

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product name : Nitrate Standard, 1000 ppm (as Nitrogen), Preserved with Chloroform
Product code : LC17910

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : For laboratory and manufacturing use only.

1.3. Details of the supplier of the safety data sheet

LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Carc. 1B H350

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS08

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H350 - May cause cancer (oral, Inhalation)
Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear protective gloves, eye protection
P308+P313 - IF exposed or concerned: Get medical advice/attention
P405 - Store locked up
P501 - Dispose of contents/container to comply with local, state and federal regulations

2.3. Other hazards

Other hazards not contributing to the classification : None.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable
Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Water	(CAS No) 7732-18-5	99.08	Not classified

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Name	Product identifier	%	GHS-US classification
Potassium Nitrate	(CAS No) 7757-79-1	0.72	Ox. Sol. 3, H272 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Chloroform	(CAS No) 67-66-3	0.2	Carc. 2, H351 Acute Tox. 4 (Oral), H302 STOT RE 2, H373 Skin Irrit. 2, H315

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Suspected of causing cancer (Oral, Inhalation).
- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Wash immediately with lots of water. Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after eye contact : Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable.
- Explosion hazard : Not available.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Eliminate ignition sources. Evacuate area. Use protective clothing.

6.1.1. For non-emergency personnel

- Protective equipment : Safety glasses. Gloves.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible products : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chloroform (67-66-3)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	10 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m ³)	240 mg/m ³
USA OSHA	OSHA PEL (Ceiling) (ppm)	50 ppm

8.2. Exposure controls

Appropriate engineering controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Personal protective equipment : Avoid all unnecessary exposure.
Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses.
Respiratory protection : Wear appropriate mask.
Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Colourless.
Odour : None.
Odour threshold : No data available
pH : No data available
pH solution : 6 - 8
Relative evaporation rate (butylacetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Self ignition temperature : No data available
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Solubility : Miscible with water.
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available

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Viscosity, dynamic	: No data available
Explosive properties	: Not applicable.
Oxidising properties	: No data available.
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Nitrogen oxides. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Potassium Nitrate (7757-79-1)	
LD50 oral rat	3750 mg/kg (Rat)

Water (7732-18-5)	
LD50 oral rat	≥ 90000 mg/kg

Chloroform (67-66-3)	
LD50 oral rat	695 mg/kg (908 mg/kg bodyweight; 1117 mg/kg bodyweight; Rat; Rat; Rat; Experimental value; Experimental value,908 mg/kg bodyweight; 1117 mg/kg bodyweight; Rat; Rat; Rat; Experimental value; Experimental value)
LD50 dermal rabbit	> 20000 mg/kg (>3980 mg/kg bodyweight; Rabbit; Rabbit; Experimental value,>3980 mg/kg bodyweight; Rabbit; Rabbit; Experimental value)
LC50 inhalation rat (mg/l)	48 mg/l/4h (Rat)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer (oral, Inhalation).

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IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen

Chloroform (67-66-3)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

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Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/injuries after eye contact : Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Potassium Nitrate (7757-79-1)	
LC50 fishes 1	162 mg/l (96 h; Pisces; Lethal)
LC50 other aquatic organisms 1	39 mg/l (96 h; Daphnia magna)
EC50 other aquatic organisms 1	200 - 1000 mg/l (Plankton; Nocivity test)
LC50 fish 2	1378 mg/l (Poecilia reticulata)
LC50 other aquatic organisms 2	490 mg/l (48 h; Daphnia magna)
TLM fish 1	3000 mg/l (96 h; Lepomis macrochirus)
TLM fish 2	162 mg/l (96 h; Gambusia affinis)
Threshold limit other aquatic organisms 1	39 mg/l (96 h; Daphnia magna)
Threshold limit other aquatic organisms 2	490 mg/l (48 h; Daphnia magna)

Chloroform (67-66-3)	
LC50 fishes 1	18.2 ppm (96 h; Oncorhynchus mykiss)
EC50 Daphnia 1	6.3 mg/l (504 h; Daphnia magna; Reproduction)
LC50 fish 2	43.8 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)
Threshold limit algae 1	185 mg/l (Microcystis aeruginosa; Toxicity test)
Threshold limit algae 2	1100 mg/l (Scenedesmus quadricauda; Toxicity test)

12.2. Persistence and degradability

Nitrate Standard, 1000 ppm (as Nitrogen), Preserved with Chloroform	
Persistence and degradability	Not established.

Potassium Nitrate (7757-79-1)	
Persistence and degradability	Biodegradability: not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Water (7732-18-5)	
Persistence and degradability	Not established.

Chloroform (67-66-3)	
Persistence and degradability	Not readily biodegradable in water. Non degradable in the soil.
ThOD	0.33 - 1.35 g O ² /g substance
BOD (% of ThOD)	0.015 - 0.06 % ThOD

12.3. Bioaccumulative potential

Nitrate Standard, 1000 ppm (as Nitrogen), Preserved with Chloroform	
Bioaccumulative potential	Not established.

Potassium Nitrate (7757-79-1)	
Bioaccumulative potential	No bioaccumulation data available.

Water (7732-18-5)	
Bioaccumulative potential	Not established.

Chloroform (67-66-3)	
BCF fish 1	6 (336 h; Lepomis macrochirus)
BCF fish 2	1.4 - 4.7 (42 days; Cyprinus carpio)
BCF other aquatic organisms 1	224 (Pecten maximus; Mantle, dry weight)
BCF other aquatic organisms 2	438 (Modiolus modiolus; Mantle, dry weight)
Log Pow	1.97 (Experimental value; 20 °C, Experimental value; 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

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12.4. Mobility in soil

Chloroform (67-66-3)	
Surface tension	0.0271 N/m (20 °C)
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with local, state and federal regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

No dangerous good in sense of transport regulations

Additional information

Other information : No supplementary information available.

ADR

Transport document description :

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Potassium Nitrate (7757-79-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 313 - Emission Reporting	1 % Nitrate compounds (water dissociable)

Water (7732-18-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Chloroform (67-66-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	10 lb
SARA Section 313 - Emission Reporting	0.1 %

15.2. International regulations

CANADA

Nitrate Standard, 1000 ppm (as Nitrogen), Preserved with Chloroform	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Potassium Nitrate (7757-79-1)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
WHMIS Classification	Class C - Oxidizing Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Water (7732-18-5)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Chloroform (67-66-3)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	

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Chloroform (67-66-3)

WHMIS Classification

Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects
Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

15.2.2. National regulations

Potassium Nitrate (7757-79-1)

Not listed on the Canadian Ingredient Disclosure List

Chloroform (67-66-3)

Listed on the Canadian Ingredient Disclosure List

15.3. US State regulations

Chloroform (67-66-3)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes				

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

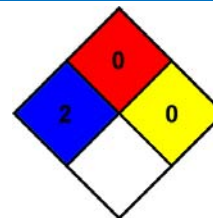
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Carc. 1B	Carcinogenicity, Category 1B
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Ox. Sol. 3	Oxidising Solids, Category 3
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H272	May intensify fire; oxidiser
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H350	May cause cancer
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure

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NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating

Health	: 2 Moderate Hazard - Temporary or minor injury may occur
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard
Personal Protection	: B

SDS US (GHS HazCom 2012)

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