

# **Safety Data Sheet**

OSHA format
Revision Number 1

**Issuing Date** Oct-03-2016 **Revision Date** Feb-08-2018

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name Alkaline Potassium Iodide with Azide

Other means of identification

Product Code(s) 7166 UN-No 2922

Recommended use of the chemical and restrictions on use

**Recommended Use** Industrial (not for food or food contact use). Use as a laboratory reagent.

Details of the supplier of the safety data sheet

Manufacturer Address LaMotte Company, Inc. 802 Washington Avenue

P.O. Box 329

Chestertown, MD 21620 USA

T 410-778-3100 F 410-778-9748

**Emergency telephone numbers** 

(CHEM-TEL):USA, Canada, Puerto Rico 1-800-255-3924 Outside North American Continent (Call collect) 813-248-0585

2. HAZARDS IDENTIFICA	TION
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Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

#### **EMERGENCY OVERVIEW**

## DANGER POISON

### Hazard statements

Harmful if swallowed. Toxic in contact with skin. Causes severe skin burns and eye damage.



Appearance Clear, colorless

Physical state liquid

**Odor** Odorless

#### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves /protective clothing /eye protection /face protection. Do not taste or swallow. Do not breathe dust /fume /gas /mist /vapors /spray. Keep out of the reach of children.

Response: Immediately call a poison center or physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF SWALLOWED:. Rinse mouth. Do NOT induce vomiting.

## Storage:

Store locked up.

#### Disposal:

Dispose of contents/container to an approved waste disposal plant.

#### Other Hazards

Harmful to aquatic life with long lasting effects.

#### **Unknown Acute Toxicity**

86.05% of the mixture consists of ingredient(s) of unknown toxicity.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS\*

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical name	CAS No	Weight-%
Sodium azide	26628-22-8	1.05
Potassium iodide*	7681-11-0	15
Potassium hydroxide	1310-58-3	70

## 4. FIRST AID MEASURES

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**First Aid Measures** 

**General advice** Do not get in eyes, on skin, or on clothing. Do not breathe dust /fume /gas /mist /vapors

/spray. Do not delay care and transport of a seriously injured person.

**Eye contact** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Rinse thoroughly with plenty of water for at least

15 minutes, lifting lower and upper eyelids. Call a physician immediately.

**Skin contact** Wash off immediately with soap and plenty of water for at least 15 minutes. Take off

contaminated clothing and wash before reuse. Immediate medical attention is required.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Call a physician immediately.

**Ingestion** Do NOT induce vomiting. Drink plenty of water. Immediate medical attention is required.

Never give anything by mouth to an unconscious person. Rinse mouth.

Self-protection of the first aider

Use personal protection recommended in Section 8. Ensure that medical personnel are

aware of the material(s) involved, take precautions to protect themselves and prevent

spread of contamination. Avoid contact with eyes, skin and clothing.

## 5. FIREFIGHTING MEASURES

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Specific hazards arising from the chemical

React vigorously and/or explosively with water.

### **Hazardous combustion products**

Contact with metals may evolve flammable hydrogen gas.

## Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

## Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection recommended in Section 8. Avoid contact with skin, eyes or

clothing. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in

confined areas.

**Environmental precautions**See Section 12 for additional Ecological Information. Beware of vapors accumulating to

form explosive concentrations. Vapors can accumulate in low areas.

#### Methods and material for containment and cleaning up

Methods for containment Do not flush to sewer. Absorb spill with inert material (e.g. dry sand or earth), then place in

a chemical waste container. Dispose of contents/containers in accordance with local

regulations.

Methods for cleaning up Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

## Precautions for safe handling

Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

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eyes, skin and clothing. Do not taste or swallow. Do not eat, drink or smoke when using this

product.

Conditions for safe storage, including any incompatibilities

Storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

heat. Store away from incompatible materials. Protect from moisture. Keep away from metals and organic halogens. Do not flush into surface water or sanitary sewer system.

Keep out of the reach of children.

