SAFETY DATA SHEETS

This SDS packet was issued with item: 078225479

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078926571

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078079708



SAFETY DATA SHEET

1. Identification

Product identifier	Fel-O-Vax® LvK/FIV
Other means of identification	
Synonyms	Feline Immunodeficiency-Leukemia Virus Vaccine
Recommended use	Indicated for vaccination of healthy cats in the prevention of infection with feline immunodeficiency virus and as an aid in the prevention of disease caused by feline leukemia virus.
Recommended restrictions	Not for human use.
Manufacturer/Importer/Supplier	/Distributor information
Manufacturer	Boehringer Ingelheim Vetmedica, Inc.
Address	2621 North Belt Hwy
	St. Joseph, MO 64506-2002
Transportation emergency	For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call
	CHEMTREC Day or Night
	Within USA and Canada: 1-800-424-9300
	Outside USA and Canada: +1 703-527-3887 (collect calls accepted)
Medical Emergency (24HR):	(866)638-2226
Non-Emergency calls:	(800) 821-7467

2. Hazard(s) identification

Physical hazards	Not classified.
Health hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storage	Store away from incompatible materials. Keep at a temperature between 2 - 7°C Do not freeze.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	

Not applicable.

3. Composition/information on ingredients

Mixtures		
Chemical name	CAS number	%
Feline Immunodeficiency- Leukemia killed virus	Not Applicable	Proprietary
Proprietary adjuvant	Not Applicable	Trade Secret
Composition comments	Thimerosal, neomycin and polymyxin B added as preservatives.	

Fel-O-Vax® LvK/FIV

4. First-aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.	
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.	
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.	
Ingestion	Rinse mouth. Get medical attention if symptoms occur.	
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.	
Indication of immediate medical attention and special treatment needed	Not for human use. For use in felines only.	
General information	Persons developing anaphylactic (life-threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.	

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.	
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water	
	. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.	
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.	
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.	
7. Handling and storage		
Descentions for onfo how dia a	Observe good industrial hygicana prostings	

Precautions for safe handlingObserve good industrial hygiene practices.Conditions for safe storage,
including any incompatibilitiesStore in original tightly closed container. Keep at a temperature between 2 - 7°C (33 - 45° F).
Store away from foodstuffs. Protect from direct sunlight. Protect from freezing. Store away from
incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).	
Biological limit values	No biological exposure limits noted for the ingredient(s).	
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.	
Individual protection measures, such as personal protective equipment		

Individual protection measures, such as personal protective equipment

Eye/face protection Not generally required when handling containers. If containers are compromised or exposure to the mixture is likely: Wear safety glasses with side shields (or goggles).

Skin protection		
Hand protection	Not generally required when handling containers. If containers are compromised or exposure to the mixture is likely: Wear suitable gloves.	
Other	Not generally required when handling containers. If containers are compromised or exposure to the mixture is likely: Wear lab coat, apron or appropriate clothing to prevent skin contact.	
Respiratory protection	Not generally required when handling vials or containers. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Respirator type: NIOSH approved organic vapor respirator.	
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.	
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.	

9. Physical and chemical properties

AppearanceReddish-white liquidPhysical stateLiquid.FormKilled virus in an injectable solutionColorReddish-whiteOdorOdorless.Odor messholNot available.pH6 - 8Melting point/freezing pointNot available.Initial boiling point and boilingNot available.Paper and the state and the s		-
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	Fel-O-Vax® LvK/FIV	SE

924313 Version #: 01 Revision date: - Issue date: 27-April-2015

11. Toxicological information

Information on likely routes of exposure

Information on likely route	s of exposure
Inhalation	No adverse effects due to inhalation are expected.
Skin contact	No adverse effects due to skin contact are expected. May cause an allergic skin reaction.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms related to the physical, chemical and toxicological characteristic	In case of accidental injection, wash the site thoroughly. Contact a physician immediately.
Information on toxicologic	al effects
Acute toxicity	This product is considered nontoxic.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.
Respiratory or skin sensiti	zation
Respiratory sensitizati	ion Not available.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA Specifically Reg Not listed.	gulated Substances (29 CFR 1910.1001-1050)
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxic single exposure	ity - Not classified.
Specific target organ toxic repeated exposure	ity - Not classified.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Chronic effects	Possible hypersensitization (development of abnormal sensitivity).
12. Ecological information	ation
Ecotoxicity	No ecotoxicity data noted for the ingredient(s).
Persistence and degradabi	ility No data is available on the degradability of this product.
Bioaccumulative potential	No data available.
Mobility in soil	This product has not been tested.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
13. Disposal consider	ations
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations	Dispose in accordance with all applicable regulations.

