NIK Test G Ampoule 1

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 2/14/2025 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : NIK Test G Ampoule 1
Product code : 160-111 (1004763)

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Forensics

1.4. Supplier's details

Safariland, LLC
11386 International Parkway
Jacksonville, Florida 32218
T Customer Care (800) 347-1200

1.5. Emergency phone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA) CCN 6410

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. Label elements

GHS US labelling

No labelling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Glycerol	CAS-No.: 56-81-5	53.559	Not classified
boric acid	CAS-No.: 10043-35-3	0.9	Repr. 1B, H360

Full text of hazard classes and H-statements : see section 16

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth. IF exposed or concerned: Get medical advice/attention.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim is unconscious : Lay in a stable manner on victim's side. Induce artificial respiration with mask fitted with one-way valve or other suitable device; not mouth-to-mouth. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Rinse eyes with water as a precaution. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal use.

Symptoms/effects after eye contact : May cause eye irritation.

Symptoms/effects after ingestion : May cause irritation to the digestive tract.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry chemical, CO2, or water spray or regular foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Metallic oxides.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment.

Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Avoid all personal contact including breathing in the mist, spray, vapours. Do not take actions involving personal risks. Absorb spillage to prevent material damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

For non-emergency personnel

Protective equipment	:	Wear recommended personal protective equipment.
Emergency procedures	:	Evacuate the danger area. If outdoors, move to an area upwind of the danger area. If possible without taking personal risks, remove ignition sources, ventilate area. Prevent other non-emergency personnel from entering the danger area.

For emergency responders

Protective equipment	:	Wear the recommended personal protective equipment. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Evacuate personnel to a safe area. Stop leak if safe to do so.
Environmental precautions	:	Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.2. Methods and materials for containment and cleaning up

For containment	:	Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up	:	Notify authorities if product enters sewers or public waters. Take up in non-combustible inert absorbent and place into container for disposal. Decontaminate surfaces and equipment with water and detergent. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

For further information refer to section 8: "Exposure controls/personal protection",For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Use only outdoors or in a well-ventilated area. Wear personal protective equipment. Avoid breathing mist, spray, vapours. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharge.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Additional hazards when processed	:	Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions	:	Store in a cool, dry and well-ventilated area away from incompatible substances. Protect from sunlight.
Incompatible materials	:	Strong acids. Strong oxidizing agents.
Specific end uses	:	Forensics.
Packaging materials	:	Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

Glycerol (56-81-5)	
USA - OSHA - Occupational Exposure Limits	
Local name	Glycerin (mist)
OSHA PEL TWA	15 mg/m³ (Total dust) 5 mg/m³ (Respirable fraction)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

boric acid (10043-35-3)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Boric acid
ACGIH OEL TWA	2 mg/m³ (I - Inhalable particulate matter)
ACGIH OEL STEL	6 mg/m³ (I - Inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:
Wear protective gloves. The following materials are suitable for protective gloves: Butyl rubber, Fluoroelastomer (FKM), Chloroprene rubber, Nitrile rubber gloves, Latex, Polyvinylchloride (PVC)

Eye protection:
Wear safety glasses which protect from splashes

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Wear suitable respiratory equipment in case of insufficient ventilation

Personal protective equipment symbol(s):

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Pink
Odour	:	Odorless
Odour threshold	:	No data available
pH	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapour pressure	:	23 hPa / 17.3 mm Hg @ 20 °C / 68 °F
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Solubility	:	Miscible with water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	> 260 °C / 500 °F
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosive limits	:	No data available
Particle characteristics	:	No data available

Glycerol	
Particle characteristics	No data available

boric acid	
Particle characteristics	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Metallic oxides.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Glycerol (56-81-5)	
LD50 oral rat	27200 mg/kg bodyweight
LC50 Inhalation - Rat	5.85 mg/l air
ATE US (oral)	27200 mg/kg bodyweight

boric acid (10043-35-3)	
LD50 oral rat	> 2600 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 2.12 mg/l air

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified. Expert judgement
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

