mg):  $\geq 9.70\%$



 **Agriculture**  
(Magnesium Source & Fertilizer)



 **Laxative & Electrolyte Replenisher (Pharmaceutical)**



 **Paper Manufacturing**



 **Wastewater Treatment**



 **Textile Industry**



 **Electrolyte Supplement (Healthcare)**



# MONO AMMONIUM PHOSPHATE (MAP)

## GRADES / SPECIFICATIONS

Purity: Min 98% | Ammonia Content (NH<sub>3</sub>): 11-12% | Heavy Metals: < 0.005%



 **Agriculture (Nitrogen & Phosphorus Fertilizer)**



 **Root Development & Crop Yield Enhancement**



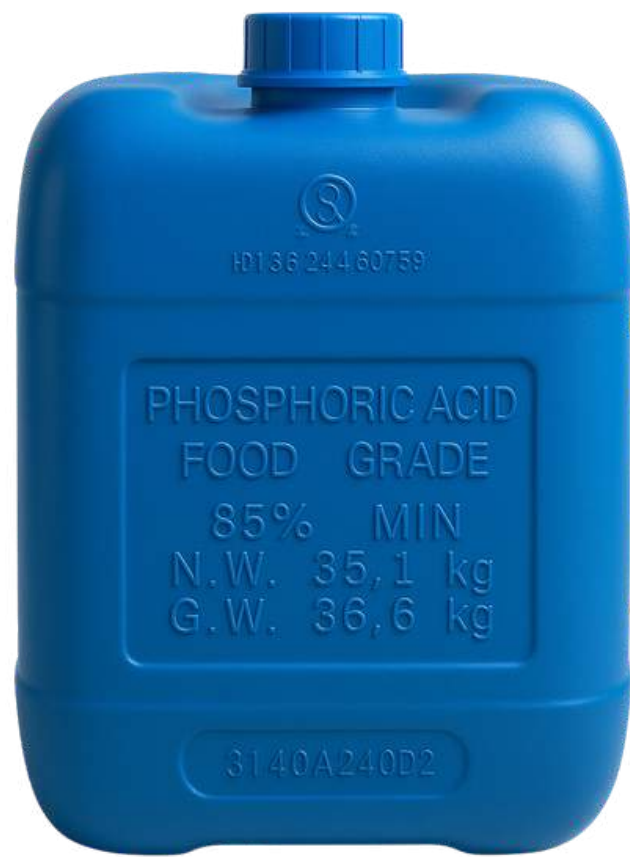
 **Soil Fertility Improvement**



 **Fire-Resistant Materials Production**



 **Animal Feed Manufacturing**



# PHOSPHORIC ACID

## GRADES / SPECIFICATIONS

Content:  $\geq 85\%$  | Heavy Metal:  $\leq 0.001\%$  | Color (APHA):  $\leq 10$



 **Phosphate Fertilizer Production**



 **Food & Beverage (Acidulant & pH Regulator)**



 **Soft Drink Flavoring**



 **Metal Treatment & Surface Processing**



 **Water Treatment**



 **Detergent & Cleaning Agent Production**



 **Chemical Manufacturing Catalyst**



## SODIUM METABISULPHITE

### GRADES / SPECIFICATIONS

Appearance: White to slightly yellowish crystalline powder | Sodium Metabisulphite Content:  $\geq 96.5\%$  | pH Value: 4.0–5.0



**Food & Beverage Preservation**



**Antioxidant & Discoloration Prevention**



**Microbial Growth Control**



**Water Treatment**



**Chemical Oxygen Scavenging**



**Cleaning & Hygiene Agents**





# SODIUM NITRATE

## GRADES / SPECIFICATIONS

Appearance: Colorless clear crystal / white crystal | Sodium Nitrate Content: Min 99% | Moisture: Max 1.5%



 Phosphate Fertilizer Production




 Food & Beverage  
(Acidulant & pH Regulator)



 Soft Drink Flavoring



 Metal Treatment &  
Surface Processing



 Water Treatment



 Detergent & Cleaning  
Agent Production



 Chemical Manufacturing Catalyst



# SULFUR GRANULE

## GRADES / SPECIFICATIONS

Appearance: Yellow | Moisture: Min 0.1% | Ash Content: < 0.01%



 **Agriculture  
(Soil Conditioning)**



 **Fungicide  
Production**



 **Sulfuric Acid  
Manufacturing**



 **Sulfide Compound  
Production**



 **Chemical Manufacturing  
Precursor**



 **Sulfide Compound  
Production**



 **Safe Storage & Transportation  
(Industrial Use)**

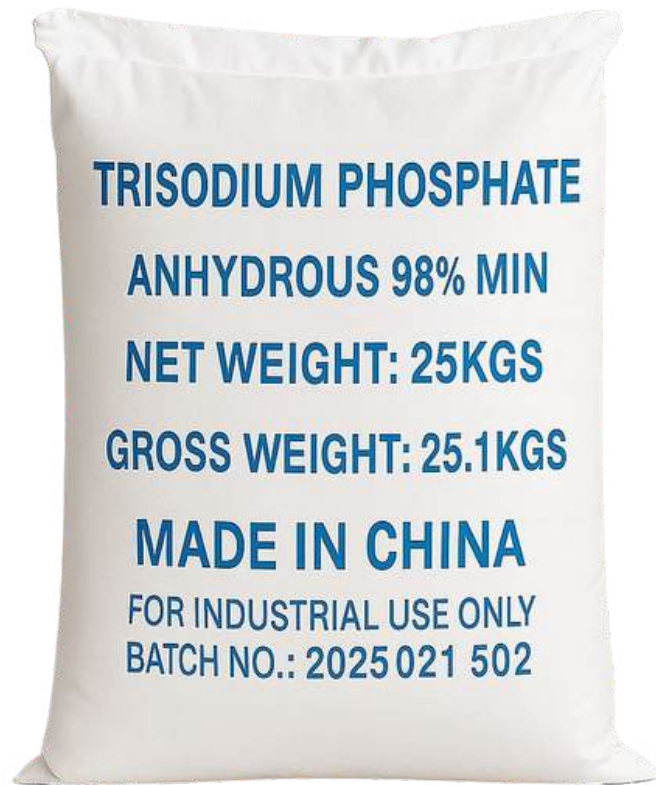


# SULFUR POWDER

## GRADES / SPECIFICATIONS

Appearance / Color: Yellow Powder | Purity: Min 99.79% | Ash Content: < 0.01%





# TRISODIUM PHOSPHATE

## GRADES / SPECIFICATIONS

Appearance: White Crystalline | Assay:  $\geq 70.0\%$  | Alkalinity: 16.0–17.0 | Insoluble:  $\leq 0.10\%$



**Heavy-Duty  
Cleaning & Degreasing**



**Stain Removal  
(Industrial & Household)**



**Water Treatment  
(pH Control)**



**Detergent  
Manufacturing**



**Ceramics & Textile  
Manufacturing**



**Agriculture  
(Phosphorus Fertilizer)**



# POTASSIUM HYDROXIDE

## GRADES / SPECIFICATIONS

Liquid: Clear Liquid | Density: 1.50–1.55 | KOH Content: 48–52% / Customizable

Flake: White Flake | KOH Content:  $\geq 90\%$



Biodiesel Production (Transesterification Catalyst)



Soap & Detergent Manufacturing (Saponification)



Potassium Carbonate Production



Liquid Fertilizer Manufacturing



Battery & Electrochemical Applications



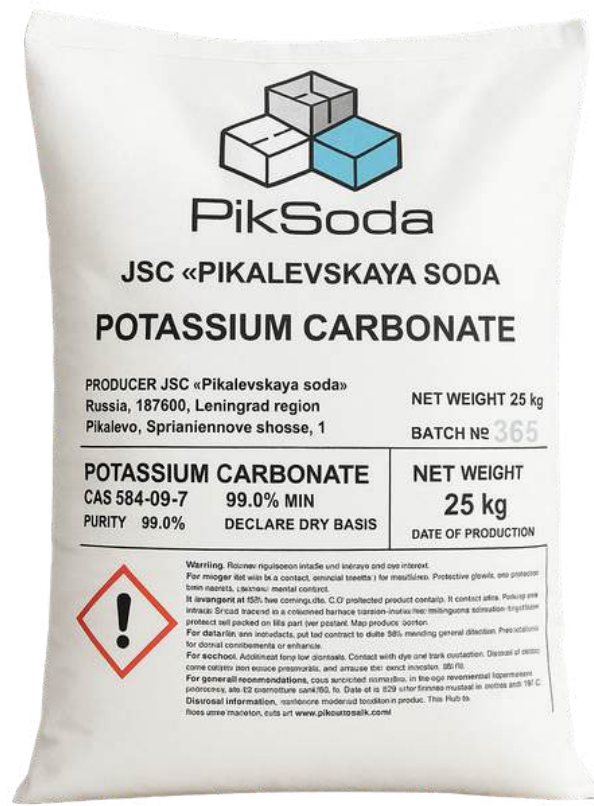
Industrial Cleaning & pH Adjustment



Food Processing



Electronics Industry



# POTASSIUM CARBONATE

## GRADES / SPECIFICATIONS

Appearance: White Crystalline Powder |  $K_2CO_3$  Content: 99% | Potassium Oxide ( $K_2O$ ): 67.9%



**Glass Manufacturing**  
(Transparency Enhancement)



**Food & Beverage**  
(Buffering Agent)



**Detergent & Soft Soap**  
Production



**Fertilizer Formulation**



**Fire Extinguisher**  
Component



**Specialty Glass**  
Production



**pH Regulation & Chemical Processing**



# UREA

## GRADES / SPECIFICATIONS

CH<sub>4</sub>N<sub>2</sub>O



 Agriculture (Nitrogen Fertilizer & Crop Yield)



 Resin & Urea-Formaldehyde Manufacturing



 Animal Feed Additive



 Polymer & Adhesive Formulation



 NO<sub>x</sub> Reduction (SCR Systems for Diesel Engines)



 Environmental & Emission Control



# POTASSIUM NITRATE FERTILIZER GRADE

## GRADES / SPECIFICATIONS

Appearance: White Crystal | Potassium Oxide ( $K_2O$ ):  $\geq 46.0\%$  | Moisture:  $\leq 0.20\%$



Fertigation & Drip  
Irrigation Systems



Hydroponics &  
Soilless Cultivation



Foliar Application  
(Rapid Nutrient Uptake)



Chloride-Free  
Crop Nutrition



Fruit Quality, Size &  
Shelf Life Improvement



Stress Tolerance  
Enhancement



High-Value &  
Sensitive Crop Cultivation



## BARIUM SULFATE

### GRADES / SPECIFICATIONS

Content:  $\geq 85-88\%$  | Moisture:  $\leq 0.3\%$  | Specific Gravity:  $4.2-4.4 \text{ g/cm}^3$  | D90:  $\leq 20.8 \mu\text{m}$  | Whiteness:  $90.5\%$



**Paint & Coatings**  
(Extender & Brightness  
Enhancement)



**Weathering &  
Chemical Resistance**



**Plastic Manufacturing**  
(Density & Rigidity)



**Rubber Industry**  
(Surface Finish  
Enhancement)



**Durable Material  
Production**



**Coating Smoothness &  
Durability Improvement**



# BENTONITE

## GRADES / SPECIFICATIONS

pH: 9.5–10.5 | Viscosity: 200–1000 cPs | Arsenic:  $\leq 5$  ppm



**Drilling Mud & Borehole Stabilization**



**Waterproofing & Sealing Barriers**



**Foundry Mold & Metal Casting**



**Landfill Liner & Environmental Engineering**



**Construction & Civil Engineering**



**Moisture Retention & Fluid Management**



# C5 HYDROCARBON RESIN

## GRADES / SPECIFICATIONS

Melt Viscosity 200°C: ≤ 255 cPs | Acid Value: ≤ 1.8 mgKOH/g | Softening Point Ring & Ball: 95-105°C | Colour Gardner: ≤ 5



