

Suite 450 One North Shore Center 12 Federal Street Pittsburgh, PA 15212

## **Safety Data Sheet**

# **KR-153SL**

## 1. IDENTIFICATION

**Product name** 

**KR-153SL** 

**Description** 

Solution of 2,2-Dibromo-3-nitrilopropionamide

Product class

Biocide

Supplier address

Suite 450

One North Shore Center 12 Federal Street

Pittsburgh, PA 16212

Telephone numbers

Company Phone Number

(412) 321-9800

**Emergency Telephone** 

CHEMTREC 800-424-9200

## 2. HAZARDS IDENTIFICATION

Hazard classification

Acute Toxicity: Oral, Category 4

Skin Irritation, Category 3

Serious Eye Damage, Category 1 Skin Sensitization, Category 1

Aquatic Environment Toxicity: Acute, Category 2

Signal word

Danger

**Hazard statements** 

Harmful if swallowed.

Causes mild skin irritation.
Causes serious eye damage.

May cause an allergic skin reaction.

Toxic to aquatic life.

Pictograms of related hazards





## **Precautionary statements**

#### **Prevention**

Wash skin thoroughly after handling.

Do not eat, drink, or smoke when using this product.

Wear protective gloves, protective clothing, eye protection, and face protection.

Avoid breathing fumes, mist, vapors, or spray.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

#### Response

Rinse mouth.

Specific treatment—see "First Aid Measures."

IF SWALLOWED: Contact a POISON CENTER or health care provider if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately contact a POISON CENTER or health care provider.

IF ON SKIN: Wash with soap and water.

If skin irritation or a rash occurs: Get medical attention.

Take off contaminated clothing and wash it before reuse.

#### Disposal

Dispose of contents and container in accordance with local, state, and federal regulations.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Weight %
2,2-Dibromo-3-nitrilo-propionamide (DBNPA)	10222-01-2	15–20
Polyethylene glycol (PEG)	25322-68-3	45–50

## 4. FIRST-AID MEASURES

**Eye contact** Flush eyes with plenty of water for at least 15 minutes,

lifting lower and upper eyelids occasionally to ensure complete rinsing. Remove contact lenses if present and easy to do, then resume rinsing. Get medical attention if

symptoms occur.

Skin contact Remove contaminated clothing and wash the affected

area with soap and water. Wash contaminated clothing

before reuse.

**Ingestion** If swallowed, DO NOT induce vomiting. Rinse mouth and

get emergency medical attention. Do not give anything by mouth unless instructed to do so by a poison center or

health care provider.

**Inhalation** If inhaled, move victim to fresh air. Seek emergency

medical attention if breathing is difficult; perform artificial

respiration if breathing stops.

**Note to health care provider**No specific information—treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Water spray, foam, dry chemical, carbon dioxide

Unsuitable extinguishing media No information available

**Protective equipment and precautions for firefighters**Exercise caution when fighting any chemical fire. A selfcontained breathing apparatus and protective clothing are
essential. Use water to keep fire-exposed containers cool.

**Specific hazards** Combustion may produce toxic gases.

Hazardous combustion products Nitrogen oxides, hydrogen bromide, bromine

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#### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions Evacuate the area of all non-essential personnel. Do not

touch spilled material without proper protective equipment. Ventilate the area and mitigate further release

if it is safe to do so. Avoid contact with eyes.

Methods for clean-up

Small spills Contain spill and soak up with an inert absorbent material

and place residues in a properly labeled container for

disposal. Avoid discharge into sewer or surface water.

<u>Large spills</u> Contain spill using trenches, diking, or absorption with an

inert material (i.e. sand or earth). Reclaim spilled material into recovery or salvage drums or tank truck for proper

disposal.

7. HANDLING AND STORAGE

Advice on safe handling Avoid contact with eyes, skin, and clothing. Avoid

breathing vapor or mist. Wash hands thoroughly after

handling.

Storage conditions Store in a cool, dry, well-ventilated area away from

incompatible materials. Keep containers closed when not

in use.

Suitable materials of

construction

No information available

Unsuitable materials of

construction

No information available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Eye/face protection** Chemical splash goggles

**Skin protection** Chemical-resistant gloves and body-covering clothing

Respiratory protection Observe published airborne exposure limits. NIOSH

approved respirator should be used in accordance with OSHA respiratory protection requirements (29 CFR

1910.134).