NIK Test G Ampoule 1	
Viscosity, kinematic	No data available

Glycerol (56-81-5)	
Viscosity, kinematic	No data available

boric acid (10043-35-3)	
Viscosity, kinematic	No data available

Symptoms/effects after inhalation : Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact : Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact : May cause eye irritation.
Symptoms/effects after ingestion : May cause irritation to the digestive tract.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

Glycerol (56-81-5)	
LC50 - Fish [1]	54000 mg/l

boric acid (10043-35-3)	
LC50 - Fish [1]	79.7 mg/l
LC50 - Fish [2]	74 mg/l
EC50 72h - Algae [1]	66 mg/l
EC50 72h - Algae [2]	54 mg/l
NOEC chronic fish	6.4 mg/l

12.2. Persistence and degradability

NIK Test G Ampoule 1	
Persistence and degradability	Not rapidly degradable

Glycerol (56-81-5)	
Persistence and degradability	Not rapidly degradable

boric acid (10043-35-3)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified

Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector’s sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Disposal must be done according to official regulations. Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.

Additional information : Do not re-use empty containers.

Ecological waste information : Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

14.1. UN Number

Not regulated for transport

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Glycerol	56-81-5	Present	Active	
boric acid	10043-35-3	Present	Active	

15.2. International regulations

CANADA

Glycerol (56-81-5)

Listed on the Canadian DSL (Domestic Substances List)

boric acid (10043-35-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Glycerol (56-81-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

boric acid (10043-35-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other Information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Issue date : 2/14/2025

Full text of hazard classes and H-statements	
H360	May damage fertility or the unborn child.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NIK Test G Ampoule 2

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 2/14/2025 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Trade name : NIK Test G Ampoule 2
Product code : 160-112 (1004764)

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Forensics

1.4. Supplier's details

Safariland, LLC
11386 International Parkway
Jacksonville, Florida 32218
T Customer Care (800) 347-1200

1.5. Emergency phone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 6410

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

GHS US classification

Corrosive to metals, Category 1	H290	May be corrosive to metals.
Skin corrosion/irritation, Category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation.

Full text of H-statements: see section 16

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : May be corrosive to metals
Causes severe skin burns and eye damage
May cause respiratory irritation
Precautionary statements (GHS US) : Keep only in original packaging.
Do not breathe dusts or mists.
Wash hands, forearms and face thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, eye protection, face protection, and hearing

protection.
If swallowed: rinse mouth. Do NOT induce vomiting.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a poison center or doctor.
Call a poison center or doctor if you feel unwell.
Specific treatment (see supplemental first aid instruction on this label).
Take off immediately all contaminated clothing and wash it before reuse.
Absorb spillage to prevent material damage.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
hydrogen chloride	CAS-No.: 7647-01-0	37	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth. Call a physician immediately.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim is unconscious : Lay in a stable manner on victim's side. Induce artificial respiration with mask fitted with one-way valve or other suitable device; not mouth-to-mouth. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Call a physician immediately. Wash contaminated clothing before reuse.

First-aid measures after eye contact : Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately transport the casualty to an eye doctor / hospital. Continue rinsing during the transport with isotonic saline solution, alternatively with water.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If the person is fully conscious, make him/her drink water. Never give an unconscious person anything to drink. Call a physician immediately.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Burns. Blisters.

Symptoms/effects after eye contact : Serious damage to eyes. Stinging, redness, itching, tears, blurred vision, swelling. Can cause blindness.

Symptoms/effects after ingestion : Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Most Important Symptoms/Effects : Causes severe skin burns and eye damage.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Transfer to hospital rapidly.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry chemical, CO2, dry sand, or alcohol-resistant foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.

Reactivity in case of fire : Contact with metals could evolve flammable hydrogen gas.