Incompatible Products Strong acids. Metals. Water reactive material.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium azide	Ceiling: 0.29 mg/m <sup>3</sup> NaN3	(vacated) S*	Ceiling: 0.1 ppm HN3
26628-22-8	Ceiling: 0.11 ppm Hydrazoic acid	(vacated) Ceiling: 0.1 ppm HN3	Ceiling: 0.3 mg/m <sup>3</sup> NaN3
	vapor	(vacated) Ceiling: 0.3 mg/m <sup>3</sup>	
	•	NaN3	
Potassium iodide*	TWA: 0.01 ppm inhalable	*-	Not Established
7681-11-0	fraction and vapor		
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m <sup>3</sup>	(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>

**Appropriate engineering controls** 

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

**Eye/Face Protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves /protective clothing /eye protection /face protection. Nitrile rubber.

**Respiratory protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Wash hands before breaks and immediately after handling

the product. Take off contaminated clothing and wash before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Physical state liquid

Appearance Clear, colorless Odor Odorless

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

**pH** 14

Melting point / freezing point

Boiling point / boiling range

No information available
No information available

Flash point Not Applicable

Evaporation rate
Flammability (solid, gas)

No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density

No information available
No information available
No information available

Specific gravity  $\sim 1.5$  (water = 1)

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Water solubility No information available Solubility in other solvents No information available No information available Partition coefficient No information available Autoignition temperature **Decomposition temperature** No information available Kinematic viscosity No information available Dynamic viscosity No information available **Explosive properties** No information available **Oxidizing properties** No information available

#### Other Information

Softening point
Molecular weight
VOC Content (%)
Density
No information available

## 10. STABILITY AND REACTIVITY

**Stability** Stable under recommended storage conditions.

**Hazardous Reactions**Reacts violently with water. Contact with metals may evolve flammable hydrogen gas.

**Hazardous polymerization** Hazardous polymerization does not occur.

Conditions to avoid Excessive heat. Incompatible Products.

Incompatible materials Strong acids. Metals. Water reactive material.

Hazardous decomposition products Carbon oxides (COx). Potassium Oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Component identification** 

Chemical name	ATEmix (oral)	ATEmix (dermal)	Inhalation LC50
Sodium azide 26628-22-8	= 27 mg/kg (Rat)	= 20 mg/kg ( Rabbit ) = 50 mg/kg ( Rat )	Not Established
Potassium iodide* 7681-11-0	Not Established	Not Established	Not Established
Potassium hydroxide 1310-58-3	= 284 mg/kg ( Rat )	Not Established	Not Established

Information on toxicological effects

Chemical name	ACGIH	IARC	NTP	OSHA
Sodium azide 26628-22-8	Not Established	Not Established	Not Established	Not Established
Potassium iodide* 7681-11-0	Not Established	Not Established	Not Established	Not Established
Potassium hydroxide 1310-58-3	Not Established	Not Established	Not Established	Not Established

**Chronic toxicity** Prolonged exposure may cause chronic effects.

**ATEmix (oral)** 475.00 mg/kg **ATEmix (dermal)** 286.00 mg/kg

## 12. ECOLOGICAL INFORMATION

## **Ecotoxicity**

Harmful to aquatic life with long lasting effects

Unknown Aquatic Toxicity 15 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Sodium azide	Not Established	0.7: 96 h Lepomis macrochirus	Not Established
26628-22-8		mg/L LC50 0.8: 96 h	
		Oncorhynchus mykiss mg/L LC50	
		5.46: 96 h Pimephales promelas	
		mg/L LC50 flow-through	
Potassium iodide*	Not Established	Not Established	Not Established
7681-11-0			
Potassium hydroxide	Not Established	80: 96 h Gambusia affinis mg/L	Not Established
1310-58-3		LC50 static	

## Persistence and degradability

Based on components product is expected to be poorly eliminated from water and poorly biodegradable.

## **Bioaccumulation/Accumulation**

Some components of this material have some potential to bioaccumulate but not all have been tested. Sodium azide: When released into the soil, this material is not expected to biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the air, this material may be moderately degraded by photolysis.

Chemical name	Log Pow
Sodium azide 26628-22-8	Not Established
Potassium iodide* 7681-11-0	Not Established
Potassium hydroxide 1310-58-3	0.65 0.83

## 13. DISPOSAL CONSIDERATIONS

**Disposal Methods** 

Dispose of waste product or used containers according to local regulations. Should not be released into the environment.

