



MATERIAL SAFETY DATA SHEET (MSDS)

Kit Name: VitroView™ Von Kossa Calcium Stain Kit

SKU #: VB-3043

Revision Date: 10-24-2025

Components:

VB-3043-1	Silver Nitrate Solution
VB-3043-2	Sodium Thiosulfate Solution
VB-3043-3	Nuclear fast red Solution

VB-3043-1 1% Silver Nitrate Solution MSDS**1. Identification of the Substance/Mixture and Company****Identification of the substance or mixture**

Product Name Silver Nitrate Solution
Product number VB-3043-1
Product Description Kit Component

Manufacturer/Supplier

VitroVivo Biotech, LLC. 405 E Gude Dr. Suite 214, Rockville, MD 20850
Phone: 301-500-0499 Toll free: 1-800-260-9817 Fax: 844-248-6208

2. Composition/information on ingredients**Composition:**

Name	CAS #	Weight (%)
Silver Nitrate	7761-88-8	<2%

3. Hazards Identification**GHS- Classification**

Skin corrosion/irritation Category1
Serious eye damage/eye irritation Category1
Chronic aquatic toxicity Category2
Ozone Not applicable

GHSLabel elements, including precautionary statements**Signal Word**

Danger

Hazard statements

H314 - Causes severe skin burns and eye damageH318-

Causes serious eye damage

H411- Toxic to aquatic life with long lasting effects

Precautionary Statements-EU(\$28,1272/2008)

P280 - Wear protective gloves/ eye protection/ face protectionP260-

Do not breathe dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handlingP363-

Wash contaminated clothing before reuse

P301+ P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing.

Rinse skin with water/shower

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathingP310 Immediately call a POISON CENTER or doctor/ physician

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P273 - Avoid release to the environmentP391- Collect spillage

P405- Store locked up

P501- Dispose of contents/ container to an approved waste disposal plant

Other information

No information available

4. First Aid Measures

General advice	Immediate medical attention is required.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin contact	Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.
Inhalation	Move to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Immediate medical attention is required.
Ingestion	Rinse mouth. Do NOT induce vomiting. Immediate medical attention is required.
Notes to physician	Treat symptomatically.
Protection of first-aiders	Use personal protective equipment. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties	Not flammable.
Flash point	not determined
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Explosion Data	
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
Protective equipment and precautions for firefighters	ear self contained breathing apparatus for firefighting if necessary.

6. Accidental Release Measures

Personal precautions	Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Try to prevent the material from entering drains or water courses.
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water. Prevent product from entering drains. Dam up.

7. Handling and Storage

Advice on safe handling	Wear personal protective equipment. Ensure adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist.
Technical measures/Storage conditions	Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

8. Exposure Controls, Personal Protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name ACGIHTLV
Silver Nitrate TWA:0.01 mg/m³Ag
7761-88-8

OSHAPEL
TWA: 0.01 mg/m³
Ag(vacated)TWA:
0.01 mg/m³Ag
NIOSHIDLH
IDLH: 10 mg/m³
AgTWA:0.01mg/ m³Ag

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in
AFL-CIO v. OSHA, 965 F.2d 962(11th Cir., 1992).
Showers, Eye wash stations, Ventilation systems

Engineering measures**Personal protective equipment****Eye/face protection****Skin and body protection****Respiratory protection**

Tightly fitting safety goggles. Face-shield.

Long sleeved clothing. Protective gloves

If exposure limits are exceeded or irritation is experienced,
NIOSH/MSHA approved respiratory protection should be
worn. Positive-pressure supplied air respirators may be
required for high airborne contaminant concentrations.
Respiratory protection must be provided in accordance with
current local regulations.

Hygiene measures

When using, do not eat, drink or smoke. Remove and wash
contaminated clothing before re-use. Provide regular
cleaning of equipment, work area and clothing.

9. Physical and Chemical Properties

Physical State

Solid

Appearance

White

Odor

Odorless

Odor Threshold

No information available

pH

5.4-6.4 10% aq solution

Melting Point/Range

212 °C / 413.6 °F

Boiling Point/Range

444 °C / 831.2 °F @ 760 mmHg

Flash Point

No information available

Evaporation Rate

Not applicable

Flammability (solid,gas)

No information available

Flammability or explosive limits**Upper**

No data available

Lower

No information available

Vapor Pressure

No data available

Vapor Density

Not applicable

Specific Gravity

No information available

Solubility

Soluble in water

Partition coefficient; n-octanol/water

No data available

Autoignition Temperature

No information available

Decomposition Temperature

> 444°C

Viscosity

Not applicable

Molecular Formula

Ag N O₃

Molecular Weight

169.87

10. Stability and Reactivity

Reactive

Yes

Hazard Stability

Oxidizer: Contact with combustible/organic material may
cause fire. Light sensitive.