Hazardous decomposition products in case of fire : Toxic fumes may be released. Hydrogen chloride.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. For large fire: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Withdraw immediately in case of rising sound from venting devices or discolouration from tank. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid all personal contact including breathing in the mist, spray, vapours. Do not take actions involving personal risks. Absorb spillage to prevent material damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Evacuate the danger area. If outdoors, move to an area upwind of the danger area. Do not breathe mist, spray, vapours. Avoid contact with skin and eyes. If possible without taking personal risks, remove ignition sources, ventilate area. Prevent other non-emergency personnel from entering the danger area.

For emergency responders

Protective equipment	:	Wear the recommended personal protective equipment. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Evacuate personnel to a safe area. Do not touch spilled material. Stop leak if safe to do so.
Environmental precautions	:	Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment	:	Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. Reduce vapour with vapour-suppression foam.
Methods for cleaning up	:	Take up in non-combustible inert absorbent and place into container for disposal. Contaminated absorbent material may pose the same hazard as the spilt product. Decontaminate surfaces and equipment with water. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

For further information refer to section 8: "Exposure controls/personal protection",For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Ensure good ventilation of the work station. Use only outdoors or in a well-ventilated area. Wear personal protective equipment. Do not breathe mist, spray, vapours. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharge.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.
Additional hazards when processed	:	Corrosive to metals. Contact with metals could evolve flammable hydrogen gas.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions	:	Store in a cool, dry and well-ventilated area away from incompatible substances. Store in corrosive resistant container with a resistant inner liner. Keep only in original container. Store locked up. Keep container tightly closed.
Incompatible materials	:	Metals. Bases. Oxidizing agents.
Specific end uses	:	Forensics.
Packaging materials	:	Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

hydrogen chloride (7647-01-0)

USA - ACGIH - Occupational Exposure Limits

Local name	Hydrogen chloride
ACGIH OEL C	2 ppm
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024

hydrogen chloride (7647-01-0)	
USA - OSHA - Occupational Exposure Limits	
Local name	Hydrogen chloride
OSHA PEL C	7 mg/m³
	5 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - NIOSH - Occupational Exposure Limits	
Local name	Hydrogen chloride
NIOSH REL C	5 ppm
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:
Wear protective gloves. The following materials are suitable for protective gloves: Butyl rubber, Fluoroelastomer (FKM), Nitrile rubber gloves, Chloroprene rubber, Polyvinylchloride (PVC), Latex
Eye protection:
Chemical goggles or face shield
Skin and body protection:
Wear suitable protective clothing. Body protection should be chosen depending on activity and possible exposure. Acid-resistant clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. In case of emergency: Respiratory protective device with a gas filter

Personal protective equipment symbol(s):

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Liquid

Colour : Colorless

Odour : Pungent

Odour threshold	:	No data available
pH	:	< 1
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	No data available
Flash point	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapour pressure	:	23 hPa / 17.3 mm Hg @ 20 °C / 68 °F
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Density	:	1.16 g/cm³ / 9.68 lbs/gal @ 20 °C / 68 °F
Solubility	:	Miscible with water.
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosive limits	:	No data available
Particle characteristics	:	No data available

hydrogen chloride	
Particle characteristics	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

May be corrosive to metals.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Incompatible materials.

10.5. Incompatible materials

Metals. Bases. Oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Hydrogen chloride.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Skin corrosion/irritation : Causes severe skin burns.
pH: < 1

Serious eye damage/irritation : Causes serious eye damage.
pH: < 1

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

hydrogen chloride (7647-01-0)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

hydrogen chloride (7647-01-0)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

NIK Test G Ampoule 2	
Viscosity, kinematic	No data available

hydrogen chloride (7647-01-0)	
Viscosity, kinematic	No data available

Symptoms/effects after inhalation : May cause respiratory irritation.

Symptoms/effects after skin contact : Burns. Blisters.

Symptoms/effects after eye contact : Serious damage to eyes. Stinging, redness, itching, tears, blurred vision, swelling. Can cause blindness.