Hazardous waste codeThe waste code should be assigned in discussion between the user, the producer and the waste
disposal company.Waste from residues / unused
productsDispose of in accordance with local regulations. Empty containers or liners may retain some
product residues. This material and its container must be disposed of in a safe manner (see:
Disposal instructions).Contaminated packagingEmpty containers should be taken to an approved waste handling site for recycling or disposal.
Since emptied containers may retain product residue, follow label warnings even after container is

14. Transport information

DOT

Not regulated as dangerous goods.

emptied.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not available. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed. US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65 Not Listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
		0.000

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	27-April-2015
Revision date	-
Version #	01
HMIS® ratings	Health: 0 Flammability: 0 Physical hazard: 0
NFPA ratings	



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Material Safety Data



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Acid Fast Stain Set Product Code: J326AS SEP 2 1 2009 Effective Date: SEP 2 1 2009 24 Hour Emergency Telephone: CMB: (800)535-5053

All non-emergency questions may be directed to customer service @ 1-970-669-2500 or fax 1-970-663-5042

HAZARDOUS INFORMATION

Product identification

Acid Fast Stain Set Solution 1, Kinyoun Carbol Fuchsin

Hazardous Ingredient: Phenol, 7.5% CAS #: 108-95-2 Ethanol, 15% CAS #: 64-17-5 Basic Fuchsin, 3% CAS #: 569-61-9

Molecular Weight: 94.11 Molecular Weight: 46.07 Molecular Weight: 323.8 Chemical Formula: C₆H₅OH Chemical Formula: CH₃CH₂OH Chemical Formula: C₁₉H₁₈NtCl

Acid Fast Stain Set Solution 2, Methanol Hazardous Ingredient: Methanol, 100% Synonyms: methyl alcohol, wood alcohol, carbinol CAS #: 67-56-1 Molecular Weight: 32.04 Chemical Formula: CH₂OH

Acid Fast Stain Set Solution 3, Ethanol, 50% Hazardous Ingredient: Denatured Ethanol, 50% Synonyms: doubly denatured ethanol, modified 3A alcohol, alcohol anhydrous CAS #: 64-17-5 Molecular Weight: 46.07 Chemical Formula: CH₃CH₂OH

Acid Fast Stain Set Solution 4, Sulfuric Acid, 1% Hazardous Ingredient: Sulfuric Acid, 1% Synonyms: oil of vitriol, babcock acid. CAS #: 7664-93-9 Molecular Weight: 98.08 Chemical Formula: H₂SO₄

Acid Fast Stain Set Solution 5, Loeffler's Methylene Blue

Hazardous Ingredient: Denatured Ethanol, 23% Synonyms: doubly denatured ethanol, modified 3A alcohol, alcohol anhydrous CAS #: 64-17-5 Molecular Weight: 46.07 Chemical Pormula: CH₃CH₂OH

HAZARDS IDENTIFICATION

Emergency Overview

Acid Fast Stain Set Solution 1, Kinyoun Carbol Fuchsin:

POISONI DANGERI VAPOR HARMFUL MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CANNOT BE MADE NONPOISONOUS. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM, LIVER AND KIDNEYS. May stain skin and clothing. SAFETY RATINGS: Health: 3, Severe (Poison) Reactivity: 0, None Flammability: 1, Slight Contact: 2, Moderate Protective Equipment: Coggles Lab Coat or Apron. Gloves Local or General Exhaust Ventilation

Protective Equipment:Goggles, Lab Coat or Apron, Gloves, Local or General Exhaust Ventilation.Storage Code:Blue: Health Hazard.