**Engineering controls** Adequate ventilation, eye-wash station, and emergency

shower

**General hygiene considerations** Do not eat, drink, or smoke while handling this product.

Chemical Name	OSHA PEL	ACGIH TLV
2,2-Dibromo-3-nitrilo-propionamide (DBNPA)	None established	None established
Polyethylene glycol (PEG)	None established	None established

## 9. PHYSICAL AND CHEMICAL PROPERTIES

рН	2.0-6.5
Appearance	Clear yellow liquid
Odor	Characteristic
Odor Threshold	No information available
Melting/freezing point	<-7°F (-21.7°C)
Initial boiling point/boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	No information available
Vapor pressure	0.00004 mmHg
Vapor density	<1 [air = 1]
VOC content	No information available
Specific gravity	1.200-1.300
Solubility	No information available
Partition coefficient n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	158°F (70°C)
Viscosity	No information available

## 10. STABILITY AND REACTIVITY

Chemical stability

Stable under normal conditions of storage and handling.

Hazardous polymerization

Polymerization will not occur.

Conditions to avoid

Exposure to light, heat, incompatibilities

Incompatibilities

Bases, oxidizing agents, reducing agents

Hazardous decomposition

products

No known non-thermal decomposition hazards.

#### 11. TOXICOLOGICAL INFORMATION

Likely routes of exposure

Skin, eyes, ingestion

**Acute toxicity** 

2,2-Dibromo-3-nitrilo-propionamide (DBNPA), (20% solution)

Parameter	Result	
Draize, Skin (rabbit)	Moderate irritant	
Draize, Eye (rabbit)	Very severe irritant	
Ames Test	Not mutagenic	
Sensitization	Extreme sensitizer	

Acute symptoms and effects

Eye irritation with or without pain, burning, itching,

redness, and discharge.

Skin irritation with or without pain, burning, itching,

redness, and swelling. Symptoms may be exacerbated by open wounds, excoriations, rashes, or other skin

breaches.

**Ingestion** Gastrointestinal distress with or without nausea, vomiting,

and diarrhea.

**Inhalation** Upper respiratory irritation with or without cough, watering

of the eyes, and postnasal drip.

Reproductive effects

No information available

**Teratogenicity** 

No information available

Mutagenicity

No information available

Embryotoxicity

No information available

Sensitization to product

May cause allergic reaction or delayed hypersensitivity in

susceptible individuals.

Synergistic products

No information available

Carcinogenicity

No components have been identified as carcinogenic by

OSHA, NTP, or IARC.

Chronic

No information available

## 12. ECOLOGICAL INFORMATION

Parameter	Result	
LC50, Oncorhynchus mykiss (rainbow trout), 96 h	3.6 mg/l	
EC50, Daphnia magna (Water flea), static test,	2.5 mg/l	
48 h immobilization		

Persistence

No information available

Bioaccumulative potential

No information available

No information available Mobility

## 13. DISPOSAL CONSIDERATIONS

Disposal

Dispose of in accordance with federal, state, and local

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regulations.

**RCRA** status

Discarded product, as sold, would not be considered a

RCRA Hazardous Waste.

#### 14. TRANSPORT INFORMATION

## **US Department of Transportation (DOT)**

**UN Number** 

Proper shipping name

Not regulated

Primary hazard class/division

Secondary hazard

Packing group

Label

#### 15. REGULATORY INFORMATION

**OSHA Hazard Communication** 

**Status** 

Acute Toxicity: Oral, Category 4

Skin Irritation, Category 3

Serious Eye Damage, Category 1 Skin Sensitization, Category 1

Aquatic Environment Toxicity: Acute, Category 2

**EPA Registration Number** 

88714-2-66126

**TSCA** 

The ingredients of this product are listed on the Toxic

Substances Control Act (TSCA) Chemical Substances

Inventory.

#### **CERCLA**

## EPA Hazardous Substances (40 CFR 302)

Chemical Name	Reportable Quantity (RQ)
2,2-Dibromo-3-nitrilo-propionamide (DBNPA)	None
Polyethylene glycol (PEG)	None

## SARA Title III (Sections 302, 311, 312, and 313)

#### Section 302 Extremely Hazardous Substances (40 CFR 355)

Chemical Name	CAS#	RQ	TPQ
None			

#### Section 311 and 312 Health and Physical Hazards

Immediate	Delayed	Fire	Pressure	Reactivity
Yes	Yes	No	No	No

## Section 313 Toxic Chemicals (40 CFR 372)

Chemical Name	CAS Number	Percent by Weight
2,2-Dibromo-3-nitrilo- propionamide (DBNPA)	10222-01-2	15–20

#### **16. OTHER INFORMATION**

**HMIS Ratings** 

Health—2; Flammability—1; Reactivity—0

**NFPA Ratings** 

Health—1; Flammability—1; Reactivity—0;

Special Hazard—None

**HMIS and NFPA Rating Scale** 

Minimal—0; Slight—1; Moderate—2; Serious—3;

Severe-4

**SDS Issue Date** 

April 30, 2015

**Revision Date** 

Version 1

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