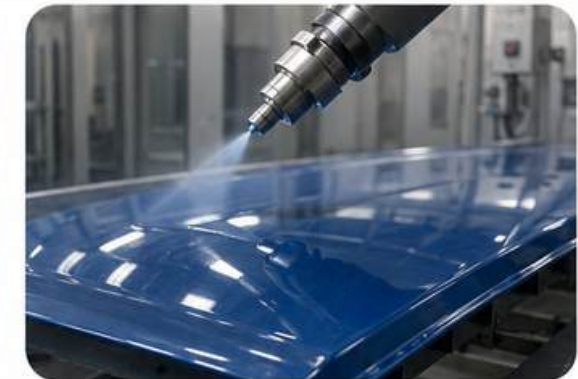

**Hot Melt Adhesive Manufacturing**




**Pressure-Sensitive Adhesive (PSA) Production**




**Sealant Formulation**




**Coatings (Gloss & Hardness Enhancement)**




**Rubber Industry (Elasticity Improvement)**




**Polymer Compatibility & Blending**



## C9 PETROLEUM RESIN

### GRADES / SPECIFICATIONS

Acid Value:  $\leq 0.50$  mgKOH/g | Softening Point Ring & Ball: 110.1–120.0°C |  
Colour Gardner: 10.5–11.2 | Ash Content:  $\leq 0.05\%$





# DIOCTYL PHTHALATE (DOP)

## GRADES / SPECIFICATIONS

Assay:  $\geq 99.5$  wt% | Appearance: Clear & Clean Liquid | Color:  $\leq 30$  APHA |  
Specific Gravity 20°C:  $0.986 \pm 0.003$  | Acid Value:  $\leq 0.03$  KOH mg/g



 Flexible PVC Manufacturing



 Cable & Wire Insulation



 Flooring & Inflatable Product Production



 Adhesive & Coating Formulation



 Synthetic Rubber Processing



 Automotive & Construction Plastics



 Electronics Component Manufacturing



# DIOCTYL TEREPHTHALATE (DOTP)

## GRADES / SPECIFICATIONS

Assay:  $\geq 99.5$  wt% | Appearance: Transparent Oily Liquid | Color:  $\leq 40$  APHA | Acid Value:  $\leq 0.1$  KOH mg/g | Water Content:  $\leq 0.1$  wt% | Specific Gravity 20°C: 0.983–0.989



 Flexible PVC Manufacturing (Phthalate-Free)



 Cable & Wire Insulation



 Flooring & Wall Covering Production



 Synthetic Leather Manufacturing



 Automotive Interior Components



 Consumer Goods & Electronics Manufacturing



 Construction Materials (Heat & UV Resistant)



# EPOXY RESIN

## GRADES / SPECIFICATIONS

Appearance: Transparent Liquid | EEW Epoxy Equivalent Weight: 170–210 g/eq | Viscosity: 11,000–14,000 mPa·s | Color: ≤ 50 APHA



 **Construction & Industrial Flooring**



 **Chemical Resistant Surface Coating**



 **Electronics Insulation & Protection**



 **Moisture & Dust Protection (Electronic Components)**



 **High-Performance Adhesive Formulation**



 **High-Gloss Coating & Finishing**



**Footwear &  
Shoe Sole Manufacturing**



**Cushioning &  
Shock Absorption Applications**



**Packaging Film &  
Sealability Enhancement**



**Solar Panel  
Encapsulation**



**Photovoltaic Cell  
Protection**



**Flexible & Durable  
Polymer Formulation**

## ETHYLENE VINYL ACETATE COPOLYMER (EVA 2518)

### GRADES / SPECIFICATIONS

Melt Index: 2.20–2.80 g/10 min | Vinyl Acetate Content: 17.5–19.0% | Phenolic AOX: 240–360 ppm



# GRAPHITE POWDER

## GRADES / SPECIFICATIONS

Appearance: Black Powder | Purity:  $\geq 99.9\%$  | Moisture Content:  $\leq 0.5\%$  | pH: 7-8



Industrial Lubrication  
(High-Temperature &  
High-Pressure)



Friction Reduction  
in Machinery



Battery & Lithium-Ion  
Battery Production



Electrode Manufacturing



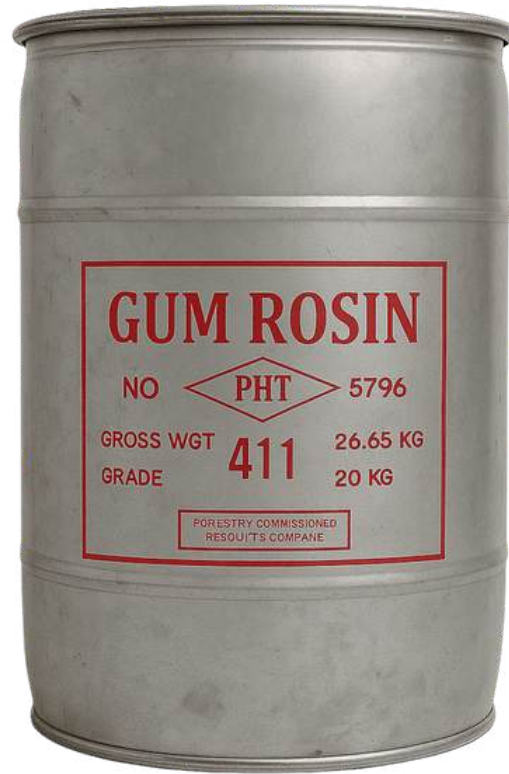
Steelmaking & Carbon  
Electrode Production



Refractory Materials



Thermal Conductivity Enhancement



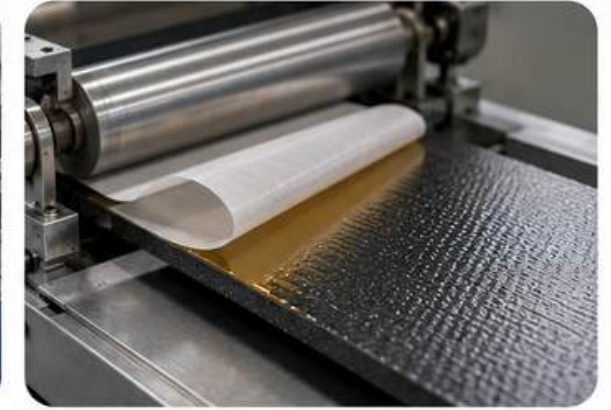
## GUM ROSIN

### GRADES / SPECIFICATIONS

Physical Form: Bulk | Melting Point:  $80 \pm 5^{\circ}\text{C}$  | Color Gardner: Max 8 | Impurities: Max 0.05% | Acid Value: Max 198 mg KOH/g | Ash Content: Max 0.04% | Viscosity: Z-Z2 | Non-Volatile Matter: Min 98%



**Pressure-Sensitive  
Adhesive Formulation**



**Tackiness & Bonding  
Strength Enhancement**



**Varnish & Paint  
Production**



**Gloss & Moisture  
Resistance Improvement**



**Rubber Processing  
& Curing**



**Coating Adhesion  
Enhancement**



# HEXAMINE

## GRADES / SPECIFICATIONS

Appearance: White Crystalline Powder | Carbon (C):  $\geq 99.5\%$  on dry basis | pH 10% Solution: 8.5–9.5 | Moisture / Loss on Drying: Max 2%



 **Resin & Plastic Manufacturing**



 **Cross-Linking Agent for Polymers**



 **Solid Fuel Tablet Production**



 **Epoxy Resin Curing Agent**



 **Laminate & Coating Production**



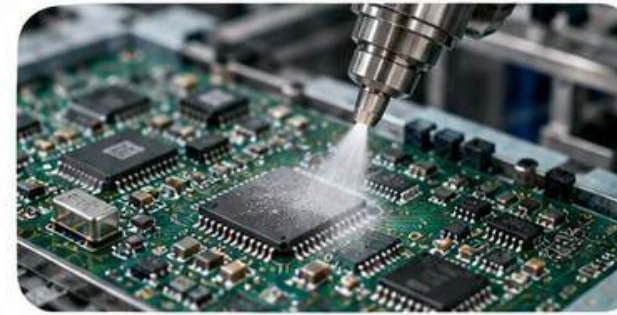
 **Portable Heating Fuel Source**



# ISOPROPYL ALCOHOL (IPA)

## GRADES / SPECIFICATIONS

Appearance: Clear and Colorless Liquid | Purity: Min 99.9% | Odor: Odorless | Water Content: Max 0.1%



 **Electronics Cleaning**  
(PCB & Sensitive Components)



 **Industrial Solvent**  
(Oil, Grease & Resin Removal)



 **Surface Disinfection**  
& Sanitization



 **Medical & Antiseptic**  
Applications



 **Cosmetics & Personal**  
Care Manufacturing



 **Equipment Sterilization**  
& Hygiene



 **Quick-Dry Cleaning Agent** (No Residue)



# KAOLIN

## GRADES / SPECIFICATIONS

Appearance: White to Cream Powder |  $\text{Al}_2\text{O}_3$ : 30–40% |  $\text{SiO}_2$ : 45–55% |  $\text{Fe}_2\text{O}_3$ : < 1% | pH: 4.5–6.5



**Ceramics, Porcelain  
& Tile Manufacturing**



**Paper Coating & Filler  
(Brightness & Smoothness)**



**Paint & Coating  
Stabilizer**



**Rubber & Plastics  
Reinforcing Agent**



**Cosmetics & Personal  
Care Formulation**



**Opacity & Gloss  
Enhancement**



**Construction & Industrial Filler**



# LIGNIN

## GRADES / SPECIFICATIONS

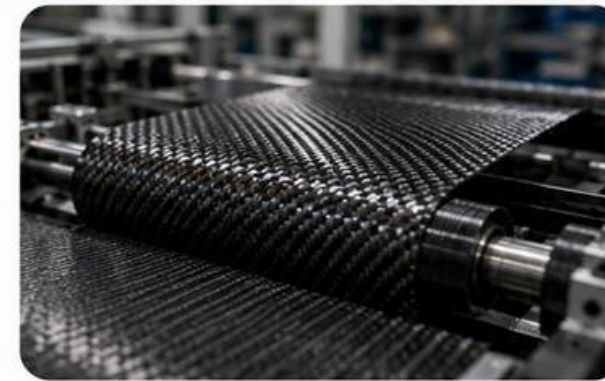
Appearance: Brown to Black Solid | Sulfate: 16.500% | pH: 3.600