Acid Fast Stain Set Solution 2, Methanol:

POISONI DANGERI VAPOR HARMFUL MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CANNOT BE MADE NONPOISONOUS. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM, LIVER AND KIDNEYS. Product #: J326AS

Acid Fast Stain Set

SAFETY RATINGS:	Health: 3, Severe (Poison) Reactivity: 1, Slight Flammability: 4, Extreme (Flammable) Contact: 1, Slight
Protective Equipment: Storage Code:	Goggles, Lab Coat or Apron, Gloves, Local or General Exhaust Ventilation. Red: Flammable Hazard.
Acid Fast Stain Set	Solution 3, Ethanol, 50%:

POISONI DANGERI VAPOR HARMFUL MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. CANNOT BE MADE NONPOISONOUS. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM, LIVER AND KIDNEYS. SAFETY RATINGS: Health: 3, Severe (Poison) Reactivity: 1, Slight Elammability: 2, Moderate (Flammable) Contact: 1, Slight

Protective Equipment:Flammability: 2, Moderate (Flammable)Contact: 1, SlighStorage Code:Safety Glasses or Goggles, Lab Coat or Apron, Gloves.Red: Flammable Hazard.

Acid Fast Stain Set Solution 4, Sulfuric Acid, 1%:

 HARMFUL IF SWALLOWEDI
 As part of good industrial hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

 SAFETY RATINGS:
 Health: 1, Slight
 Reactivity: 0, None

 Flammability: 0, None
 Contact: 1, Slight

 Protective Equipment:
 Safety Glasses or Goggles, Lab Coat or Apron, Gloves.

 Storage Code:
 Green: Minimal Hazard:

 Actic Past Stand Set Sometion Structure of Acting Participation

 POISONI DANGERI MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED

 THROUGH SKIN. CANNOT BE MADE NONPOISONOUS. MAY CAUSE IRRITATION TO SKIN, EYES AND RESPIRATORY

 TRACT. AFFECTS CENTRAL NERVOUS SYSTEM, LIVER AND KIDNEYS. May stain skin and clothing.

 SAFETY RATINGS:
 Health: 3, Severe (Poison)

 Reactivity: 1, Slight

 Flammability: 2, Moderate (Flammable)
 Contact: 1, Slight

 Storage Code:
 Red: Flammable Hazard.

Potential Health Effects

Acid Fast Stain Set Solutions 1, Kinyoun's; 2, Methanol; 3, Ethanol, 50%:

INHALATION:

Methanol & Ethanol: Slight irritants to the mucous membranes. Toxic effects exerted upon nervous system, particularly the optic nerve. Once absorbed into the body, it is very slowly eliminated. Symptoms of overexposure may include headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma, and death. Phenol: The major hazard of Phenol is its ability to penetrate the skin rapidly, particularly when liquid, causing severe injury which can be fatal. Phenol also has a strong corrosive effect on body tissue causing severe chemical burns. Due to its local anesthetizing properties, skin burns may be painless.

INGESTION:

Methanol & Ethanol: Toxic! Symptoms parallel inhalation. Can intoxicate and cause blindness. Usual fatal dose: 100-125 milliliters. Phenol: Toxic! Symptoms may include burning pain in mouth and throat, abdominal pain, nausea, vomiting, headache, dizziness, muscular weakness, central nervous system effects, increase in beart rate, irregular breathing, coma, and possibly death. Acute exposure is also associated with kidney and liver damage. Ingestion of 1 gram has been lethal to humans.

SKIN CONTACT:

Methanol & Ethanol: Defatting agents and may cause skin to become dry and cracked. Skin absorption can occur, symptoms may parallel inhalation exposure. Phenol: May cause irritation or burns. Rapidly absorbed through the skin with systemic poisoning effects to follow, symptoms may parallel inhalation exposure.

EYE CONTACT:

Methanol & Ethanol: Irritant. Continued exposure may cause eye lesions. Phenol: Eye burns with redness, pain, blurred vision may occur. May cause severe damage and blindness.