Conditions to Avoid

Avoid dust formation. Incompatible products. Excess heat.
Combustible material. Exposure to light.

Incompatible Materials

Strong oxidizing agents, Strong reducing agents,
Combustible material, Metals, Amines

Hazardous Decomposition Products
Hazardous Polymerization
Hazardous Reactions

Nitrogen oxides (NOx)
Hazardous polymerization does not occur.
None under normal processing.

11. Toxicological Information

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Silver nitrate	> 2000 mg/kg (Rat)	LD50 > 2000 mg/kg (Rat)	LC50 > 750 µg/m3 (Rat) 4 h

Toxicologically Synergistic No information available

Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes burns by all exposure routes

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP ACGIH	OSHA	Mexico
Silver nitrate	7761-88-8	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system

STOT - repeated exposure Liver Kidney

Aspiration hazard No information available

Symptoms / effects, both acute and delayed Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological Information

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Silver nitrate	Not listed	Leuciscus idus: : LC500.029 mg/L/96h	Photobacterium phosphoreum: EC50: 0.038 mg/L/24h Photobacterium phosphoreum: EC50: 0.395 mg/l/15min Photobacterium phosphoreum: EC50: 0.44 mg/L/30 min as Ag++ Photobacterium phosphoreum: EC50: 0.86 mg/L/15 min as Ag++	EC50: 0.0006 mg/L/48h
Persistence and Degradability	Soluble in water Persistence is unlikely based on information available.			
Bioaccumulation/ Accumulation	No information available.			
Mobility	Will likely be mobile in the environment due to its water solubility. Component log Pow Silver nitrate 0.19			

13. Disposal Information

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport Information

DOT

UN-No UN1493
Proper Shipping Name SILVER NITRATE
Hazard Class 5.1
Subsidiary Hazard Class 8
Packing Group II

TDG

UN-No UN1493
Proper Shipping Name SILVER NITRATE
Hazard Class 5.1
Packing Group II

IATA

UN-No UN1493
Proper Shipping Name Silver nitrate
Hazard Class 5.1
Packing Group II

IMDG/IMO

UN-No UN1493
Proper Shipping Name Silver nitrate
Hazard Class 5.1
Packing Group II

15. Regulatory Information

United States of America Inventory

Component CAS TSCA TSCA Inventory notification Active-Inactive TSCA - EPA Regulatory Flags
Silver nitrate 7761-88-8 X ACTIVE -

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Not applicable
Substances & Mixtures, Under TSCA Section 6(h) (PBT)
TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Silver nitrate	7761-88-8	X	-	231-853-9	X	X	X	X	X	KE-31281

U.S. Federal Regulations

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Silver nitrate	X	11b	X	-

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Silver nitrate	1 lb	-

California Proposition 65 This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know

Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Silver nitrate	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ):	Y
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

16. Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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VB-3043-2 5% Sodium Thiosulfate Solution MSDS

1. Identification of the Substance/Mixture and Company

Identification of the substance or mixture

Product Name Sodium Thiosulfate Solution
Product number VB-3043-2
Product Description Kit Component

Manufacturer/Supplier

VitroVivo Biotech, LLC. 405 E Gude Dr. Suite 214, Rockville, MD 20850
Phone: 301-500-0499 Toll free: 1-800-260-9817 Fax: 844-248-6208

2. Composition/information on ingredients

Composition:

Name	CAS #	Weight(%)
Sodium thiosulfate	7772-98-7	<6%

3. Hazards Identification

Classification of the substance or mixture: The product is not classified according to the Globally Harmonized System (GHS).

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

Not applicable. Information concerning particular hazards for human and environment: The product does not need to be labelled due to the calculation procedure of international guidelines.

Classification system: The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

GHS label elements Void
Hazard pictograms Void
Signal word Void
Hazard statements Void

Classification system:

NFPA ratings (scale 0 - 4)

- Health = 1
- Fire = 0
- Reactivity = 0

HMIS-ratings (scale 0 - 4)

- Health = 1
- Fire = 0
- Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable

4. First Aid Measures

Description of first aid measures

General information:

No special measures required.