Symptoms/effects after ingestion : Burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Most Important Symptoms/Effects : Causes severe skin burns and eye damage.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. Before neutralisation, the product may represent a danger to aquatic organisms.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

12.2. Persistence and degradability

NIK Test G Ampoule 2	
Persistence and degradability	Not rapidly degradable

hydrogen chloride (7647-01-0)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations. Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions. U.S. - RCRA (Resource Conservation Recovery Act) - D Waste-Characteristic Waste Codes. D002- Aqueous with pH < 2.0 or pH > 12.5, or Liquid and corrodes steel at > 0.25 inch / year, at 55° C.
Additional information : Do not re-use empty containers.
Ecological waste information : Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

14.1. UN Number

UN-No. (DOT) : UN1789
UN-No. (IMDG) : 1789
UN-No. (IATA) : 1789

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Hydrochloric acid
Proper Shipping Name (IMDG) : HYDROCHLORIC ACID
Proper Shipping Name (IATA) : Hydrochloric acid

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 8
Hazard labels (DOT) : 8

IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8

IATA

Transport hazard class(es) (IATA) : 8

Danger labels (IATA) : 8

14.4. Packing group

Packing group (DOT) : II

Packing group (IMDG) : II

Packing group (IATA) : II

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : UN1789

DOT Special Provisions (49 CFR 172.102) : 386 - Notwithstanding the provisions of §177.834(l) of this subchapter, cargo heaters may be used when weather conditions are such that the freezing of a wetted explosive material is likely. Shipments must be made by private, leased or contract carrier vehicles under exclusive use of the offeror. Cargo heaters must be reverse refrigeration (heat pump) units. Shipments made in accordance with this Special provision are excepted from the requirements of §173.60(b)(4) of this subchapter.
A3 - For combination packagings, if glass inner packagings (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packagings.
B3 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks and DOT 57 portable tanks are not authorized.
B15 - Packagings must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance.
B133 - Hydrochloric acid concentration not exceeding 38%, in Packing Group II, is authorized to be packaged in UN31H1 or UN31HH1 intermediate bulk containers when loaded in accordance with the requirements of §173.35(h) of this subchapter.
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
N41 - Metal construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.
T8 - 4 178.274(d)(2) Normal..... Prohibited
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Packaging Non Bulk (49 CFR 173.xxx) : 202

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	30 L
DOT Vessel Stowage Location	:	C - The material must be stowed ‘‘on deck only’’ on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	:	53 - Stow ‘‘separated from’’ alkaline compounds,58 - Stow ‘‘separated from’’ cyanides

IMDG

Limited quantities (IMDG)	:	1 L
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P001
IBC packing instructions (IMDG)	:	IBC02
IBC special provisions (IMDG)	:	B20
Tank instructions (IMDG)	:	T8
Tank special provisions (IMDG)	:	TP2
EmS-No. (Fire)	:	F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	:	S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES
Stowage category (IMDG)	:	C
Segregation (IMDG)	:	SGG1, SG36, SG49
Properties and observations (IMDG)	:	Colourless liquid. An aqueous solution of the gas hydrogen chloride. Highly corrosive to most metals. Causes burns to skin, eyes and mucous membranes.

IATA

Special provisions (IATA)	:	A3, A803
PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y840
PCA limited quantity max net quantity (IATA)	:	0.5L
PCA packing instructions (IATA)	:	851
PCA max net quantity (IATA)	:	1L
CAO packing instructions (IATA)	:	855
CAO max net quantity (IATA)	:	30L
ERG code (IATA)	:	8L

SECTION 15 Regulatory information

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency’s Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
hydrogen chloride	7647-01-0	Present	Active	

hydrogen chloride (7647-01-0)

Not subject to reporting requirements of the United States SARA Section 313
Subject to reporting requirements of United States SARA Section 313
Listed on EPA Hazardous Air Pollutant (HAPS)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	5000 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb

15.2. International regulations

CANADA

hydrogen chloride (7647-01-0)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

hydrogen chloride (7647-01-0)

Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other Information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date : 2/14/2025

Full text of hazard classes and H-statements	
H290	May be corrosive to metals
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H335	May cause respiratory irritation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NIK Test G Ampoule 3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date: 2/14/2025 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form	:	Substance
Trade name	:	NIK Test G Ampoule 3
CAS-No.	:	67-66-3
Product code	:	160-110 (1004762)
Formula	:	CHCl3