Acid Fast Stain Set

CHRONIC EXPOSURE:

Methanol & Ethanol: Marked impairment of vision and enlargement of the liver have been reported. Repeated or prolonged exposure may cause skin irritation. Phenol: Repeated exposure may cause symptoms described for acute poisoning as well as eye & skin discoloration.

AGGRAVATION of PRE-EXISTING CONDITIONS:

Persons with pre-existing skin, eye or central nervous system disorders, or impaired liver, kidney, or pulmonary function may be more susceptible to the effects of the substance.

Acid Fast Stain Set Solutions 4, Sulfuric Acid, 1% & 5, Loeffler's Methylene Blue:

INHALATION: No known effects. **INGESTION:** May be harmful. May cause nausea, intoxication, blindness, headache and diarrhea. SKIN CONTACT: May cause irritation. EYE CONTACT: May cause irritation. CHRONIC EXPOSURE: No information available. AGGRAVATION of PRE-EXISTING CONDITIONS: No information available.

FIRST AID MEASURES

Acid Fast Stain Set Solutions 1, Kinyoun's; 2, Methanol; 3, Ethanol, 50%:

INHALATION:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

INGESTION:

Methanol & Ethanol: Induce vomiting immediately as directed by medical personnel. Phenol: Immediately administer castor oil or other vegetable oil. Never give anything by mouth to an unconscious person. Be ready to induce vomiting at the advice of physician or poison control center. Castor oil or vegetable oil dosage should be between 15 & 30 cc. Get medical attention immediately.

SKIN CONTACT:

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical advise if irritation develops.

EYE CONTACT:

Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Acid Fast Stain Set Solutions 4, Sulfuric Acid, 1% & 5, Loeffler Methylene Blue:

INHALATION:

Remove to fresh air if effects occur.

INGESTION:

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

SKIN CONTACT:

Wash with mild soap and water. Get medical advise if irritation develops.

EYE CONTACT:

Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical advise if irritation develops.

Acid Fast Stain Set

Product #: J326AS

FIRE FIGHTING MEASURES

FIRE:

Flash Point: No information available.

Autoignition Temperature: No information available.

Flammable Limits in Air % by Volume: No information available.

EXPLOSION:

Methanol: Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Moderate explosion hazard and dangerous fire hazard when exposed to heat, sparks or flames. Sensitive to static discharge. FIRE EXTINGUISHING MEDIA:

Use alcohol foam, dry chemical or carbon dioxide.

SPECIAL INFORMATION:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

NFPA RATINGS: Health: 1 Flammability: 3 Reactivity: 0

ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in the Personal Protection Section. Collect liquid in an appropriate container or absorb with a paper towel for proper disposal. Do not flush to sewer! Wash area with soap and water.

HANDLING AND STORAGE

Store in a cool, dry, ventilated area away from flame, sources of ignition and heat. Keep containers tightly closed and upright. Protect from physical damage. Keep out of direct sunlight and separate from incompatible materials. Storage and use areas should be non-smoking.

PERSONAL PROTECTION

Acid Fast Stain Set:

AIRBORNE EXPOSURE LIMITS, METHANOL:OSHA; Permissible Exposure Limit (PEL):200 ppm (TWA).ACGIH; Threshold Limit Value (TLV):200 ppm (TWA).200 ppm (STEL) skin.

AIRBORNE EXPOSURE LIMITS, ETHANOL:

OSHA; Permissible Exposure Limit (PEL): 1000 ppm (TWA).

ACGIH; Threshold Limit Value (TLV): 1000 ppm (TWA).

AIRBORNE EXPOSURE LIMITS, PHENOL:

OSHA; Permissible Exposure Limit (PEL): 5 ppm (TWA) skin. ACGIH; Threshold Limit Value (TLV): 5 ppm (TWA) skin.

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

PERSONAL RESPIRATORS (NIOSH) APPROVED:

If the exposure limit is exceeded, a full face piece respirator, air lined hood or full-face piece self-contained breathing apparatus. This substance has poor warning properties.

SKIN PROTECTION:

Wear protective clothing, gloves, lab coat or apron, as appropriate, to prevent skin contact.

EYE PROTECTION:

Use chemical safety glasses or goggles. Maintain eye wash fountain in work area.