 **Biofuel & Renewable Energy Production**



 **Paper & Pulp Manufacturing**



 **Carbon Fiber & Advanced Material Production**



 **Dispersant & Binder in Industrial Formulations**



 **Adhesive & Resin Manufacturing**



 **Soil Conditioner & Agricultural Application**



# LITHOPONE

## GRADES / SPECIFICATIONS

Zinc Sulfide (ZnS):  $\geq 28\%$  | Zinc Oxide (ZnO):  $\leq 0.6\%$



 **Paint & Coatings**  
(White Pigment & Opacity)



 **Industrial & Architectural Finishing**



 **Automotive Coating Applications**



 **Plastics Whitening & Reinforcement**



 **Rubber Manufacturing**



 **Weather-Resistant Coating Formulation**



# LOW AROMATIC WHITE SPIRIT (LAWS)

## GRADES / SPECIFICATIONS

Appearance: White | Color: Min 30



**Paint &  
Coating Thinner**



**Industrial  
Degreasing & Cleaning**



**Printing Industry  
Solvent**



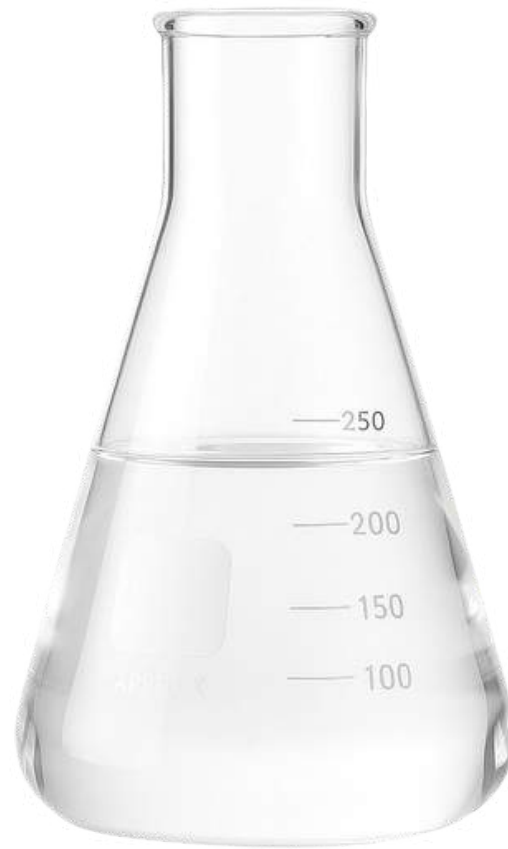
**Automotive  
Maintenance & Cleaning**



**Grease & Oil  
Residue Removal**



**Low-Toxicity  
Workplace Cleaning Agent**



# METHANOL

## GRADES / SPECIFICATIONS

Appearance: Clear liquid, free of opalescence, suspended matter, and sediments | Odor: Characteristic and non-residual | Specific Gravity: Max 0.7928



**Paint, Coating & Adhesive Solvent**



**Fuel & Fuel Additive (Energy Sector)**



**Formaldehyde & Acetic Acid Production**



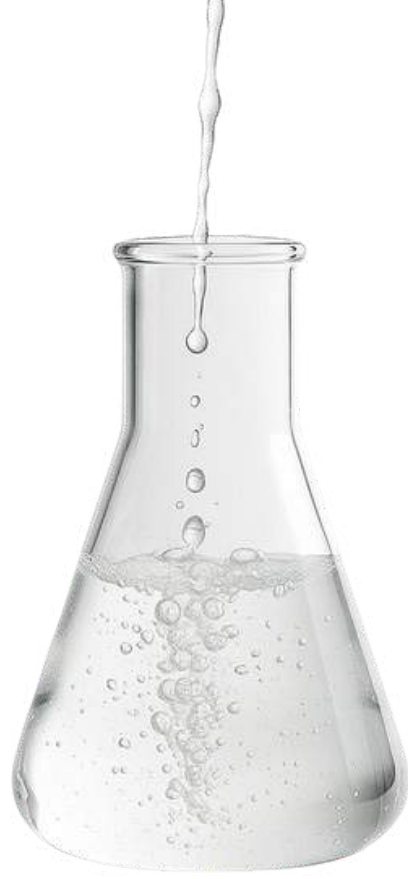
**Antifreeze Manufacturing**



**Plastics & Synthetic Fiber Production**



**Chemical Manufacturing Feedstock**



# MONO ETHYLENE GLYCOL (MEG)

## GRADES / SPECIFICATIONS

Appearance: Clear Colorless Liquid | Purity: Min 99.9% | Specific Gravity: 1.1151–1.1156 | Water Content: Max 0.05 wt%



 Polyester Fiber & Resin Production



 PET (Polyethylene Terephthalate) Manufacturing



 Plastic Bottle & Packaging Production



 Antifreeze & Coolant Formulation



 Automotive & Industrial Cooling Systems



 Textile Industry Raw Material



# SILICA SAND

## GRADES / SPECIFICATIONS

Silica Content: 23.40–39.60% | Alkalinity: 8.30–17.90% | Ratio: 2.00–2.30



 **Glass & Glassware Manufacturing**



 **Construction & Building Materials**



 **Foundry & Metal Casting**



 **Water Filtration & Treatment**



 **Hydraulic Fracturing (Oil & Gas Industry)**



 **Ceramics & Refractory Production**



# TALC

## GRADES / SPECIFICATIONS

Liaoning: Whiteness: Min 91% | SiO<sub>2</sub>: Min 32% | MgO: Min 30% | CaO: Max 1.5% | Fe<sub>2</sub>O<sub>3</sub>: Max 0.3% | Al<sub>2</sub>O<sub>3</sub>: Max 0.3% | Size: 325 Mesh | Moisture: Max 0.6%

Haichen: Whiteness: Min 91% | SiO<sub>2</sub>: Min 36% | MgO: Min 30% | CaO: Max 1.5% | Fe<sub>2</sub>O<sub>3</sub>: Max 0.3%



**Cosmetics & Personal Care**  
(Baby Powder & Skincare)



**Moisture Absorption & Friction Reduction**



**Paper Production**  
(Filler & Coating)



**Plastics & Rubber Additive**



**Industrial Lubrication & Machinery**



**Texture & Performance Enhancement**



# TRICLOSAN

## GRADES / SPECIFICATIONS

Appearance: White Crystalline Powder | Heavy Metals:  $\leq 0.002\%$  | Water Content:  $\leq 0.1\%$



 **Antibacterial Soap & Personal Care Products**



 **Toothpaste & Oral Hygiene Formulation**



 **Deodorant & Skin Lotion Manufacturing**



 **Medical Device Coating & Sterilization**



 **Wound Treatment & Infection Prevention**



 **Industrial Cleaning & Sanitation Products**



# XYLENE

## GRADES / SPECIFICATIONS

Appearance: Liquid | Density: Min 0.8 g/mL | Assay:  $\geq 99\%$



Paint &  
Coating Solvent



Adhesive &  
Resin Dissolution



Chemical Thinner  
& Diluent



Printing Ink  
Manufacturing



Rubber & Leather  
Industry Solvent



Cleaning &  
Degreasing Agent



# ZINC OXIDE

## GRADES / SPECIFICATIONS

ZnO Content: Min 99.8% | Moisture Content: Max 0.15% | Ignition Loss: Max 0.1%



Sunscreen & UV Protection  
(Personal Care)



Skincare & Cosmetics  
Formulation



Rubber Stabilizer &  
Vulcanization



Paint & Coating  
(Whitening Agent)



Ceramics & Glass  
Manufacturing



Automotive Industry  
Applications



# POLYVINYL ALCOHOL

## GRADES / SPECIFICATIONS

2688A: Alcoholysis Degree: 86.0–90.0% | Viscosity: 50.0–60.0 | pH Value: 5–7

1788A: Alcoholysis Degree: 86.0–90.0% | Viscosity: 20.0–29.0 | pH Value: 5–7

1799A: Viscosity: 22.0–30.0 | pH Value: 5–7

2488A: Alcoholysis Degree: 86.0–90.0%



Textile Sizing & Finishing



Adhesive & Bonding Agent Formulation



Paper Coating & Surface Sizing



Biodegradable Packaging Film



Emulsion Stabilizer



Construction & Building Materials



Agricultural Film & Coating



Personal Care & Cosmetics Formulation



# VINYL ACETATE EMULSION (VARIOUS GRADES)

## GRADES / SPECIFICATIONS

WW-101: Appearance: White or Slightly Yellowish Emulsion | pH: 4–6 | Solid Content: 50.0–57.0 wt% | Viscosity 25°C: 2400 mPa·s | Residual Vacuum: 0.004–0.059

VV-102H: Appearance: White or Slightly Yellowish Emulsion | pH: 4.5–5.8 | Solid Content: 51%



 Wood Glue & Adhesive Manufacturing



 Paper Lamination & Bonding



 Textile Finishing & Sizing



 Architectural Paint & Coating Binder



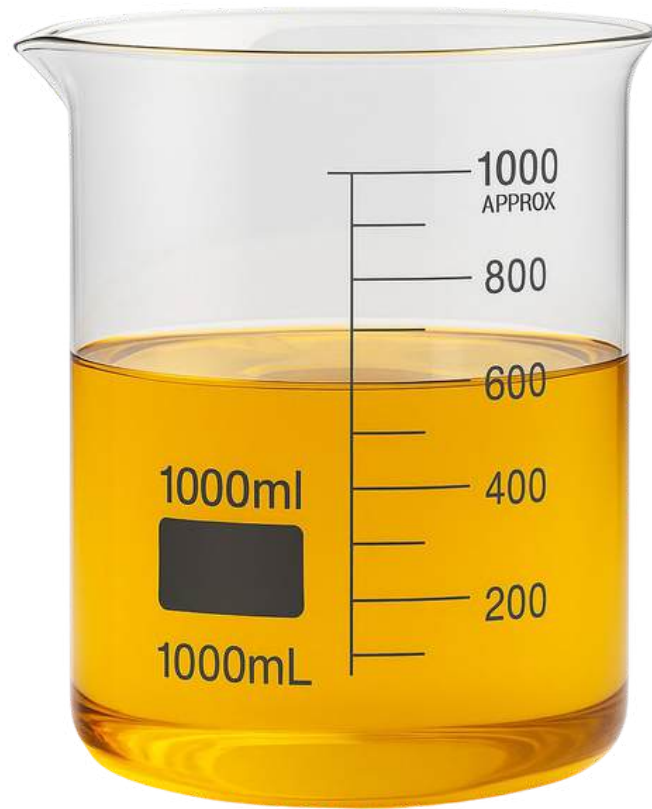
 Construction Compound Formulation



 Film-Forming & Surface Coating



 Filler & Pigment Compatibility Enhancement



## WAX EMULSION

### GRADES / SPECIFICATIONS

Appearance: Yellow to Brownish Yellow Liquid | pH 28°C:  $10.0 \pm 1$  | Density 28°C: 0.99 g/mL



 **Paper & Board Coating  
(Water Resistance)**



 **Wood & Furniture  
Surface Finishing**



 **Textile Finishing &  
Fabric Treatment**



 **Paint & Coating Additive  
(Slip & Scratch Resistance)**



 **Leather Treatment &  
Conditioning**



 **Adhesive & Release Agent  
Formulation**



 **Floor Polish & Surface Care Products**



# ACETIC ACID

## GRADES / SPECIFICATIONS

Concentration:  $\geq 99.85\%$  | Non-Volatile Matter:  $\leq 0.01\%$  | Heavy Metals as Pb:  $\leq 0.0002\%$



 **Food & Beverage  
Preservation & Flavoring**



 **Vinegar Production**



 **Polymer & Resin  
Manufacturing**



 **Adhesive  
Formulation**



 **Synthetic Fiber  
Production**



 **pH Control &  
Regulation**



 **Industrial Solvent Applications**



# BLEACHING EARTH

## GRADES / SPECIFICATIONS

Color: White / Gray / Light Pink | Moisture:  $\leq 12.0\%$  | pH: 2.2–4.8 | Tap Density:  $0.55 \pm 0.10 \text{ g/mL}$  | Heavy Metal as Pb:  $\leq 40 \text{ mg/kg}$



 **Edible Oil Decolorization & Purification**



 **Impurity & Pigment Removal (Food Industry)**



 **Mineral Oil & Lubricant Purification**



 **Wax Refining & Clarification**



 **Biofuel Feedstock Refining**



 **Odor Removal & Quality Enhancement**



 **Petrochemical Processing & Stabilization**



# ACH (ALUMINIUM CHLOROHYDRATE)

## GRADES / SPECIFICATIONS

Appearance: Clear to Slightly Hazy Liquid |  $\text{Al}_2\text{O}_3$  Content: 22.0–25.0% | Specific Gravity: 1.32–1.38