Contaminated packaging

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Sodium azide	Not Established	-	Not Established	Not Established
26628-22-8				
Potassium iodide*	Not Established	-	Not Established	Not Established
7681-11-0				
Potassium hydroxide	Not Established	-	Not Established	Not Established
1310-58-3				

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium azide 26628-22-8	Not Established	P105	Not Established	Not Established
Potassium iodide* 7681-11-0	Not Established	Not Established	Not Established	Not Established
Potassium hydroxide 1310-58-3	Not Established	Not Established	Not Established	Not Established

Chemical name	California Hazardous Waste Status
Sodium azide	Ignitable
26628-22-8	Reactive
Potassium iodide* 7681-11-0	*_
Potassium hydroxide 1310-58-3	Toxic Corrosive

# 14. TRANSPORT INFORMATION

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DOT

Proper shipping name CORROSIVE LIQUIDS, TOXIC, NOS (Potassium hydroxide/Sodium azide solution)

UN-No 2922
Hazard Class 8
Subsidiary class 6.1
Packing group II
Reportable Quantity (RQ) 1000

**IATA** 

**UN-No** 2922

Proper shipping name CORROSIVE LIQUIDS, TOXIC, N.O.S (Potassium hydroxide / Sodium azide solution)

Hazard Class 8
Subsidiary class 6.1
Packing group II

IMDG/IMO

**UN-No** 2922

Proper shipping name CORROSIVE LIQUIDS, TOXIC, N.O.S (Potassium hydroxide / Sodium azide solution)

Hazard Class 8
Subsidiary class 6.1
Packing group II

RID

**UN-No** 2922

Proper shipping name CORROSIVE LIQUIDS, TOXIC, N.O.S (Potassium hydroxide / Sodium azide solution)

Hazard Class 8
Packing group II

<u>ADR</u>

**UN-No** 2922

Proper shipping name CORROSIVE LIQUIDS, TOXIC, N.O.S (Potassium hydroxide / Sodium azide solution)

Hazard Class 8
Packing group ||

# 15. REGULATORY INFORMATION

**International Inventories** 

**TSCA** Complies DSL/NDSL Complies **EINECS/ELINCS** Complies **ENCS** Complies Complies **IECSC** Complies **KECL PICCS** Complies **AICS** Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances **IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

#### **US Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical

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or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Sodium azide	1.0
26628-22-8	
Potassium iodide*	Not Established
7681-11-0	
Potassium hydroxide	Not Established
1310-58-3	

SARA 311/312 Hazard Categories

Acute health hazard Yes
Chronic Health Hazard Yes
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard Yes

## **CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous
	Quantities			Substances
Sodium azide 26628-22-8	Not Established	Not Established	Not Established	Not Established
Potassium iodide* 7681-11-0	Not Established	Not Established	Not Established	Not Established
Potassium hydroxide 1310-58-3	1000 lb	Not Established	Not Established	Х

## **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Sodium azide 26628-22-8	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ
Potassium iodide* 7681-11-0	*-	Not Established	-
Potassium hydroxide 1310-58-3	1000 lb	Not Established	RQ 1000 lb final RQ RQ 454 kg final RQ

## **US State Regulations**

Chemical name	California Proposition 65	
Sodium azide 26628-22-8	Not Established	
Potassium iodide* 7681-11-0	Not Established	
Potassium hydroxide 1310-58-3	Not Established	

#### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium azide	X	X	X
26628-22-8			
Potassium iodide*	Not Established	Not Established	Not Established
7681-11-0			
Potassium hydroxide	X	X	X
1310-58-3			

## CPSC (Consumer Product Safety Commission) - Specially Regulated Substances

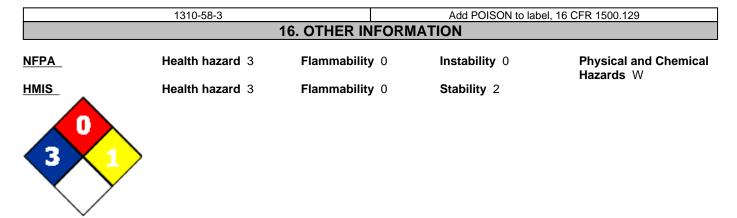
Chemical name	CPSC (Consumer Product Safety Commission) - Specially Regulated Substances
Potassium hydroxide	Banned, 16 CFR 1500.17

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Health Hazard Fire Hazard

Reactivity

Regulatory Affairs Department

Oct-03-2016 Feb-08-2018

SDS sections updated 2 14

<u>Disclaimer</u>

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**