VENTILATION SYSTEM:

PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE: ODOR: SOLUBILITY: SPECIFIC GRAVITY: pH: % VOLATILES by VOLUME: BOILING POINT: MELTING POINT: VAPOR DENSITY (Air =1): VAPOR PRESSURE (mm Hg): EVAPORATION RATE (BuAc=1):
- Characteristic. Characteristic. No information available. No information available.

STABILITY AND REACTIVITY

STABILITY:

Stable under ordinary conditions of use and storage. HAZARDOUS DECOMPOSITION PRODUCTS: No information available. HAZARDOUS POLYMERIZATION: Will not occur. INCOMPATIBILITIES: Strong oxidizing agents and bases. Avoid heat, flame and other sources of ignition. CONDITIONS to AVOID: Heat, flames, ignition sources and incompatibles.

TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA:

Methanol: Oral rat LD50: 5628 mg/kg; Inhalation rat LC50: 64000 ppm/4H; Skin rabbit LD50: 15800 mg/kg. Irritation data: Standard Draize Test, Skin rabbit: 20 mg/24hr., moderate; Eye rabbit: 100 mg/24hr., moderate. Investigated as a mutagen, reproductive effector.

Ethanol: Oral rat LD50: 7060 mg/kg; Inhalation rat LC50: 20000 ppm/10H; Irritation data: Standard Draize Test, Eye rabbit: 500 mg/24hr., moderate. Investigated as a mutagen, reproductive effector.

Phenol: Oral rat LD50: 317 mg/kg; Inhalation rat LC50: 316 mg/m³; Skin rabbit LD50: 630 mg/kg. Irritation data: Standard Draize Test, Skin rabbit: 500 mg/24hr., severe; Eye rabbit: 5 mg/^{30S} rinse, mild. Investigated as a tumorigen, mutagen, reproductive effector.

ECOLOGICAL INFORMATION

When released into the soil, this material may leach into ground water. ENVIRONMENTAL TOXICITY: This material is expected to be toxic to aquatic life.

DISPOSAL INFORMATION

Dispose of container and unused contents in accordance with federal, state and local requirements. State and local disposal regulation may differ from federal disposal regulations.

Acid Fast Stain Set

OTHER INFORMATION

Acid Fast Stain Set Solution 2, Methanol:

TRANSPORT (Land, DOT): Methanol, 3, UN1230, II <u>Acid Fast Stain Set Solutions 3, Ethanol 50%:</u> TRANSPORT (Land, DOT): Alcohols, n.o.s. (denatured ethanol), 3, 1987, II <u>Acid Fast Stain Set Solutions 5, Leoffler's Methylene Blue:</u> TRANSPORT (Land, DOT): Alcohols, n.o.s. (denatured ethanol), 3, 1987, III <u>Acid Fast Stain Set Solutions 1, Kinyoun Carbol Fueshin & 4, Sulfurie Acid 1%:</u> TRANSPORT (Land, DOT): Not Regulated

PRODUCT USE:

Laboratory Reagent.

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Safety Data Sheet

1. IDENTIFICATION

Product Identifier:	Loeffler's Methylene Blue	
Product Code(s):	J0326ASD4	
Synonyms:	Mixture.	
Recommended Use:	For invitro veterinary use only.	
Uses Advised Against:	Not for use on humans.	
Supplier:	Jorgensen Laboratories 1450 Van Buren Avenue, Loveland, CO 80538 Phone: (970) 669-2500 or (800) 525-5614 Fax: (970) 663-5042	
Emergency Phone Number:	U.S. and Canada: (800) 535-5053	International: (352) 323-3500 (INFOTRAC)

2. HAZARDS IDENTIFICATION

Hazard Classifications:	Flammable Liquids:	Category 3
Signal Word:	WARNING	
Hazard Statements:	Flammable liquid and vap	or.
Pictograms:		

Precautionary Statements:

Prevention:	Keep away from heat, sparks, open flames, and hot surfaces. – No smoking. Keep container tightly closed. Ground container and receiving equipment. Use explosion-proof electrical, ventilating, lighting, and transportation equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves, protective clothing, eye protection, and face protection.
Response:	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