 **Municipal Water Treatment & Purification**



 **Industrial Wastewater Treatment**



 **Suspended Particle Coagulation & Aggregation**



 **Antiperspirant & Deodorant Manufacturing**



 **Sweat Gland Blocking (Personal Care)**



 **Low-Sludge Coagulation Process**



 **Sustainable Water Management Solutions**



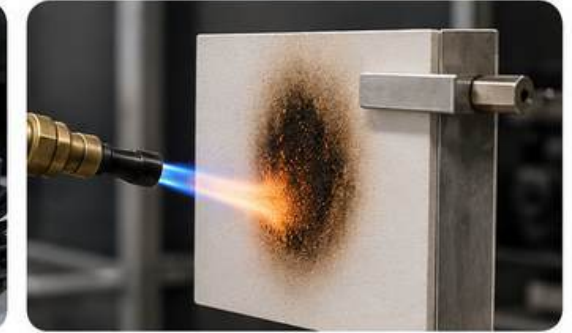
# ALUMINIUM HYDROXIDE

## GRADES / SPECIFICATIONS

Alumina ( $\text{Al}_2\text{O}_3$ ):  $\geq 64.5\%$  | Moisture:  $\leq 0.1\%$  | LOI:  $34.5 \pm 0.5\%$



 **Flame Retardant  
(Plastics & Rubber)**



 **Fire Resistance  
Enhancement**



 **Polymer Filler &  
Mechanical Property Improvement**



 **Antacid &  
Pharmaceutical Applications**




 **Water Treatment &  
pH Adjustment**



 **Ceramics & Glass  
Manufacturing**



 **Aluminium Chemical Production**



# ALUMINIUM INGOT

## GRADES / SPECIFICATIONS

Appearance: Silver White Metal | Aluminum (Al):  $\geq 99.7\%$



 **Automotive Parts & Component Manufacturing**



 **Aerospace Structural Component Production**




 **Construction & Building Material Fabrication**



 **Packaging & Container Manufacturing**



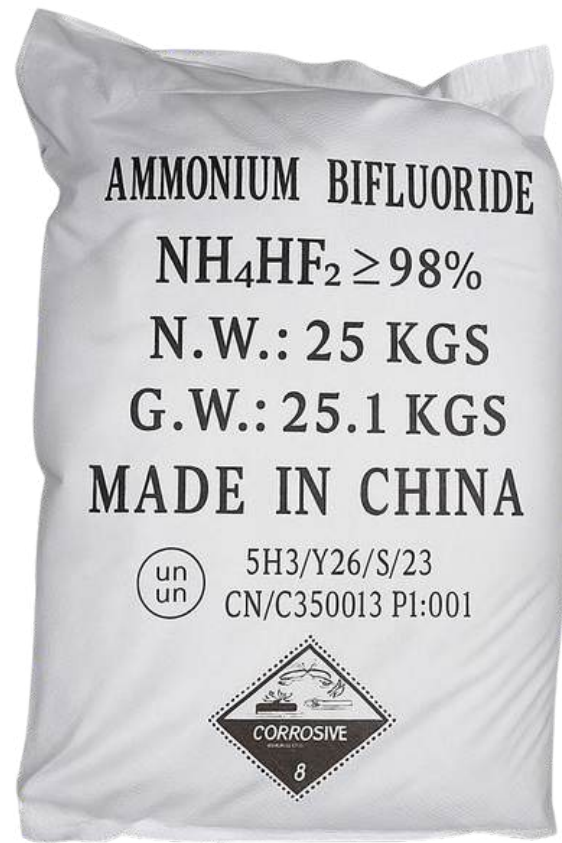
 **Electrical Conductor & Thermal Applications**



 **Lightweight Structural Alloy Production**



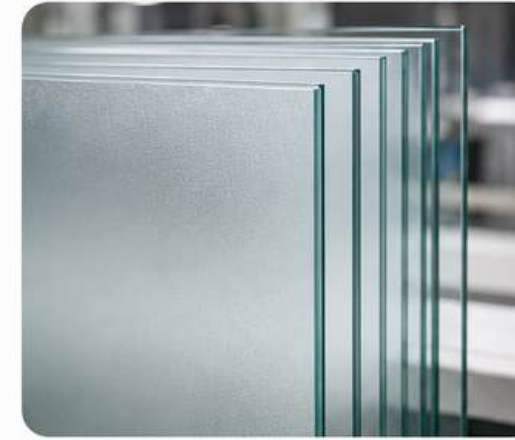
 **Recycled Aluminium Processing & Sustainability**



# AMMONIUM BIFLUORIDE

## GRADES / SPECIFICATIONS

Purity:  $\geq 98.00\%$  | Dried Weightlessness:  $\leq 3.00\%$  | Ignition Residue:  $\leq 0.20\%$  |  
Sulphate:  $\leq 0.10\%$  | Ammonium Fluorosilicate:  $\leq 1.50\%$



 Glass Etching & Frosting



 Glass Manufacturing & Surface Treatment



 Metal Surface Preparation & Oxide Removal



 Industrial Cleaning & Deposit Removal



 Adhesion & Finish Enhancement



 Silica Reaction & Processing Applications



# AMMONIUM CHLORIDE

## GRADES / SPECIFICATIONS

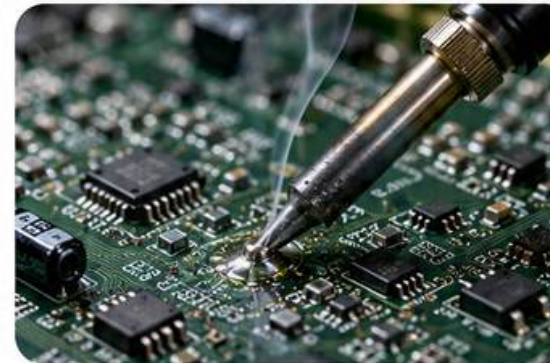
Appearance / Color: White & Yellow | Purity:  $\geq 99.5\%$  | Moisture:  $\leq 0.7\%$  | Heavy Metals:  $\leq 5$  ppm | pH: 4.0–5.8



**Agriculture (Nitrogen Fertilizer & Soil Fertility)**



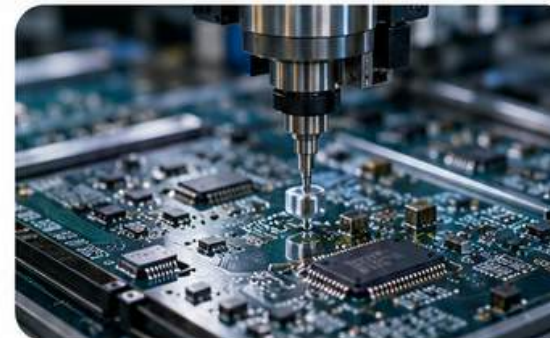
**Metal Cleaning & Surface Treatment**



**Soldering Flux Agent**



**Dry Cell Battery Electrolyte**



**Electronics & Metalworking Industry**



**Crop Yield & Plant Growth Enhancement**



# AMMONIUM HYDROXIDE

## GRADES / SPECIFICATIONS

NH<sub>4</sub> Content: ≥ 25% | Appearance: Clear Transparent Liquid | Specific Gravity: 0.85–0.95



 Glass & Surface Cleaning & Degreasing



 Household & Industrial Cleaning Formulation



 Surface Disinfectant Manufacturing



 Water Treatment & pH Adjustment



 Textile Processing & Finishing



 Cosmetic Formulation (pH Regulator)



# AMMONIUM POLYACRYLATE

## GRADES / SPECIFICATIONS

Appearance: Clear to Slightly Yellowish Liquid | Purity: 25–30% | Specific Gravity 20°C: 1.1–1.2



 **Water Treatment**  
(Scale Inhibition)



 **Wastewater Treatment & Process Efficiency**



 **Paint & Coating**  
Dispersing Agent



 **Ceramics Manufacturing**  
(Particle Dispersion)



 **Construction**  
Material Additive



 **Anti-Scaling & Equipment Protection**



 **pH-Compatible Industrial Formulations**



## ANTISCALANT SWRO

### GRADES / SPECIFICATIONS

Appearance: Brownish Red Transparent Liquid | Content: 40.0–45.0% | pH 5% Aqueous Solution: 4.0–5.0 | Density 20°C: 1.15–1.20 g/cm<sup>3</sup>



 Seawater Reverse Osmosis (SWRO) Scale Prevention



 Brackish Water Desalination Systems



 RO Membrane Protection & Lifespan Extension



 Calcium Carbonate & Silica Deposit Inhibition



 Municipal Desalination Plant Operations



 Offshore Platform Water Treatment



 High-Recovery Rate Desalination Optimization



# ARSENIC METAL

## GRADES / SPECIFICATIONS

Appearance: Silvery Gray to Dark Gray Solid | Arsenic Content:  $\geq 99\%$  | Sulphur:  $\leq 0.4\%$  | Antimony:  $\leq 0.4\%$  | Bismuth:  $\leq 0.1\%$  | Packaging: 50 kg/drum



Lead-Based Alloy  
Hardening & Strengthening



Corrosion Resistance  
Enhancement



Semiconductor  
Manufacturing  
(Gallium Arsenide)



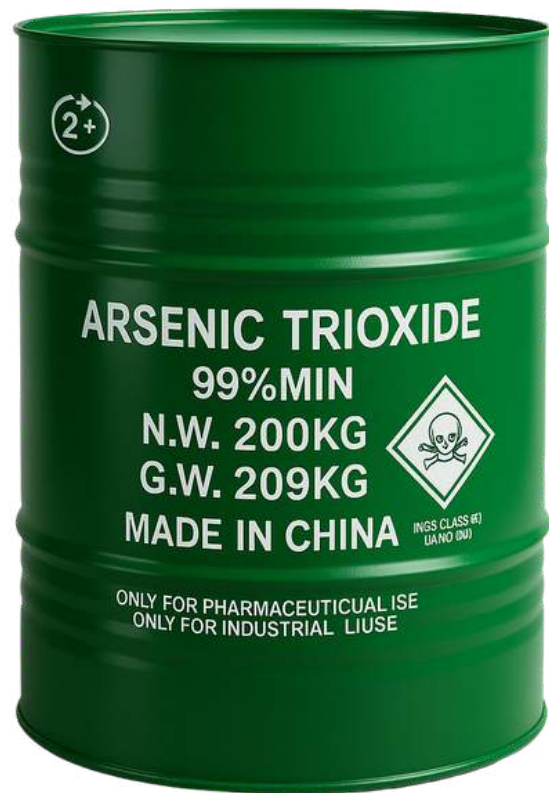
High-Speed Electronic  
Device Production



Solar Cell &  
Photovoltaic Applications



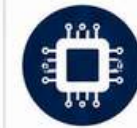
Renewable Energy  
Technology Development



# ARSENIC TRIOXIDE

## GRADES / SPECIFICATIONS

As<sub>2</sub>O<sub>3</sub> Content: ≥ 99% | Iron (Fe): ≤ 0.02% | Water Content: ≤ 0.3%



Semiconductor  
Manufacturing &  
Electronics



Metal Alloy Additive  
(Strength & Durability)



Metallurgical  
Processing



Wood Preservation  
(Fungal & Insect Protection)



Glass & Ceramic  
Decolorization



Pharmaceutical &  
Medical Applications



# ASPHALT EMULSION

## GRADES / SPECIFICATIONS

Chemical Formula: Varied Composition | Color: Black | Form: Liquid | Purity:  
≥ 60% Asphalt Residue | pH: 2.5–4.5