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture	:	Forensics

1.4. Supplier's details

Safariland, LLC
11386 International Parkway
Jacksonville, Florida 32218
T Customer Care (800) 347-1200

1.5. Emergency phone number

Emergency number	:	For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA) CCN 6410

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (inhalation:dust,mist), Category 3	H331	Toxic if inhaled.
Skin corrosion/irritation, Category 2	H315	Causes skin irritation.
Serious eye damage/eye irritation, Category 2A	H319	Causes serious eye irritation.
Carcinogenicity, Category 2	H351	Suspected of causing cancer (Inhalation, Oral).
Reproductive toxicity, Category 2	H361	Suspected of damaging the unborn child..
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness.
Specific target organ toxicity — Repeated exposure, Category 1	H372	Causes damage to organs (liver, kidneys) through prolonged or repeated exposure (Oral, Inhalation).

Full text of H-statements: see section 16

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US) :

Signal word (GHS US)	:	Danger
Hazard statements (GHS US)	:	Harmful if swallowed Causes skin irritation

		Causes serious eye irritation Toxic if inhaled May cause drowsiness or dizziness Suspected of causing cancer (Inhalation, Oral). Suspected of damaging the unborn child.. Causes damage to organs (liver, kidneys) through prolonged or repeated exposure (Oral, Inhalation)
Precautionary statements (GHS US)	:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist, spray, vapours. Wash hands, forearms and face thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves. If swallowed: Call a poison center or doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. If exposed or concerned: Get medical advice/attention. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Name	:	Cyalume Technologies | NIK Test G Ampoule 10
CAS-No.	:	67-66-3

Name	Product identifier	%	GHS US classification
chloroform; trichloromethane	CAS-No.: 67-66-3	100	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 2, H351 Repr. 2, H361 STOT SE 3, H336 STOT RE 1, H372 Aquatic Chronic 3, H412

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth. Call a physician immediately.

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim is unconscious : Lay in a stable manner on victim's side. Induce artificial respiration with mask fitted with one-way valve or other suitable device; not mouth-to-mouth. Call a physician immediately.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Do not give anything to drink. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects : Suspected of damaging the unborn child. Suspected of causing cancer.

Symptoms/effects after inhalation : Toxic if inhaled. May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Irritation (itching, redness, blistering).

Symptoms/effects after eye contact : Eye irritation. redness, itching, tears.

Symptoms/effects after ingestion : Harmful if swallowed.

Most Important Symptoms/Effects : Toxic if inhaled. Harmful if swallowed. Causes skin and eye irritation.

Chronic symptoms : Causes damage to organs (liver, kidneys) through prolonged or repeated exposure (oral, inhalation).

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : IF exposed or concerned: Get medical advice/attention.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry chemical, CO2, or water spray or regular foam.

Unsuitable extinguishing media	:	Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	:	No fire hazard.
Explosion hazard	:	Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Hazardous decomposition products in case of fire	:	Toxic fumes may be released. Hydrogen chloride. Phosgene.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	:	Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Move containers from fire area if it can be done without personal risk. Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment.
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Avoid all personal contact including breathing in the mist, spray, vapours. Do not take actions involving personal risks. Absorb spillage to prevent material damage. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.

For non-emergency personnel

Protective equipment	:	Wear recommended personal protective equipment.
Emergency procedures	:	Evacuate the danger area. If outdoors, move to an area upwind of the danger area. Do not breathe mist, spray, vapours. Avoid contact with skin and eyes. If possible without taking personal risks, remove ignition sources, ventilate area. Prevent other non-emergency personnel from entering the danger area.

For emergency responders

Protective equipment	:	Wear the recommended personal protective equipment. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Evacuate personnel to a safe area. Do not touch spilled material. Stop leak if safe to do so.
Environmental precautions	:	Do not allow product to spread into the environment.