	In case of fire: Use water spray, dry powder, alcohol resistant foam, or carbon dioxide to extinguish.
Storage:	Store in a well-ventilated place. Keep cool.
Disposal:	Dispose of contents and container in accordance with local, regional, national, and international regulations.
Hazards Not Otherwise Classified:	This product may be toxic to humans. Primates are especially susceptible to the toxic effects of methanol, which are not reflected through toxicity data (see Section 11). May cause adverse reproductive effects based on human and animal data.
Toxicity Statement:	Not applicable.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Component	Common Name / Synonyms	CAS#	Chemical Formula	% by Weight
Water	Water	7732-18-5	H ₂ O	80.7
Ethanol	Ethyl Alcohol	64-17-5	C₂H₅OH	17.0
Methanol	Methyl Alcohol	67-56-1	CH₃OH	0.848
Isopropanol	Isopropyl Alcohol	67-63-0	C ₃ H ₇ OH	0.942
Methylene Blue	Basic Blue 9	7220-79-3	C ₁₆ H ₁₈ N ₃ SCI • 3H ₂ O	0.397
Potassium Hydroxide	Caustic Potash	1310-58-3	КОН	0.0446

Trade Secret Statement:

Not applicable.

4. FIRST AID MEASURES

First Aid Procedures:

Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician immediately if you feel unwell or are concerned.
Ingestion:	Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person. Call a physician immediately if you feel unwell or are concerned.
Skin Contact:	Remove contaminated clothing and shoes. Wash skin with plenty of water for at least 15 minutes. Wash clothing before reuse. Call a physician immediately if you feel unwell or are concerned.
Eye Contact:	Check for and remove contact lenses if present and easy to do. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately if you feel unwell or are concerned.
General Advice:	Ensure that medical personnel and those providing first aid are aware of the material(s) involved and take precautions to protect themselves.
Symptoms and Effects:	Irritation, nausea, vomiting, diarrhea, visual disturbances, abdominal pain, nervous system effects, drowsiness, dizziness, blindness, metabolic acidosis, unconsciousness. May cause irritation to the eyes, skin, respiratory tract, and gastrointestinal tract. May cause blindness or visual disturbances if absorbed into the blood stream. May affect the blood, brain, urinary system, liver, spleen, eyes, kidneys, cardiovascular system, and pancreas. Prolonged or repeated exposure may affect the liver, kidneys, cardiovascular system, and nervous system. May cause damage to eyesight. May cause mutagenic effects, adverse reproductive effects, and dermatitis.

If you feel unwell or are concerned, call a physician or poison control center immediately. Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable Extinguishing Media:	Water spray, dry powder, alcohol resistant foam, carbon dioxide.
Unsuitable Extinguishing Media:	Do not use a solid (straight) water stream, as it may scatter and spread fire.
Hazardous Combustion Products:	Carbon oxides, nitrogen oxides, toxic fumes.
Specific Hazards:	Flammable. Vapors may cause flash fire or ignite explosively. Burns if ignited by heat, sparks, or flames. Sealed containers may explode when heated or involved in fire. Material may be sensitive to static discharge. Vapors may travel considerable distance to source of ignition and flash back. Vapor from the solvent may accumulate in container headspace, resulting in flammability hazard.
Special Protective Equipment/ Precautions for Firefighters:	As in any fire, wear MSHA/NIOSH-approved (or equivalent), self-contained, positive- pressure or pressure-demand breathing apparatus and full protective gear. Use water spray to cool unopened containers. Move containers from fire area, if you can do so without risk. This material may evaporate and leave a flammable residue if spilled. In the event of fire and/or explosion, do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions and Protective Equipment:	Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Wear appropriate personal protective equipment (see Section 8). Remove all sources of ignition. Avoid contact with eyes, skin, and clothing.
Emergency Procedures:	In case of chemical emergency, or if unsure how to address an accidental release, consult a professional (see Section 1).
Methods for Containment:	Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements, or confined areas. Dike the spilled material, where this is possible. Product should not be released to the environment. Contain and recover liquid when possible.
Methods for Cleanup:	Absorb spill with an inert material (e.g. vermiculite, dry sand, earth, cloth, or fleece) and place in a noncombustible container for reclamation or disposal. Do not flush to sewer. Clean contaminated surface thoroughly. Spills can be dissolved with alcohol or acetone solution. Never return spills in original containers for reuse. Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE

Handling:	Do not handle near an open flame, excessive heat, or sources of ignition. Wear personal protective equipment (see Section 8). Provide sufficient air exchange and/or exhaust in work areas. Avoid contact with skin, eyes, and clothing. Do not breathe vapors or spray mist. Do not ingest. When using, do not eat, drink, or smoke. Keep away from incompatible materials (see Section 10). Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Containers of this material may be hazardous when empty, as they retain product residues. Observe all warnings and precautions listed for this product.
Storage:	Store in a cool, dry, ventilated area. Limit exposure to light. Store in a segregated and approved area away from incompatible materials (see Section 10). Store in original

container. Keep containers tightly closed and upright. Keep away from food, drink, and animal foodstuffs. Keep out of the reach of children. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of this product.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:	Water:	No information found.
	Ethanol:	ACGIH: STEL: 1000 ppm OSHA: PEL: 1000 ppm 1900 mg/m ³
	Methanol:	ACGIH: TWA: 200 ppm STEL: 250 ppm BEL: 15 mg/L OSHA: PEL: 200 ppm
		260 mg/m ³
	Isopropanol:	ACGIH: TWA: 200 ppm STEL: 400 ppm BEL: 40 mg/L OSHA: PEL: 400 ppm 980 mg/m ³
	Methylene Blue:	No information found.
	Potassium Hydroxide:	OSHA: PEL: 2 mg/m ³ ACGIH: TLV: 2 mg/m ³
Engineering Controls:	applicable, use process e to maintain airborne level	on. Ventilation rates should be matched to conditions. If nclosures, local exhaust ventilation, or other engineering controls s below recommended exposure limits. If exposure limits have not in airborne levels to an acceptable level.
Personal Protective Measures:		
Eye/Face Protection:		side shields or safety goggles. Wear a face shield. Maintain n and accessible rinse facilities in work area.
Skin Protection:	Wear appropriate chemic resistant gloves.	al resistant clothing (with long sleeves) and appropriate chemical
Respiratory Protection:	permissible under certain exceed exposure limits. U potential for an uncontrol	pproved respirator with appropriate cartridge or canister may be circumstances where airborne concentrations are expected to lse a positive-pressure, air-supplied respirator if there is any ed release, if exposure levels are unknown, or if any other e air-purifying respirators may not provide adequate protection.
Specific Requirements for Personal Protective Equipment:	Ensure that glove materia glove manufacturers.	I is compatible with this product. This information is available from

9. PHYSICAL AND CHEMICAL PROPERTIES

Unless otherwise indicated, all properties are given at 25 °C and standard pressure.

Appearance:

Blue, opaque liquid.

Odor:	Slight, alcoholic.
Odor Threshold:	No information found.
Formula Weight:	Mixture.
pH:	No information found.
Melting/Freezing Point:	< 0 °C
Boiling Point/Range:	< 100 °C
Decomposition Temperature:	No information found.
Flash Point:	38 °C (estimated)
Auto-ignition Temperature:	No information found.
Flammability:	Flammable liquid and vapor.
Flammability/Explosive Limits:	No information found.
Solubility:	Miscible with water, alcohol.
Vapor Pressure:	No information found.
Vapor Density:	No information found.
Specific Gravity:	0.960 (Water = 1)
Evaporation Rate:	No information found.
Viscosity:	No information found.
Partition Coefficient (n-octanol/water):	No information found.

10. STABILITY AND REACTIVITY

Reactivity Data:	Flammable. See Section 9.
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	Heat, incompatible materials.
Incompatible Materials:	Oxidizing agents, acids, bases, metals, organic materials.
Hazardous Decomposition Products:	Carbon oxides, nitrogen oxides, toxic fumes.
Possibility of Hazardous Reactions:	May react vigorously, violently or explosively if exposed to extreme thermal conditions or in contact with the incompatible materials listed above.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Inhalation, ingestion, skin contact, eye contact.