 Road Paving & Construction



 Road Patching & Maintenance



 Surface Sealing & Waterproofing



 Slurry Seal & Chip Seal Applications



 Asphalt Mixture Binder



 Low-Temperature Application  
(Energy Efficient)



 Durable Surface Protection  
(Harsh Weather Conditions)



# BARIUM CARBONATE

## GRADES / SPECIFICATIONS

Purity  $BaCO_3$ :  $\geq 99.2\%$  | Moisture:  $\leq 0.30\%$  | Ignition Residue of HCl Insolubles:  $\leq 0.15\%$  | Total Sulfur:  $\leq 0.25\%$



 Ceramics & Glaze Manufacturing



 Glass Production & Strength Enhancement



 Barium Compound Chemical Manufacturing



 Rodenticide (Agricultural Pest Control)



 Oil & Gas Drilling Fluid Additive



 Melting Point Reduction (Energy Efficiency)



 Fluid Density Control in Drilling Operations



# CALCIUM HYPOCHLORITE

## GRADES / SPECIFICATIONS

Appearance: White Powder |  $\text{CaCl}_2$  Content: 9–12% | Available Chlorine: 63%  $\pm 2$  | Water Content:  $\leq 3\%$  | Annual Chlorine Loss Rate:  $\leq 8\%$



Water Disinfection & Purification



Swimming Pool Sanitation & Treatment



Paper & Pulp Bleaching



Textile Fabric Bleaching



Bacteria & Contaminant Elimination



Industrial Surface Disinfection



Wastewater Treatment & Sanitation



# CERIUM OXIDE

## GRADES / SPECIFICATIONS

Appearance: Light Yellow Powder | Purity:  $\geq 99.5\%$



Glass & Optical  
Lens Polishing



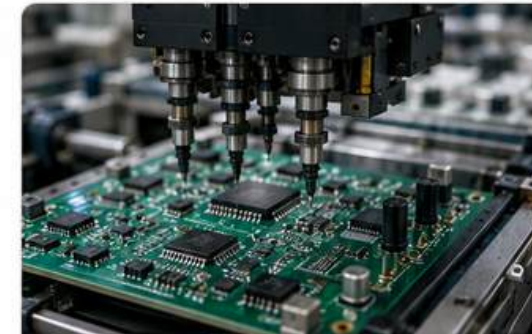
Ceramics & Metal  
Surface Finishing



Automotive Catalytic  
Converter (Emission  
Reduction)



Flat-Panel Display  
Manufacturing



Electronic Component  
Production



Abrasive & Surface  
Treatment Applications



# COBALT TETROXIDE

## GRADES / SPECIFICATIONS

Cobalt (Co):  $\geq 72\%$  | Fe, Ni, Zn, Mn, Cu, Pb:  $\leq 0.02\%$  each | Size -325 Mesh:  $\geq 98\%$



 Ceramics & Glass  
Pigmentation  
(Blue-Black Coloring)



 High-Temperature  
Color Stability



 Coating &  
Paint Colorant



 Oxidation  
Process Catalyst



 Industrial Chemical  
Synthesis



 Battery & Energy  
Storage Materials



 Electrochemical Applications



# COLMONOY POWDER

## GRADES / SPECIFICATIONS

COLMONOY 22: Boron:  $\geq 1\%$  | Nickel: Balance / Rem | Silicon:  $\geq 3\%$

COLMONOY 4: Boron:  $\geq 2\%$  | Nickel: Balance / Rem | Silicon:  $\geq 2\%$



 **Turbine Component Coating & Protection**



 **Pump & Valve Seat Surface Hardening**



 **Wear & Abrasion Resistance Enhancement**



 **High-Temperature Industrial Applications**



 **Aerospace Component Manufacturing**



 **Automotive Part Coating & Durability**



 **Corrosion Protection & Maintenance Reduction**



# CYCLOPENTANE

## GRADES / SPECIFICATIONS

Appearance: Clear Liquid | Cyclopentane Content:  $\geq 95\%$  | Water Content:  $\leq 100$  wtpm | Initial Boiling Point:  $\geq 45^{\circ}\text{C}$  | Dry Point:  $\leq 65^{\circ}\text{C}$  | Color:  $\geq 28$  CBT | Sulfur Content:  $\leq 0.1$  wtpm



 Polyurethane Foam Blowing Agent



 Polystyrene Foam Insulation Production



 Thermal Performance & Energy Efficiency Enhancement



 Eco-Friendly CFC/HCFC Alternative (Low GWP)



 Industrial Solvent & Chemical Processing



 Refrigerator & Appliance Insulation Manufacturing



 Sustainable & High-Performance Material Production



# DECOLORING AGENT (DCA CW08)

## GRADES / SPECIFICATIONS

Appearance: Colorless or Light-Color Sticky Liquid | Dynamic Viscosity 20°C: 10–500 mPa·s | pH 30% Water Solution: 2.0–5.0 | Solid Content: ≥ 50%



 Textile & Dyeing  
Wastewater Decolorization



 Synthetic Dye Removal &  
Neutralization



 Industrial Effluent  
Treatment & Clarification



 Paper Industry Color  
Impurity Removal



 Water Recycling &  
Safe Discharge Compliance



 Environmental  
Regulation Compliance



 Eco-Friendly & Biodegradable Water Treatment



# DISODIUM PHOSPHATE

## GRADES / SPECIFICATIONS

Appearance: White Powder | Assay on Dried Basis as  $\text{Na}_2\text{HPO}_4$ :  $\geq 98\%$  |  
Pyrophosphate as  $\text{Na}_4\text{P}_2\text{O}_7$ :  $\leq 2\%$  | pH 1% Aqueous Solution: 8.4–9.6 | Loss on  
Drying:  $\leq 5\%$  | Water Insoluble Matter:  $\leq 0.2\%$



**Food Processing**  
(Buffering & pH Regulation)



**Water Treatment**  
(Scale & Corrosion Control)



**Detergent Manufacturing**  
(Water Softening)



**Dispersing Agent in  
Industrial Formulations**



**Equipment Longevity &  
Efficiency Enhancement**



**Formulation Stabilization &  
Ingredient Optimization**



**Reliable Industrial Process Performance**



# DURANATE

## GRADES / SPECIFICATIONS

Appearance: Bright Yellow or Yellowish-Green Crystals | CaO: 30.4–32.2% | MgO: 20.2–24.0%



High-Performance  
Coating Manufacturing



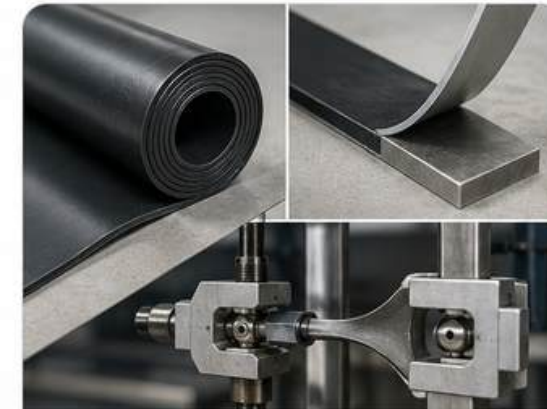
Adhesive & Bonding  
Agent Formulation



Chemical Resistance  
Enhancement



Metal & Wood  
Protective Coating



Flexibility & Adhesion  
Improvement



Industrial Durability &  
Long-Lasting Protection



# FERRIC CHLORIDE (POWDER & LIQUID)

## GRADES / SPECIFICATIONS

Powder: Appearance: Dark Green Hygroscopic Powder | Purity:  $\geq 98\%$

Liquid: Appearance: Amber-Colored Solution | Liquid Purity: 39.5–40.5%  
 $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$



 **Water Treatment (Coagulant & Flocculant)**



 **Drinking Water Purification**



 **Industrial Wastewater & Effluent Treatment**



 **PCB Etching & Circuit Board Manufacturing**



 **Electronics Component Production**



 **Chemical Synthesis & Industrial Processing**



 **Reliable Industrial Process Performance**



# FIBERGLASS RESIN

## GRADES / SPECIFICATIONS

Appearance: Fine Powder | Main Composition: Silica, Alumina, Calcium Oxide & Magnesium Oxide



 **Construction & Structural Reinforcement**



 **Automotive Lightweight Component Manufacturing**



 **Aerospace Part & Structural Production**



 **Marine & Corrosion-Resistant Applications**



 **Electrical & Thermal Insulation**



 **Composite Material Manufacturing**



# FLUOROSILICIC ACID

## GRADES / SPECIFICATIONS

Hydrofluorosilicic Acid  $H_2SiF_6$ : Min 40% | Hydrofluoric Acid HF: Max 0.50% | Sulfuric Acid  $H_2SO_4$ : Max 0.50% | Iron Fe: Max 0.010% | Lead Pb: Max 0.005%



Drinking Water  
Fluoridation  
(Public Health)



Dental Health &  
Cavity Prevention



Water Treatment  
Plant Applications



Fluorine Compound  
Chemical Manufacturing



Ceramics Industry  
Processing



High-Performance  
Material Synthesis



# FORMALDEHYDE

## GRADES / SPECIFICATIONS

Appearance: Clear Liquid, Free from Foreign Matters | Purity: 37–37.5% | Specific Gravity: 1.1050–1.1150 | Methanol: Max 4% | Free Acid: Max 0.03%



Urea-Formaldehyde & Phenol-Formaldehyde Resin Production



Adhesive & Coating Manufacturing



Woodworking & Furniture Industry



Automotive Part & Insulation Material Production



Textile Fabric Finishing



Disinfectant & Preservative Manufacturing



Medical & Industrial Sterilization



## FORMIC ACID

### GRADES / SPECIFICATIONS

Acidity: Min 90% / Min 94% | Color Index Platinum-Cobalt: Max 10 | Chloride: Max 0.0005% | Sulfate: Max 0.0005% | Metals as Fe: Max 0.0005% | Evaporation Residue: Max 0.006%



Animal Feed Preservation & Antibacterial Agent



Livestock Health & Feed Shelf Life Enhancement



Textile Dyeing & Fabric Finishing



Leather Tanning & Hide Preservation



pH Regulation & Industrial Chemical Processing



Rubber Coagulation & Natural Rubber Processing



# GLASS BEADS

## GRADES / SPECIFICATIONS

88A: Appearance: Colorless | Index of Refraction: Min 1.5 | Specific Gravity: 2.4–2.6

88B: Appearance: Colorless | Index of Refraction: Min 1.5 | Specific Gravity: 2.4–2.6



Reflective Road Marking & Traffic Safety



Night Visibility & Low-Light Safety Enhancement



Abrasive Blasting & Surface Finishing



Metal, Plastic & Glass Surface Treatment



Plastic & Rubber Filler (Strength Enhancement)



Construction & Automotive Industry Applications



# HPMC (HYDROXYPROPYL METHYLCELLULOSE)

## GRADES / SPECIFICATIONS

Appearance: White to off-white powder



**Construction**  
(Tile Adhesive &  
Cement Additive)



**Thickening & Binding Agent**  
(Industrial Formulations)



**Food Processing**  
(Emulsifier & Stabilizer)



**Cosmetics & Personal Care**  
(Texture Improvement)



**Pharmaceutical**  
(Tablet Coating &  
Controlled Release)



**Gel Formation &  
Viscosity Control**



# Hydrazine

## GRADES / SPECIFICATIONS

Physical Form: Clear Colorless Liquid | Hydrazine Content:  $\geq 80\%$  | pH 10%  
Aqueous Solution:  $11 \pm 1$