After inhalation:

Supply fresh air; consult doctor in case of complaints.

After skin contact:

Generally the product does not irritate the skin.

After eye contact:

Rinse opened eye for several minutes under running water.

After swallowing:

If symptoms persist consult doctor. Information for doctor: Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

5. Fire Fighting Measures**General Information:**

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

Extinguishing Media:

For small fires, use water spray, dry chemical, carbon dioxide or chemical foam. Flash Point: Not applicable.

Autoignition Temperature:

Not applicable.

Explosion Limits

Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

6. Accidental Release Measures**General Information:**

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

7. Handling and Storage**Handling**

Avoid prolonged or repeated contact with skin. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage.

Store in a cool, dry place. Store in a tightly closed container.

8. Exposure Controls, Personal Protection**Engineering Controls:**

Use adequate ventilation to keep airborne concentrations low.

OSHA Vacated PELs:

Water: No OSHA Vacated PELs are listed for this chemical. Sodium thiosulfate, pentahydrate: No OSHA Vacated PELs are listed for this chemical.

Personal Protection:**Eye Protection:**

Safety glasses or goggles.

Respiratory Protection:

Normal room ventilation is adequate.

Skin Protection:

Chemical resistant gloves

9. Physical and Chemical Properties**Physical State**

Powder Solid

Appearance

White

Odor

No information available

Odor Threshold

No information available

pH

6.0-8.5 5% aq. sol. 20°C

Melting Point/Range

>100 °C

Boiling Point/Range

No information available

Flash Point

No information available

Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	negligible
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	Decomposes in contact with water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable
Molecular Formula	Na2 O3 S2
Molecular Weight	158.1

10. Stability and Reactivity

Reactive Hazard	None known, based on information available
Stability	Hygroscopic.
Conditions to Avoid	Exposure to moist air or water. Incompatible products
Incompatible Materials	Strong oxidizing agents, Acids
Hazardous Decomposition Products	Sulfur oxides, Sodium oxides
Hazardous Polymerization	Hazardous polymerization does not occur
Hazardous Reactions	None under normal processing.

11. Toxicological Information

Acute Toxicity

Product Information No acute toxicity information is available for this product

Component Information	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium Thiosulfate	>8000 mg/kg (Rat)	not listed	not listed

Toxicologically Synergistic Products

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation	No information available.
Sensitization	No information available.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Sodium Thiosulfate	7772-98-7	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects	No information available.
Reproductive Effects	No information available.
Developmental Effects	No information available.
Teratogenicity	No information available.
STOT - single exposure	None known
STOT - repeated exposure	None known
Aspiration hazard	No information available
Symptoms / effects,both acute and delayed	No information available
Endocrine Disruptor Information	No information available
Other Adverse Effects	The toxicological properties have not been fully investigated.

12. Ecological Information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability	Soluble in water Persistence is unlikely based on information available.
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Bioaccumulation/ Accumulation Mobility	No information available. Will likely be mobile in the environment due to its water solubility
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Waste Disposal Methods	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification
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13. Disposal Information

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification

14. Transport Information

DOT	Not regulated
TDG	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

15. Regulatory Information

SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

16. Other Information

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Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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VB-3043-3 Nuclear Fast Red Solution MSDS

1. Identification of the Substance/Mixture and Company

Identification of the substance or mixture

Product Name Nuclear Fast Red Solution
Product number VB-3043-3
Product Description Kit Component

Manufacturer/Supplier

VitroVivo Biotech, LLC. 405 E Gude Dr. Suite 214, Rockville, MD 20850
Phone: 301-500-0499 Toll free: 1-800-260-9817 Fax: 844-248-6208

2. Composition/information on ingredients

Composition: Mixture

Name	CAS #
Nuclear Fast Red	6409-77-4

3. Hazards Identification

GHS CLASSIFICATION:

Skin Irritation Category 2;
Eye Irritation Category 1;
Chronic Aquatic Toxicity Category 3

Hazard Phrases

H318 Causes serious eye damage.
H315 Causes skin irritation
H411 Toxic to aquatic life with long lasting effects.

Precautionary Phrases

P302+P352 IF ON SKIN: Wash with plenty of soap and water
P305+p351 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.
P337+P315 If eye irritation persists: Get medical advice/attention.
P273 Avoid release to the environment.