6.2. Methods and materials for containment and cleaning up

For containment	:	Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up	:	Take up in non-combustible inert absorbent and place into container for disposal. Contaminated absorbent material may pose the same hazard as the spilt product. Decontaminate surfaces and equipment with water. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Notify authorities if product enters sewers or public waters. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

For further information refer to section 8: "Exposure controls/personal protection",For further information refer to section 13

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe mist, spray, vapours. Avoid contact with skin, eyes and clothing. Take precautionary measures against static discharge.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store in a cool, dry and well-ventilated area away from incompatible substances. Protect from sunlight. Store locked up. Keep container tightly closed.

Incompatible materials : Bases. Oxidizing agents. Metals. Oxygen. Acetone. Sodium azide.

Specific end uses : Forensics.

Packaging materials : Store always product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

chloroform; trichloromethane (67-66-3)

USA - ACGIH - Occupational Exposure Limits	
Local name	Chloroform
ACGIH OEL TWA	10 ppm
Remark (ACGIH)	TLV® Basis: Liver & embryo/fetal dam; CNS impair. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2024
USA - OSHA - Occupational Exposure Limits	
Local name	Chloroform (Trichloromethane)
OSHA PEL C	240 mg/m³
	50 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - NIOSH - Occupational Exposure Limits	
Local name	Chloroform (Trichloromethane)
NIOSH REL STEL	2 ppm [60-min]
Remark (NIOSH)	Ca = Potential occupational carcinogens
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:
Wear protective gloves. The following materials are suitable for protective gloves: Fluoroelastomer (FKM)

Eye protection:
Wear safety glasses which protect from splashes

Skin and body protection:
Wear suitable protective clothing. Body protection should be chosen depending on activity and possible exposure

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protective device with a gas filter. In case of emergency: Positive pressure self-contained breathing apparatus (SCBA)

Personal protective equipment symbol(s):

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Colorless
Odour	:	Ether-like
Odour threshold	:	No data available
pH	:	No data available
Melting point	:	-63 °C / -81.4 °F
Freezing point	:	No data available
Boiling point	:	62 °C / 143.6 °F
Flash point	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapour pressure	:	210 hPa / 157.5 mm Hg @ 20 °C / 68 °F
Relative vapour density at 20°C	:	No data available
Relative density	:	No data available
Density	:	1.48 g/cm³ / 12.35 lbs/gal @ 20 °C / 68 °F
Solubility	:	Water: 8 g/l @ 20 °C / 68 °F
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Explosive limits	:	No data available
Particle characteristics	:	No data available

chloroform; trichloromethane	
Particle characteristics	No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Moisture. Incompatible materials.

10.5. Incompatible materials

Bases. Oxidizing agents. Oxygen. Metals. Acetone. Sodium azide.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Hydrogen chloride. Phosgene.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Inhalation:dust,mist: Toxic if inhaled.

(67-66-3)	
ATE US (oral)	500 mg/kg bodyweight
ATE US (dust,mist)	0.5 mg/l/4h

chloroform; trichloromethane (67-66-3)	
ATE US (oral)	500 mg/kg bodyweight
ATE US (dust,mist)	0.5 mg/l/4h

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified

Carcinogenicity : Suspected of causing cancer (Inhalation, Oral).

chloroform; trichloromethane (67-66-3)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : Suspected of damaging the unborn child..
STOT-single exposure : May cause drowsiness or dizziness.

chloroform; trichloromethane (67-66-3)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Causes damage to organs (liver, kidneys) through prolonged or repeated exposure (Oral, Inhalation).

chloroform; trichloromethane (67-66-3)	
NOAEL (oral, rat, 90 days)	34 mg/kg bodyweight
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.049 mg/l air
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

(67-66-3)	
Viscosity, kinematic	No data available

chloroform; trichloromethane (67-66-3)	
Viscosity, kinematic	No data available

Symptoms/effects : Suspected of damaging the unborn child. Suspected of causing cancer.

Symptoms/effects after inhalation : Toxic if inhaled. May cause drowsiness or dizziness.