 **Rocket Propellant & Aerospace Applications**



 **Boiler Water Treatment (Oxygen Scavenging)**



 **Corrosion Inhibitor in Water Treatment**



 **Polyurethane Foam Blowing Agent**



 **Agricultural Chemical Manufacturing**



 **Chemical Synthesis & Reducing Agent**



# HYDROFLUORIC ACID

## GRADES / SPECIFICATIONS

China: Appearance: Colorless and Transparent Liquid | HF Content: Min 55% | Sulphuric Acid:  $\leq 0.08\%$

70%: Appearance: Colorless to Yellowish Liquid | Purity: Min 70% | Sulphuric Acid: Max 0.08%

Spain: HF Content: Min 55% | Density: 1.20 kg/L



Semiconductor  
Manufacturing &  
Silicon Wafer Etching



Electronics Cleaning &  
Precision Production



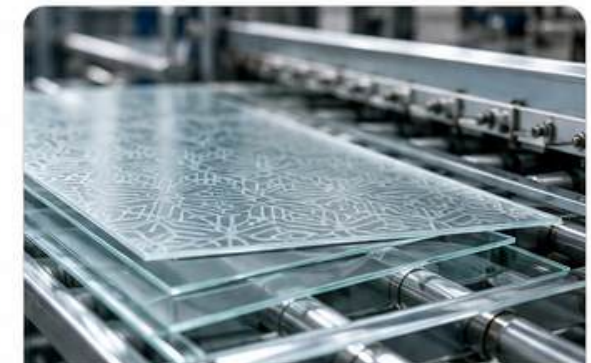
Fluorine Compound  
Chemical Manufacturing



Refrigerant  
Production



Petrochemical  
Refining



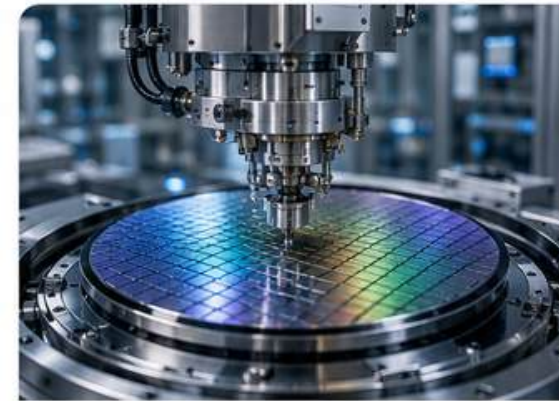
Glass Etching &  
Specialty Glass Production



# HYDROGEN PEROXIDE


## GRADES / SPECIFICATIONS

Appearance: Clear Colorless Liquid | Concentration: 27.5%, 35%, 50%, 60% | Free Acid:  $\leq 0.02\%$  | pH: 3.0–4.0



 Semiconductor Manufacturing & Silicon Wafer Etching



 Electronics Cleaning & Precision Production



 Fluorine Compound Chemical Manufacturing



 Refrigerant Production



 Petrochemical Refining



 Glass Etching & Specialty Glass Production



# HEXAMOLL

## GRADES / SPECIFICATIONS

Content: Min 99.5% | Viscosity: 44–60 | Density: 0.944–0.954



 Flexible PVC Manufacturing  
(Non-Phthalate)



 Consumer Goods & Safe  
Plasticizer Applications



 Construction Material  
Formulation



 Low Migration & High  
Durability Polymer Systems



 Thermal Stability &  
Softness Retention



 Regulatory-Compliant  
Industrial Product  
Manufacturing



# ION EXCHANGE RESIN

## GRADES / SPECIFICATIONS

Appearance: Yellow or Light Brown Spherical Granules | Active Ion Content:  $\geq 80\%$



**Water Purification & Deionization**



**Water Softening (Hardness Removal)**



**Industrial Wastewater Treatment**



**Pharmaceutical & Food Grade Water Production**



**Chemical Processing & Separation**



**Power Plant & Boiler Feed Water Treatment**



# LAURIC ACID

## GRADES / SPECIFICATIONS

Appearance: White Powder | Assay:  $\geq 99\%$



 Soap & Detergent Manufacturing



 Cosmetics & Personal Care Formulation (Creams & Lotions)



 Surfactant & Emulsifier Production



 Antimicrobial & Antifungal Preservation



 Food Additive (Confectionery & Dairy Products)



 Skin Conditioning & Moisturizing Applications



 Pharmaceutical & Ointment Formulation



# LEAD NITRATE

## GRADES / SPECIFICATIONS

Purity Dry Base: Min 99% | Water Insolubles: Max 0.02% | Chloride as Cl: Max 0.005%



**Lead-Based Pigment & Paint Manufacturing**



**Lead Chromate Production**



**Water Treatment (Algae Growth Control)**



**Chemical Synthesis & Industrial Processing**



**Coatings & Colorant Formulation**



# LITHIUM NITRATE

## GRADES / SPECIFICATIONS

Appearance: White Crystal or White Powder | Purity: Min 98% | pH: 5.5-7.5



Lithium-Ion Battery  
Manufacturing



Electric Vehicle &  
Electronics Energy Storage



Lithium Compound  
Precursor Production



Heat-Resistant Glass  
Manufacturing



Ceramics & Advanced  
Material Production



Pyrotechnics & Specialty  
Chemical Applications



# LYCNAR

## GRADES / SPECIFICATIONS

Appearance: Brown Yellow to Pale Yellow, Clear to Slightly Hazy Liquid | pH: 7-8 at  $\pm 28^{\circ}\text{C}$  | Specific Gravity:  $1.32 \pm 0.02$



**Textile Dye Stripping & Color Removal**



**Fabric Treatment & Stain Removal**



**Textile Finishing & Quality Enhancement**



**Garment Production & Fabric Appearance Improvement**



**Unwanted Dye Residue Elimination**



**High-Quality Fabric & Garment Manufacturing**



# MAGNESIUM CHLORIDE

## GRADES / SPECIFICATIONS

Appearance: White Crystal | Purity: Min 98% | Chloride Content: 54.5–56%



Road De-icing & Winter Maintenance



Dust Control & Suppression



Magnesium Metal Production



Lightweight Alloy Manufacturing (Automotive & Aerospace)



Agriculture (Soil Quality Improvement)



Magnesium Compound Precursor Production



# MALTODEXTRIN

## GRADES / SPECIFICATIONS

Appearance: White to Slightly Yellowish Powder | Purity: Min 98% | Dextrose Equivalent DE: 10–20 | pH 10% Solution: 4.5–6.5



**Food & Beverage  
Thickening & Stabilization**



**Powdered Drink &  
Instant Food Formulation**



**Snack Food, Sauce &  
Dessert Production**



**Sports & Dietary  
Supplement Manufacturing**



**Low-Calorie &  
Reduced-Sugar  
Product Development**



**Bulking Agent &  
Texture Enhancement**



# MELAMINE

## GRADES / SPECIFICATIONS

Appearance: White Crystalline Powder | Concentration: Min 99.8% | pH Value: 7.5-9.5



Laminate & Countertop Manufacturing



Flooring & Surface Material Production



Dinnerware & Consumer Goods Manufacturing



Adhesive & Coating Formulation



Foam Insulation Material Production



Automotive & Construction Heat-Resistant Applications



# METHYLENE CHLORIDE (DICHLOROMETHANE, DCM)

## GRADES / SPECIFICATIONS

Appearance: Colorless, Clear Liquid, No Suspended Matter |  $\text{CH}_2\text{Cl}_2$  Content:  $\geq 99.0\%$  | Chroma / Hazen Pt-Co Color:  $\leq 10$



**Paint Stripping &  
Coating Removal**



**Industrial Degreasing &  
Cleaning**



**Precision  
Equipment Cleaning**



**Chemical Extraction &  
Processing**



**Pharmaceutical &  
Chemical Manufacturing  
Solvent**



**Adhesive &  
Foam Blowing Agent**



# MINAREX-I

## GRADES / SPECIFICATIONS

Appearance: White Liquid | Purity: Min 98% | Density: 1.2–1.3 g/cm<sup>3</sup> | pH 10% Solution: 5.5–7.5 | Heavy Metals: < 0.01%



**Water Treatment & Impurity Removal**



**Hard Water Treatment & Scale Prevention**



**Pipe & Equipment Scale Buildup Prevention**



**Textile Industry Water Processing**



**Paper Manufacturing Water Treatment**



**Industrial Cleaning (Oil & Grease Removal)**



# MSG (MONOSODIUM GLUTAMATE)

## GRADES / SPECIFICATIONS

Appearance: White Crystals or White Powder | Purity: Min 99%



**Food Flavor  
Enhancement (Umami)**



**Soup & Sauce  
Seasoning**



**Savory Snack &  
Processed Food  
Manufacturing**



**Seasoning Blend &  
Spice Formulation**



**Canned Food &  
Ready-to-Eat Meal  
Production**



**Processed Meat  
Flavor Improvement**



# MONO KALIUM PHOSPHATE (MKP)

## GRADES / SPECIFICATIONS

Main Content: Min 99% | Potassium Oxide ( $K_2O$ ): Min 34% | pH Value: 4.4–4.8



Fertigation &  
Drip Irrigation Systems



Hydroponics &  
Soilless Cultivation



Foliar Application  
(Phosphorus &  
Potassium Source)



Root Development &  
Flowering Enhancement



Food Processing  
(Buffering Agent)



Specialty Chemical &  
Nutrient Additive



Chlorine-Free Crop Nutrition



## NICKEL OXIDE

### GRADES / SPECIFICATIONS

Nickel (Ni):  $\geq 75\%$  | Calcium (Ca): 218–222 ppm | Manganese (Mn): 9–12 ppm



Catalyst in  
Chemical Processing



Nickel Salt &  
Compound Manufacturing



Ceramics &  
Glass Colorant



Battery & Energy  
Storage Material



Electroplating &  
Surface Coating



Pigment & Specialty  
Chemical Production



# NON-OXIDIZING BIOCIDES

## GRADES / SPECIFICATIONS

Active Composition: 2,2-Dibromo-3-nitrilopropionamide & Specialty Biocide Blend | Colour & Form: Light Yellow or Light Blue-Green Transparent Liquid | pH 1% Aqueous Solution: 2.0-5.0



Catalyst in  
Chemical Processing



Nickel Salt &  
Compound Manufacturing



Ceramics &  
Glass Colorant



Battery & Energy  
Storage Material



Electroplating &  
Surface Coating



Pigment & Specialty  
Chemical Production



## OLIVEM 800 & 900

### GRADES / SPECIFICATIONS

Olivem 800: Appearance: Waxy Flake | Odor: Slight Characteristic | Color: White | Actives: Min 99.0% | Moisture: 0-1% | Acid Value: 0-30 mg KOH/g

Olivem 900: Appearance: Waxy Flake | Odor: Slight Characteristic | Color: Ivory | Actives: 99.0%



Cosmetic Emulsion & Cream Formulation



Lotion & Moisturizer Manufacturing



Natural & Olive Oil-Derived Emulsifier



Skin Care Product Stabilization



Personal Care Texture Enhancement



Natural & Eco-Friendly Cosmetic Ingredient



## OXALIC ACID

### GRADES / SPECIFICATIONS

Purity:  $\geq 99.6\%$  | Sulfate  $\text{SO}_4^{2-}$ :  $\leq 0.08\%$  | Ash Content:  $\leq 0.08\%$



Textile Bleaching &  
Stain Removal



Leather Industry  
Cleaning & Processing



Rust Removal &  
Metal Surface Treatment



Wood Brightening &  
Home Improvement



Agriculture (Natural  
Pesticide & Mite Control)



