

# GELEST, INC.

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MATERIAL SAFETY  
DATA SHEET

EMERGENCY TELEPHONE  
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **BARIUM ISOPROPOXIDE 20% in ISOPROPANOL - AKB121**

CHEMICAL NAME: BARIUM ISOPROPOXIDE 20% in ISOPROPANOL

SYNONYMS: BARIUM ISOPROPYLATE, BARIUM 2-PROPOXIDE

CHEMICAL FAMILY: METAL ALCOHOLATE

FORMULA:  $C_6H_{14}O_2Ba$

HMIS CODES HEALTH: 3 FLAMMABILITY: 4 REACTIVITY: 1

## INGREDIENTS

IDENTITY	CAS NO.	%	TLV	OSHA PEL
BARIUM ISOPROPOXIDE	24363-37-9	<25	not established (0.5mg/m <sup>3</sup> soluble compounds as Ba)	
ISOPROPANOL	67-63-0	>75	400ppm	TWA: 400ppm

## PHYSICAL DATA

Boiling Point: 82° (initial, isopropanol) Melting Point: <0°  
Specific Gravity: 0.89 Vapor Pressure, NA  
Vapor Density (air =1): >2 Solubility in water: reacts  
% volatiles: NA Evaporation rate: N/A  
Molecular Weight: 255.52 Other: N/A  
Appearance & Color: Pale yellow to amber solution

## FIRE & EXPLOSION DATA

Flash Point, COC: 12°C (54°F) Autoignition Temp. (isopropanol): 455°C  
Flammability Limits-isopropanol LEL: 2.5% UEL: 12%

Extinguishing Media: Dry chemical extinguisher, dry soda ash.

Special Fire Fighting Procedures: Protect against caustic dust, smoke and water. Wear pressure demand self-contained breathing apparatus with full facepiece and full protective clothing.

Unusual Fire and Explosion Hazards: Irritating fumes and caustic vapors may develop when material is exposed to elevated temperatures or open flame.

-1-(AKB121)

## ENVIRONMENTAL INFORMATION

Spill response: Ventilate area. Eliminate ignition sources. Absorb material into oil absorbent type clay, scoop into a dry metal container and cover loosely. Take to a chemical disposal area, then flush with a copious amount of water, collecting all caustic wastewater for proper disposal.

Recommended disposal: Treat quantities of 500 grams or less by flooding with water. Water solution will be caustic. Follow all chemical pollution control regulations.

## HEALTH HAZARD DATA

Eye Contact: Barium isopropoxide will cause immediate or delayed severe caustic burns to the eyes.

Skin contact: Will cause irritation and burns. Worker will notice a slippery feeling on washing.

Inhalation: Inhalation will cause sneezing, irritation and burns.

Oral Toxicity: In general, soluble barium salts, such as the chloride and sulfide, have been reported as poisonous when taken orally. The insoluble salt, barium sulfate, is used in radiography and is not acutely toxic.

Inhalation Toxicity: not determined

### SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes, holding eyes open. Get medical attention.

SKIN: Immediately flush with water for at least fifteen minutes.

INHALATION: Move exposed individual to fresh air. Administer oxygen if needed. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Give a demulscent such as milk, olive oil, or margarine in small amounts, up to two or three tablespoons.

## REACTIVITY DATA

Stability: Stable under nitrogen or argon in sealed containers.

Conditions to avoid: Material decomposes slowly in contact with moist air and rapidly in contact with water. Avoid contact with moist air, water, acids, alcohols, ketones, esters, carbon dioxide, halogens.

Hazardous decomposition products: Barium hydroxide, isopropanol and caustic organic vapors.

-2-(AKB121)

## **SPECIAL PROTECTION INFORMATION**

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV, a NIOSH approved Caustic organic vapor-type respirator should be worn.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. Long-sleeved fire-resistant lab uniform or coverall is recommended. An eyewash and emergency shower should be available. Launder clothing before reuse.

## **OTHER PRECAUTIONS**

For research use only.

Storage and Handling: Store under dry nitrogen or argon in sealed containers.

## **TRANSPORTATION**

DOT SHIPPING NAME: ALCOHOLATES SOLUTION N.O.S. (ISOPROPANOL)

DOT HAZARD CLASS: 3 SUB: 8

DOT LABELS: FLAMMABLE LIQUID, CORROSIVE

DOT ID No: UN 3274 PG: II

Prepared by safety and environmental affairs      ISSUE DATE AKB121: 9/23/02  
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