



## MATERIAL SAFETY DATA SHEET

**Product Name:**

**Non Foaming Alkaline detergent**

**Latest revision:**

21 September 2023

**Manufacturer:**

Pishgam Bahar Chemical Inc.

Plot 26, Kamineh 1, Benavar industrial area,  
Siminshahr city, Gomishan city, Golestan,  
Iran, 00981734473734, 09121462755

### 1. PRODUCT INFORMATION

**Uses:**

- CIP process and removal of residues of fats and oils in production lines of dairy industries
- RO and UF membrane systems

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Conc. (W/W)	CAS No.	R-Phrases
Sodium hydroxide	20-30	1310-73-2	R35
Potassium hydroxide	5-15	1310-58-3	R22 , R35
water			
others	to 100%		

### 3. HAZARDS IDENTIFICATION

- This product is classified in the group of alkaline compounds, whose contact with eyes, skin and mucus will be burning.



- This product is not flammable, but its presence in fire will produce toxic and dangerous gases.
- Inhaling the vapors emitted from this product causes irritation in the respiratory tract.
- When diluting the product with water, pay attention to the order of adding water and product. (always pour alkalis on water)

#### **4. FIRST AID MEASURES**

**Eye Contact:** On contact with eyes, rinse immediately with plenty of running water for at least 15 minutes. If irritation persists seek medical advice.

**Ingestion:** If swallowed drink water or milk of magnesia. Do not induce vomiting. Seek medical advice showing the container/label or this safety data sheet.

**Skin Contact:** Wash affected area with plenty of water. Remove and wash contaminated clothing. Seek medical attention if irritation occurs.

**Inhalation:** Remove affected person to fresh air. Apply resuscitation if necessary. If irritation persists, seek medical attention.

**First Aid Facilities:** Eye wash facilities should be provided



## 5. FIRE-FIGHTING MEASURES

**Flammability:**

Non-Flammable

**Fire and Explosion:**

Product is Non Flammable, but its presence in fire will produce toxic and dangerous gases. If product involved in fire, wear self-contained breathing apparatus, protective clothing and eye protection for firefighting. Use water fog, water or foam to cool intact containers and nearby storage areas.

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## 6. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:**

Liquid

**Solubility in Water:**

Soluble

**Appearance:**

No color

**pH @solution 0.5%:**

12.5

**Density@ 25:**

1.17 gr/cm<sup>3</sup>

**Flammability:**

Non-flammable

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## 7. STABILITY AND REACTIVITY

- This product is stable under normal conditions and during the period of the use-by date provided.
- This product has a strongly alkaline pH that reacts with all metals except for a few precious metals and some alloys.
- This product produces toxic and dangerous gases only in reaction with acids and chlorine compounds.



- High temperature reduces product stability. According to the concentration, temperature and reducing factors in the environment, the final product of the reactions is different.

**Incompatibilities:** organic compounds, combustible materials, moisture, acids, hydrogen sulfide, carbides, alcohols, organic solvents, cyanides

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## 8. TOXICOLOGY INFORMATION

Tests performed on animals have not shown any carcinogenic or mutagenic effects.

### **Sodium hydroxide**

LD50/LC50:

Intraperitoneal LD50 (mouse): 40 mg/kg;

Oral Lowest Lethal Dose (rabbit): 500 mg/kg;

Skin (rabbit): severe irritation 500 mg/24H;

### **Potassium hydroxide**

LD50 (Oral-Rat): 273 mg/kg;

LD50 (Oral-Rat): 365 mg/kg;

LD50 (Skin-Rabbit): 1260 mg/kg;

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## 9. ENVIRONMENTAL INFORMATION

- Because this product has a very strong game, it causes a change in the pH of the water, and a change in the pH factor in turn leads to a change in the biological status of aquatic organisms.
- On the other hand, the presence of alkalis in the vicinity of the soil causes changes in soil chemistry. As a result, the contact of this product with soil and running water will cause many changes and damages.
- Before disposing of this product, be sure to dilute the concentrated solution with water or use neutralizing chemical compounds to minimize the damage.



**For sodium hydroxide:**

LC100 Cyprinus Carpio 180 ppm/24 hr @ 25°C (77°F)

TLm mosquito fish 125 ppm/96 hr (fresh water);

TLm Bluegill 99 mg/L/48 hr (tap water)

**For potassium hydroxide:**

LC50 (24 hr) mosquito fish: 80.0 mg/L; TLm (mosquito fish) = 80 ppm/ 24 hours/ fresh water

## 10. DISPOSAL CONSIDERATIONS

**Disposal Considerations:**

- In order to dispose of small amounts of the product, first dilute the material and pour it into the sewer with high water pressure.
- Contact the relevant legal authorities regarding the disposal of large quantities of the product.
- Wash the empty containers with water first, then they can be reused with the permission of legal authorities..

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## 11. TRANSPORT AND STORAGE INFORMATION

**Transportation:**

- Make sure that the containers for transporting the product are healthy and the lids are properly closed.
- The workers who carry this product must observe all the safety principles related to the transportation of pharmaceutical, chemical and flammable materials.
- Do not use metal containers to transport this product.
- Avoid eating and smoking while transporting this product.



## **Storage:**

- Containers containing the product must be healthy and completely sealed, and metal containers should not be used to store this product.
- In order to store this product for a long time, use glass, HDPE or PP containers. Note that this product causes drying and eventually bursting of colored and colorless PET containers.
- Store in a dry, cool and well-ventilated place.
- In order to keep the product in the warehouse, on the cartons containing the product, information about the product such as the name, production and expiration date, and warning signs should be pasted.
- Keep away from strong currents of electricity and flame sources.