Beekeeping  
Pest Management



Chemical Synthesis & Industrial Precursor



# PARACETIC ACID

## GRADES / SPECIFICATIONS

Peracetic Acid Content: 4–5 g/100 g | Hydrogen Peroxide Content:  $\geq 25\%$



**Food Processing  
Sanitation &  
Disinfection**



**Beverage Facility  
Sterilization**



**Medical &  
Healthcare  
Disinfection**



**Bacteria, Virus &  
Fungi Elimination**



**Water Treatment &  
Oxidizing Agent**



**Non-Toxic Byproduct &  
Eco-Friendly Sanitization**



# PARAFFIN WAX (SEMI & FULL REFINED)

## GRADES / SPECIFICATIONS

Oil Content: Min 58% | Kinematic Viscosity: Min 3.5 | Specific Gravity 70°C: Min 0.0770



 **Candle Manufacturing**



 **Cosmetics & Skincare (Lotions & Creams)**



 **Food-Grade Coating (Fruit & Vegetable Preservation)**



 **Food Packaging & Protective Coating**



 **Industrial Lubrication & Sealing**



 **Waterproofing & Surface Protection**



# PARAFORMALDEHYDE

## GRADES / SPECIFICATIONS

Appearance: Powder | Melting Point: 120–170°C | Density 25°C: 0.88 g/mL



Formaldehyde-Based  
Resin Manufacturing



Plastic & Polymer  
Production



Disinfectant &  
Antimicrobial Applications



Biological Specimen  
Preservation  
(Laboratory & Hospital)



Textile Industry  
Chemical Processing



Agricultural Fungicide &  
Soil Sterilization



# PEA PROTEIN

## GRADES / SPECIFICATIONS

Appearance: Light Yellow Powder | Odor: Odorless / No Specific Odor |  
Concentration:  $\geq 80.0\%$



Plant-Based Meat  
Substitute Manufacturing



Protein Powder &  
Supplement Production



Food & Beverage  
Fortification



Gluten-Free Product  
Formulation



Sports & Nutrition  
Product Development



Sustainable &  
Vegan-Friendly Ingredient



## PINE OIL

### GRADES / SPECIFICATIONS

Appearance: Clear to Pale Yellow Liquid



Cleaning Product &  
Disinfectant Formulation



Antibacterial &  
Antifungal Surface  
Sanitization



Air Freshener &  
Deodorizer  
Manufacturing



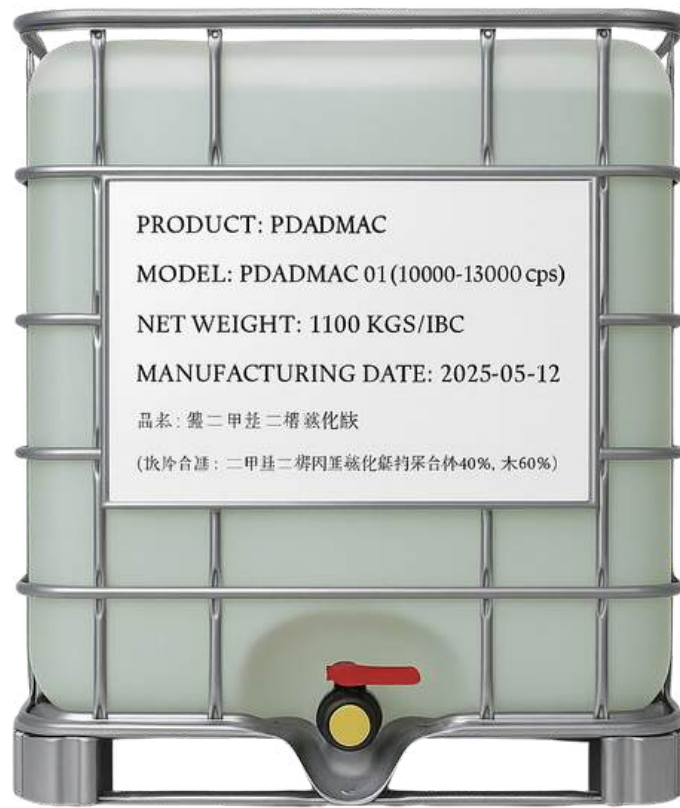
Fragrance &  
Perfumery Industry



Cosmetics & Personal  
Care Formulation



Aromatherapy &  
Therapeutic Applications



# POLY DIALLYL METHYLAMMONIUM CHLORIDE (PDADMAC)

## GRADES / SPECIFICATIONS

Appearance: White or Light Yellow Powder / Colorless or Light-Color Sticky Liquid | Solid Content: 90% / 40% | Dynamic Viscosity 20°C: 5.0–7.0 cps / 3.0–8.0 cps



Municipal Water Treatment & Clarification



Industrial Wastewater Treatment



Flocculation & Coagulation Agent



Suspended Solids & Turbidity Removal



Sludge Dewatering & Management



Organic Impurity Removal & Water Quality Optimization



# POTASSIUM PERMANGANATE

## GRADES / SPECIFICATIONS

Appearance: Dark Purple Metallic Granule or Needle Crystal |  $\text{KMnO}_4$   
Content: 99.4% | Moisture: Max 0.5%



Drinking Water  
Treatment & Disinfection



Iron & Hydrogen Sulfide  
Removal (Well Water)



Taste & Odor Control  
in Water Systems



Industrial Wastewater  
Oxidation & Treatment



Pharmaceutical  
Manufacturing



Organic Chemical Synthesis  
& Oxidizing Agent



# POLY FERRIC SULFATE

## GRADES / SPECIFICATIONS

Appearance: Golden Yellow | Ferric (Fe) Content: Min 20% | pH 1% Solution: 2.0–3.0



Municipal Water  
Treatment & Purification



Industrial Wastewater  
Treatment & Clarification



Suspended Solids &  
Turbidity Removal



Colloidal Particle &  
Organic Contaminant Removal



Sludge Volume Reduction &  
Dewatering



Color Removal &  
Environmental Discharge  
Compliance



Reverse Osmosis (RO)  
System Scale Prevention



Calcium & Barium  
Sulfate Deposit Control



Metallic Surface  
Corrosion Protection



RO Membrane  
Lifespan Extension



Brackish & Seawater  
Desalination Systems



Boiler Feed Water &  
Ultrapure Water Treatment



Power Generation &  
Electronics Water System Protection

# RO SCALE AND CORROSION INHIBITOR

## GRADES / SPECIFICATIONS

Appearance: Light Yellow to Brownish Black Liquid | pH 1% Aqueous Solution:  $\leq 4$  | Density:  $\geq 1.10$  | Other Specification: Customizable based on customer needs



# SODIUM BICARBONATE

## GRADES / SPECIFICATIONS

Total Alkalinity: Min 99% | Arsenic: Max 0.0001% | Heavy Metals: Max 0.005%



Food Processing &  
Baking Industry



pH Regulation &  
Acid Neutralization



Odor Control &  
Deodorization



Fire Extinguisher Agent



Cleaning & Mild  
Abrasive Applications



Pharmaceutical &  
Antacid Formulation



## SODIUM CARBONATE (SODA ASH)

### GRADES / SPECIFICATIONS

Soda Ash Dense: Appearance: White Powder | Total Alkali Content: Min 99.2% | Chloride Content: Max 0.7% | Particle Size 180  $\mu$ m: Min 70%

Soda Ash Light: Appearance: White Powder | Total Alkali Content: Min 99.2% | Chloride Content: Max 0.7%



**Glass Manufacturing  
& Production**



**Detergent & Soap  
Manufacturing**



**pH Adjustment &  
Alkalinity Control**



**Chemical Processing &  
Industrial Applications**



**Water Treatment &  
Softening**



**Textile & Pulp  
Industry Processing**



# SODIUM CHLORIDE

## GRADES / SPECIFICATIONS

Coarse Salt: Color: White | Appearance: Odorless | Water Content: 10.33%

Fine Salt: Chemical Formula: NaCl | Color: White | Water Content: 0.42–0.50% | NaCl Content: 90.88–96.35%



**Food Seasoning & Preservation**



**Water Treatment & Softening (Ion Exchange Regeneration)**



**Chemical Manufacturing (Chlorine & Caustic Soda Production)**



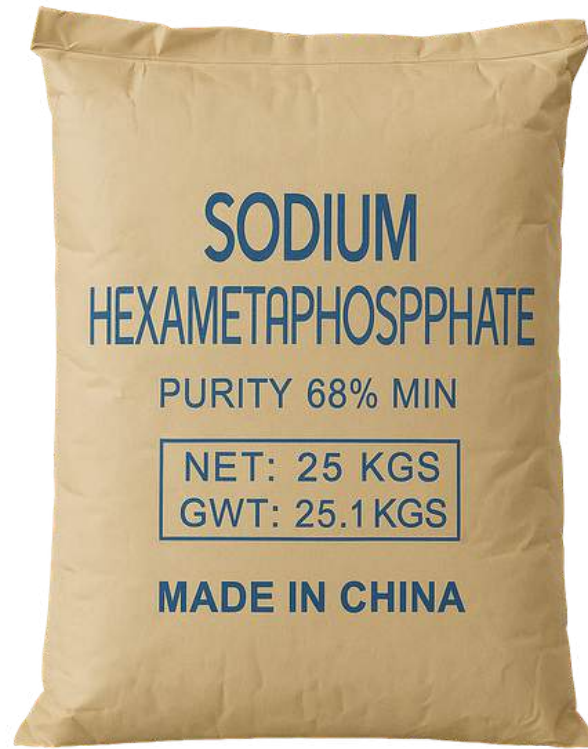
**De-icing & Road Maintenance**



**Textile & Leather Processing**



**Pharmaceutical & Saline Solution Production**



# SODIUM HEXAMETAPHOSPHATE

## GRADES / SPECIFICATIONS

Total Phosphate: Min 68.00% | Inactive Phosphate: Max 7.50% | pH Value: 5.8-7.3



Water Softening &  
Scale Prevention



Food Processing &  
Shelf Life Improvement



Emulsion Stabilization &  
Dispersing Agent



Detergent & Cleaning  
Product Formulation



Ceramic & Paint  
Industry Dispersant



Industrial Water Treatment &  
Corrosion Control



# SODIUM LAURYL ETHER SULFATE

## GRADES / SPECIFICATIONS

Appearance: White or Light Yellow Viscous Paste | Active Matter Content: 68–72% | pH 2% Solution: 7.5–9.5



Shampoo &  
Hair Care Formulation



Body Wash &  
Personal Care Manufacturing



Household Detergent &  
Cleaning Product



Industrial Cleaning &  
Hygiene Formulation



Foaming &  
Emulsifying Agent



Oil & Dirt Breakdown &  
Cleansing Applications



**Meat Curing &  
Food Preservation**



**Bacterial Growth  
Inhibition (Food Safety)**



**Meat Color  
Enhancement**



**Corrosion Inhibitor  
Manufacturing**



**Dye & Pigment  
Manufacturing**



**Industrial Chemical  
Stabilization**

## SODIUM NITRITE

### GRADES / SPECIFICATIONS

Appearance: White Fine Crystal with Slightly Yellowish Color | Sodium Nitrite Content: 99%



# SODIUM SILICATE

## GRADES / SPECIFICATIONS

Alkalinity as  $\text{Na}_2\text{O}$ : 8.30–17.90% | Silica as  $\text{SiO}_2$ : 23.40–39.60% | Ratio: 2.0–2.3 |  
Baume: Min 58.00 °Bé



Detergent & Cleaning  
Product Manufacturing



Paper Production &  
Coating



Construction (Cement &  
Concrete Water Resistance)



Corrosion Inhibitor &  
Protective Coating



Water Treatment &  
pH Adjustment



Refractory Binder &  
Industrial Adhesive



# SULFAMIC ACID

## GRADES / SPECIFICATIONS

Sulfamic Acid Content: Min 99.8% | Sulfate: Max 0.03% | Heavy Metals as Pb: Max 0.0003% | Iron Fe: Max 0.0003% | Moisture Content: Max 0.05%