Symptoms/effects after skin contact : Irritation (itching, redness, blistering).

Symptoms/effects after eye contact : Eye irritation. redness, itching, tears.

Symptoms/effects after ingestion : Harmful if swallowed.

Most Important Symptoms/Effects : Toxic if inhaled. Harmful if swallowed. Causes skin and eye irritation.

Chronic symptoms : Causes damage to organs (liver, kidneys) through prolonged or repeated exposure (oral, inhalation).

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Not classified

chloroform; trichloromethane (67-66-3)	
EC50 - Other aquatic organisms [1]	152.5 mg/l
EC50 72h - Algae [1]	13.3 mg/l
NOEC (chronic)	6.3 mg/l
NOEC chronic fish	0.151 mg/l

12.2. Persistence and degradability

(67-66-3)	
Persistence and degradability	Not rapidly degradable

chloroform; trichloromethane (67-66-3)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations. Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Additional information : Do not re-use empty containers.
Ecological waste information : Avoid release to the environment.

SECTION 14 Transport information

In accordance with DOT / IMDG / IATA

14.1. UN Number

UN-No. (DOT) : UN1888
UN-No. (IMDG) : 1888
UN-No. (IATA) : 1888

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Chloroform
Proper Shipping Name (IMDG) : CHLOROFORM
Proper Shipping Name (IATA) : Chloroform

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 6.1
Hazard labels (DOT) : 6.1

IMDG

Transport hazard class(es) (IMDG) : 6.1
Danger labels (IMDG) : 6.1

IATA

Transport hazard class(es) (IATA) : 6.1
Danger labels (IATA) : 6.1

14.4. Packing group

Packing group (DOT)	:	III
Packing group (IMDG)	:	III
Packing group (IATA)	:	III

14.5. Environmental hazards

Other information	:	No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT)	:	UN1888
DOT Special Provisions (49 CFR 172.102)	:	IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). N36 - Aluminum or aluminum alloy construction materials are permitted only for halogenated hydrocarbons that will not react with aluminum. T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	153
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	203
DOT Packaging Bulk (49 CFR 173.xxx)	:	241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	220 L
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	:	40 - Stow ‘‘clear of living quarters’’

IMDG

Limited quantities (IMDG)	:	5 L
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P001, LP01
IBC packing instructions (IMDG)	:	IBC03
Tank instructions (IMDG)	:	T7
Tank special provisions (IMDG)	:	TP2
EmS-No. (Fire)	:	F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	:	S-A - SPILLAGE SCHEDULE Alfa - TOXIC SUBSTANCES
Stowage category (IMDG)	:	A

Stowage and handling (IMDG)	:	SW2
Segregation (IMDG)	:	SGG10
Properties and observations (IMDG)	:	Colourless, volatile liquid. Boiling point: 61°C. Non-flammable. When involved in a fire, evolves extremely toxic fumes (phosgene). Toxic if swallowed, by skin contact or by inhalation. Anaesthetic.

IATA

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y680
PCA limited quantity max net quantity (IATA)	:	2L
PCA packing instructions (IATA)	:	680
PCA max net quantity (IATA)	:	60L
CAO packing instructions (IATA)	:	680
CAO max net quantity (IATA)	:	220L
ERG code (IATA)	:	6A

SECTION 15 Regulatory information

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
chloroform; trichloromethane	67-66-3	Present	Active	

chloroform; trichloromethane (67-66-3)

Subject to reporting requirements of United States SARA Section 313
Listed on EPA Hazardous Air Pollutant (HAPS)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	10 lb
RQ (Reportable quantity, section 304 of EPA's List of Lists)	10 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	10000 lb

15.2. International regulations

CANADA

chloroform; trichloromethane (67-66-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

chloroform; trichloromethane (67-66-3)

Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

WARNING: This product can expose you to chemicals including Chloroform, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16 Other Information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)
Issue date : 2/14/2025

Full text of hazard classes and H-statements	
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H331	Toxic if inhaled
H336	May cause drowsiness or dizziness
H351	Suspected of causing cancer.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.