4. First Aid Measures

Eyes :

Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if irritation persists.

Skin:

In case of contact, flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention

Ingestion:

Call medical doctor or poison control center immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Inhalation:

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms worsen.

5. Fire Fighting Measures

Flammability of the product:

Flash point: Not Available

Autoignition temperature: Not Available

NFPA Hazard classification:

Health: 2 Flammability: 0 Reactivity: 0 Other:

HMIS Hazard classification:

Health: 2 Flammability: 0 Reactivity: 0 Protection: B

Extinguish media: Use dry chemical, CO₂, water spray (fog) or foam.

Not suitable: Do not use water jet.

Special fire fighting procedures:

Fire-fighters should wear appropriate protective equipment self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6. Accidental Release Measures

Small spill and leak:

Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Do not allow product to enter drains.

Large spill and leak:

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment.

Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and Storage

Handling Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid breathing vapor.

Storage. Store in accordance with local regulations. Store in a segregated and approved area. Store in a well ventilated area. Store at 2-8°C

8. Exposure Controls, Personal Protection

Engineering controls:

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment

Respiratory protection:

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eye protection:

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. Recommended: splash goggles

Skin protection:

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Work hygienic practices:

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove

potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eye wash stations and safety showers are close to the workstation location.

Notes:

Avoid releasing large quantities into the environment.

9. Physical and Chemical Properties

Appearance:	Red liquid
Odor:	Unknown
Physical state:	Liquid.
pH as supplied:	N/A
Boiling point:	N/A
Melting point:	N/A
Freezing point:	N/A
Vapor pressure (mmHg):	N/A
Vapor density (Air = 1):	N/A
Evaporation rate:	N/A
Solubility in water:	Soluble in water
Molecular weight:	Mixture
Viscosity:	N/A

10. Stability and Reactivity

Stability:	Product is stable under normal conditions of use.
Condition to avoid (stability):	Excessive heat, static electricity, direct sunlight.
Incompatibility (Material to avoid):	Oxidizers, alkalis, antimony salts, arsenates, carbonates, and phosphates.
Hazardous decomposition:	Carbon oxides, Nitrogen oxides, oxides of silver.
Hazardous polymerization:	No hazardous polymerization.

11. Toxicological Information

Acute Toxicity

Product Information

Oral LD50	N/A
Dermal LD50	N/A
Other information on acute toxicity	N/A
Skin corrosion/irritation	Irritating to skin and mucous membranes.
Serious eye damage/eye irritation	Seriously irritating to the eye.
Respiratory or skin sensitization	N/A
Germ cell mutagenicity:	N/A

International Agency for Research on Cancer (IARC).

None of the components are listed.

National Toxicology Program (NTP).

Although not listed above, this stain is suspected of causing cancer.

Specific target organ toxicity

Single exposure (Globally Harmonized System)	N/A
Repeated exposure (Globally Harmonized System)	N/A
Aspiration hazard	N/A

Potential health effects

Inhalation:	May cause respiratory tract irritation.
Ingestion:	Toxic if swallowed.
Skin:	Causes skin irritation.
Eyes:	Causes eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Routes if entry:

Skin/eye contact, inhalation, and ingestion.

Acute health hazard:

See above, potential health effects.

12. Ecological Information**Toxicity:**

Fish:	N/A
Crustacea:	N/A
Algae/Aquatic Plants:	N/A
Other Organisms:	N/A
Persistence and degradability	N/A
Bioaccumulative potential	N/A
Mobility in soil	N/A
PBT and vPvB assessment	N/A
Other adverse effects	N/A

13. Disposal Information**Waste Disposal Method:**

Unused product: dispose as a regulated hazardous waste. Spent product or spill clean up follow all provincial, local, state, and federal regulations.

14. Transport Information

DOT	Not regulated
TDG	Not regulated
IATA	Not regulated

15. Regulatory Information**United States of America Inventory**

TSCA 12(b) - Notices of Export Not applicable

International regulations**CANADA**

No additional information available

EU-Regulations

No additional information available

U.S. Federal Regulations

SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA - Occupational Safety and Health Administration	Not applicable
CERCLA	Not applicable
California Proposition 65	This product does not contain any Proposition 65 chemicals.
U.S. State Right-to-Know Regulations	Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ):	N
DOT Marine Pollutant	N
DOT Severe Marine Pollutant	N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade	No information available
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16. Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product.

Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

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