**Industrial Descaling & Scale Removal**



**Boiler & Heat Exchanger Cleaning**



**Rust & Limescale Removal from Metal Surfaces**



**Household & Industrial Cleaning Product**



**Water Treatment Chemical**



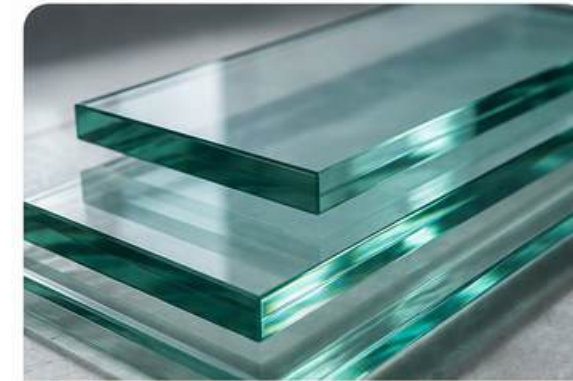
**Metal Processing & Surface Treatment**



# SELENIUM POWDER

## GRADES / SPECIFICATIONS

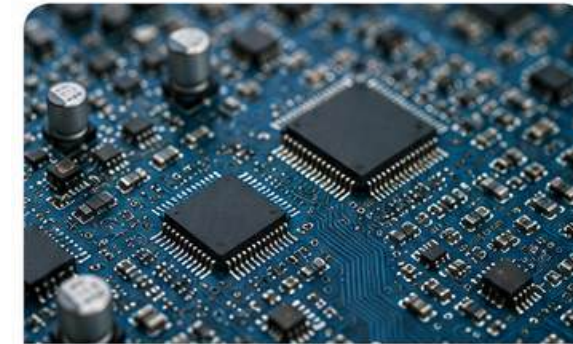
Selenium (Se): Min 99% | Arsenic (As): 2-4 ppm | Mercury (Hg): 3-5 ppm |  
Particle Size: Minus 200 Mesh



Glass Decolorizing &  
Optical Clarity Enhancement



Photocell &  
Solar Panel Component



Electronics &  
Conductivity Enhancement



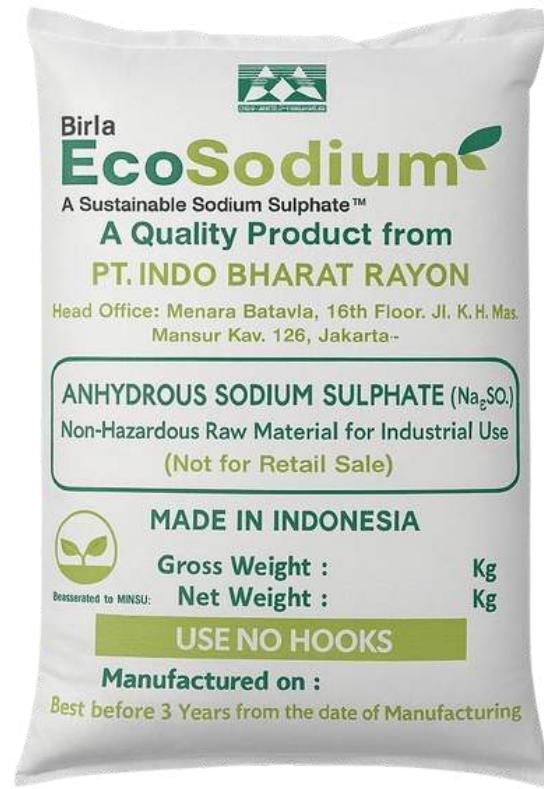
Stainless Steel  
Machinability Improvement



Metallurgical Additive &  
Performance Enhancement



Catalytic Reaction  
Optimization (Chemical Processing)



# SODIUM SULFATE

## GRADES / SPECIFICATIONS

Appearance: White Powder |  $\text{Na}_2\text{SO}_4$  Content:  $\geq 99.00\%$  | Moisture:  $\leq 0.50\%$  |  $\text{NaCl}$ :  $\leq 0.50\%$



 Powder Detergent Filler & Manufacturing



 Textile Dyeing & Washing Process Aid



 Glass Manufacturing (Air Bubble Removal)



 Pulp & Paper Industry Processing Aid



 Production Efficiency & Quality Enhancement



 Industrial-Grade Bulk Chemical Supply



# SODIUM PERCARBONATE

## GRADES / SPECIFICATIONS

Appearance: White Granules with Good Fluidity | Bulk Density: 900–1200 g/L  
| pH 20% Solid: 10.0–11.0





# TRISODIUM CITRATE

## GRADES / SPECIFICATIONS

Assay: 99.0–100.5% | Loss on Drying / Water: 10.0–13.0% | Heavy Metals: ≤ 10 ppm



**Food & Beverage  
Acidity Regulation &  
Buffering**



**Soft Drink &  
Processed Cheese  
Formulation**



**Ready-to-Eat Meal  
Flavor Enhancement**



**Toothpaste &  
Mouthwash  
Manufacturing**



**Personal Care  
pH Regulation &  
Stability**



**Chelating Agent &  
Shelf Life  
Improvement**



# TRICHLOROISOCYANURIC ACID (GRANULE, POWDER, TABLET)

## GRADES / SPECIFICATIONS

Concentration: Min 90% | pH 1% Solution: 2.6–3.2 | Moisture: Max 0.5% | Form: Powder / Tablet / Granular



Drinking Water &  
Wastewater  
Disinfection



Swimming Pool  
Sanitation &  
Treatment



Industrial Cooling  
Water Microbial  
Control



Textile Bleaching &  
Oxidizing Agent



Agriculture &  
Livestock Water  
Sanitation



Aquaculture Water  
Treatment &  
Disinfection



# VINYL ACETATE MONOMER (VAM)

## GRADES / SPECIFICATIONS

Appearance: Colorless Clear Liquid | Purity: Min 99.5% | Relative Density: 0.932–0.933



**Polyvinyl Acetate (PVA) Resin Production**



**EVA Copolymer Manufacturing**



**Adhesive & Bonding Agent Formulation**



**Paint & Coating Film-Forming Agent**



**Textile Treatment & Finishing**



**Flexible Packaging Material Production**



# XANTHAN GUM

## GRADES / SPECIFICATIONS

Appearance: Free-Flowing Powder | Viscosity: 1400–1600 mPa·s | Particles: ≥ 99%



**Food & Beverage**  
Thickening & Stabilization



**Cosmetics & Personal Care**  
Viscosity Control



**Oil & Gas**  
Drilling Fluid Additive



**Pharmaceutical**  
Formulation & Suspension



**Industrial Fluid**  
Viscosity Enhancement



**Gluten-Free & Natural Food Ingredient**



# ZINC STEARATE

## GRADES / SPECIFICATIONS

Appearance: Fluffy White Powder | Specific Gravity: 1.06–1.12 | Metal Content: 10.5–11.5%



 **Plastics Processing**  
(Lubricant & Stabilizer)



 **Rubber Manufacturing**  
(Mold Release Agent)



 **Cosmetics & Personal**  
Care Powder Formulation



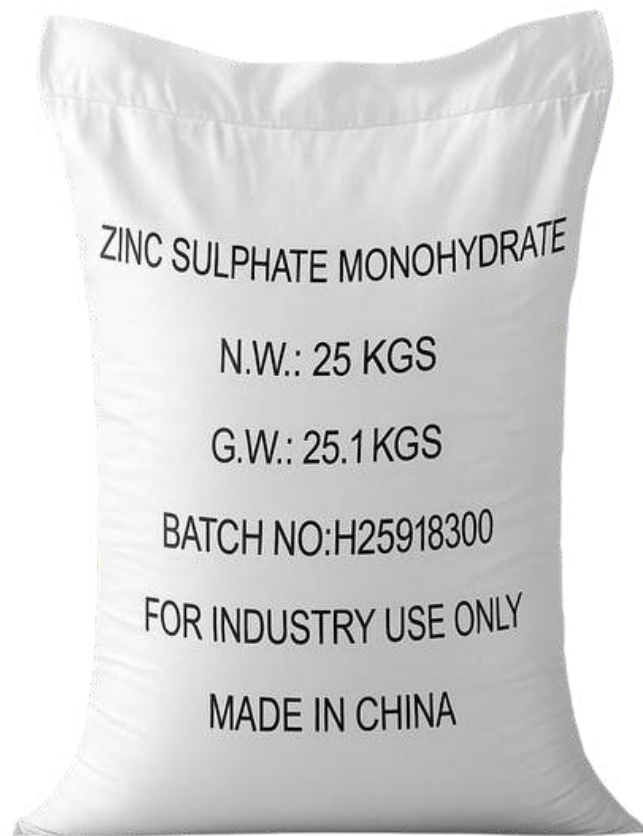
 **Paint & Coating**  
Smoothness Enhancement



 **Industrial Lubricant**  
Production



 **Anti-Sticking & Surface**  
Finish Improvement



# ZINC SULFATE

## GRADES / SPECIFICATIONS

Appearance: Colorless Crystal | Purity: Min 95% | Zinc (Zn): Min 21.5%



**Agriculture**  
(Zinc Micronutrient Fertilizer)



**Crop Yield & Plant Health Improvement**



**Animal Feed Supplement Manufacturing**



**Zinc Deficiency Treatment (Healthcare)**



**Chemical Manufacturing Precursor**



**Water Treatment & Industrial Processing**



# INDUSTRY SALT

## GRADES / SPECIFICATIONS

Brine: NaCl Content: Min 21% | Calcium (Ca): Max 500 ppm | Magnesium (Mg): Max 3000 ppm | Moisture: —

Dryfine: Purity Dry Basis: Min 98% | Calcium (Ca): Max 600 ppm | Magnesium (Mg): Max 400 ppm | Moisture: Max 0.2%

Wetfine: Purity Dry Basis: Min 98% | Calcium (Ca): Max 600 ppm | Magnesium (Mg): Max 400 ppm | Moisture: Max 3%

Microfine: Purity Dry Basis: Min 98% | Calcium (Ca): Max 600 ppm | Magnesium (Mg): Max 400 ppm | Moisture: Max 0.5%



**Food Seasoning & Flavor Enhancement**



**Food Preservation & Shelf Life Extension**



**Meat Curing & Processing**



**Pickled & Fermented Food Production**



**Bakery & Dairy Product Manufacturing**



**Fish & Seafood Processing**



## LOCAL INDUSTRY SALT

### GRADES / SPECIFICATIONS

Retail Table Salt: Composition: 100% Local Salt +  $\text{KIO}_3$  Min 30 ppm | Calcium (Ca): Max 1800 ppm | Magnesium (Mg): Max 8000 ppm | Moisture: Max 2%

Crude: Purity Dry Basis: Min 92% | Calcium (Ca): Max 1800 ppm | Magnesium (Mg): Max 8000 ppm | Moisture: Max 8%

Crushdry: Purity Dry Basis: Min 92% | Calcium (Ca): Max 1800 ppm | Magnesium (Mg): Max 8000 ppm | Moisture: Max 1%



Food & Beverage  
Industry Processing



Chemical  
Manufacturing  
Raw Material



Animal Feed &  
Livestock Nutrition



Retail Table Salt &  
Consumer Use



# MANMEG

CHEMICAL

✉ [corpsec@manmegchemical.co.id](mailto:corpsec@manmegchemical.co.id)

☎ +62 21 226 38787

📍 Head Office: Jl. Keamanan Raya No. 51A, Jakarta 11130, Indonesia

[www.manmegchemical.co.id](http://www.manmegchemical.co.id)