

# MATERIAL SAFETY DATA SHEET

## pH- Minus Granules

### 01 – Information of the material and supplier

**Product Name:** FROGGY pH- Minus Granules

**Other names:** pH- Minus Granules

**Product Use:** Correction of pH

**Supplier's Name:** Pology Coagulant Chemical Plant ALC  
243 Lesi Ukrainky st.,  
Pology, Zaporozhye region,  
70605, Ukraine

**Tel/Fax:** +38 (06165) 312-30  
+38 (06165) 312-34

### Section 02 – Composition/Information on Ingredients

Components	CAS Number	% by weight
Sodium bisulfate	7681-38-1	100

### Section 03 – Hazard Identification

#### Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive, permeator). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastrointestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

#### Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated skin exposure can produce local skin destruction, or dermatitis. Repeated inhalation of dust can produce varying degree of respiratory irritation or lung damage.

## Section 04 – First Aid Measures

**Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

**Skin Contact:**

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

**Serious Skin Contact:**

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:**

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion:** Not available.

## Section 05 – Fire Fighting

**Flammability of the Product:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in

presence of static discharge: Not available.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## Section 06 – Accidental Release Measures

<b>Small Spill:</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
<b>Large Spill:</b>	Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

## Section 08 – Personal Protection / Exposure Controls

### Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Personal Protection:

Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent.

Gloves.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available

## Section 09 – Physical and Chemical Properties

<b>Physical state and appearance:</b>	Solid. (Granular solid.)
<b>Odor:</b>	Not available.
<b>Taste:</b>	Not available.
<b>Molecular Weight:</b>	120.6 g/mole
<b>Color:</b>	Off-white.
<b>pH (1% soln/water):</b>	Not available.
<b>Boiling Point:</b>	Not available.
<b>Melting Point:</b>	157.22°C (315°F)
<b>Critical Temperature:</b>	Not available.
<b>Specific Gravity:</b>	2.435 (Water = 1)
<b>Vapor Pressure:</b>	Not applicable.
<b>Vapor Density:</b>	Not available.
<b>Volatility:</b>	Not available.
<b>Odor Threshold:</b>	Not available.
<b>Water/Oil Dist. Coeff.:</b>	Not available.
<b>Ionicity (in Water):</b>	Not available.
<b>Dispersion Properties:</b>	See solubility in water.
<b>Solubility:</b>	Easily soluble in hot water. Soluble in cold water. Soluble in 2 parts cold water. Soluble in 1 part boiling water. Decomposed by alcohol into sodium sulfate and free H <sub>2</sub> SO <sub>4</sub> .

## Section 10 – Stability and Reactivity

<b>Stability:</b>	The product is stable.
<b>Instability Temperature:</b>	Not available.
<b>Conditions of Instability:</b>	Incompatible materials, moisture
<b>Incompatibility with various substances:</b>	Reactive with oxidizing agents, alkalis.
<b>Corrosivity:</b>	Non-corrosive in presence of glass.
<b>Special Remarks on Reactivity:</b>	Do not mix with liquid chlorine bleach (hypochlorites), ammonia cleansers or similar products, or alcohols. Hygroscopic; keep container tightly closed.
<b>Special Remarks on Corrosivity:</b>	Not available.
<b>Polymerization:</b>	Will not occur

## Section 11 – Toxicological Information

<b>Routes of Entry:</b>	Absorbed through skin. Dermal contact. Inhalation. Ingestion.
<b>Toxicity to Animals:</b>	Acute oral toxicity (LD50): 2800 mg/kg [Rat].
<b>Chronic Effects on Humans:</b>	MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.
<b>Other Toxic Effects on Humans:</b>	Very hazardous in case of skin contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive, permeator).
<b>Special Remarks on Toxicity to Animals:</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans:</b>	May affect genetic material (mutagenic)
<b>Special Remarks on other Toxic Effects on Humans:</b>	Acute Potential Health Effects: Skin: Can cause severe skin irritation or burns. Eyes: Can cause severe irritation or burns of the eyes. Inhalation: It is destructive to the mucous membranes of the upper respiratory tract. Causes irritation and chemical burns to the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath, and pulmonary edema. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Ingestion: Causes gastrointestinal tract irritation and burns. Symptoms may include nausea and vomiting. May cause severe and permanent damage to the digestive tract. Chronic Potential Health Effects: Repeated exposure may cause erosion of teeth, lung irritation, bronchitis, persistent coughing,

## Section 12 – Ecological Information

<b>Ecotoxicity:</b>	Not available.
<b>BOD5 and COD:</b>	Not available.
<b>Products of Biodegradation:</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation:</b>	The product itself and its products of degradation are not toxic.
<b>Special Remarks on the Products of Biodegradation:</b>	Not available.

## Section 13 – Disposal considerations

### Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## Section 14 – Transportation Information

### DOT Classification:

Class 8: Corrosive material

### Identification:

Corrosive Solid, n.o.s.(Sodium Bisulfate) UNNA: 1759 PG: III Special Provisions for Transport:  
Not available.

## Section 15 – Regulatory Information

### Federal and State Regulations:

Connecticut hazardous material survey: Sodium bisulfate New Jersey: Sodium bisulfate TSCA 8(b) inventory: Sodium bisulfate

### Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

### Other Classifications:

**WHMIS (Canada):** CLASS E: Corrosive solid.

### DSCL (EEC):

R34- Causes burns. R41- Risk of serious damage to eyes. S24/25- Avoid contact with skin and eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

### HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 0

Reactivity: 0

Personal Protection: j

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

## Section 16 – Other Information

This information is dedicated to technically skilled specialists who should personally assess the risk related to usage of this product. The user is responsible for work place safeguarding. The producer is not responsible for damage caused by incorrect or unregulated application of the product as application conditions of the product are not controlled by him. The buyer is recommended to consult the producer regarding the correct choice and application of the product.