Acute Effects:May be harmful if swallowed. May cause irritation to the eyes, skin, respiratory tract, and
gastrointestinal tract. May cause blindness or visual disturbances if absorbed into the blood
stream. May affect the blood, brain, urinary system, liver, spleen, eyes, kidneys,
cardiovascular system, and pancreas.

Chronic Effects:	Prolonged or repeated exposure may affect the liver, kidneys, cardiovascular system, and nervous system. May cause damage to eyesight. May cause mutagenic effects, adverse reproductive effects, and dermatitis.			
Toxicological Data:	Water:	Not applicable.		
	Ethanol:	LD ₅₀ Oral, Rat: LC ₅₀ Inhalation, Rat:	7060 mg/kg 124.7 mg/L 4 h	
	Methanol:	LD₅₀ Oral, Rat: LD₅₀ Dermal, Rabbit: LC₅₀ Inhalation, Rat:	5628 mg/kg 15,800 mg/kg 87.5 mg/L 6 h	
	Isopropanol:	LD₅₀ Oral, Rat: LD₅₀ Dermal, Rabbit: LC₅₀ Inhalation, Rat:	5045 mg/kg 12,800 mg/kg 72.6 mg/L 4 h	
	Methylene Blue:	No information found.		
	Potassium Hydroxide:	LD ₅₀ Dermal, Rabbit: Corrosive to eyes and sk	273 mg/kg in based on human and animal data.	
Symptoms of Exposure:	Irritation, nausea, vomiting, diarrhea, visual disturbances, abdominal pain, nervous system effects, drowsiness, dizziness, blindness, metabolic acidosis, unconsciousness.			
Carcinogenic Effects:	No component of this product is considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.			
ACGIH:	Isopropanol: A4 – Not classifiable as a human carcinogen			
IARC:	Isopropanol: 3 – No	t classifiable as to its carcin	ogenicity to humans	
12. ECOLOGICAL IN	ORMATION			
Ecotoxicological Data:	Water: Not applicable.			

EC₅₀, Water Flea (Daphnia magna):

EC₅₀, Water Flea (Daphnia magna):

No information found.

May not be readily biodegradable.

LC₅₀, Fathead Minnow (Pimephales promelas):

LC₅₀, Fathead Minnow (Pimephales promelas):

LC₅₀, Western Mosquitofish (Gambusia affinis):

LC₅₀, Western Mosquitofish (Gambusia affinis):

Ethanol:

Methanol:

Isopropanol:

Methylene Blue:

Potassium Hydroxide:

Persistence and Degradability:

7.7 mg/L 48 h

> 100 mg/L 96 h

> 10,000 mg/L 48 h

> 100 mg/L 96 h

>1400 mg/L 96 h

80 mg/L 96 h

Not expected to be hazardous to the environment. However, the possibility of an environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13. DISPOSAL INFORMATION

Disposal Instructions:		be handled in accordance with local, state, and federal regulations. ure to product waste (see Section 8).
Contaminated Packaging:	Because emptied containers retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local recycling facilities.	
Waste Codes:	Methanol:	U154 (US RCRA Hazardous Waste U List – Ignitable Waste)

14. TRANSPORT INFORMATION

DOT:

UN Number:	UN1987
Proper Shipping Name:	Alcohols, n.o.s. (Denatured ethanol)
Hazard Class:	3
Packing Group:	III
ERG Number:	127
Environmental Hazard Regulations:	No information found.
Other Transport Precautions:	No information found.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

OSHA:	This product is considered a "Hazardous Chemical" as defined by the OSHA Hazard
	Communication Standard, 29 CFR 1910.1200.

TSCA Inventory:	All components of this product are on the U.S. TSCA Inventory.
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U.S. EPCRA (SARA Title III):

Section 302: No information found.

Sections 311/312:	Hazard Category	List (Yes/No)
	Section 311 – Hazardous Chemical	Yes
	Immediate Hazard	Yes
	Delayed Hazard	Yes
	Fire Hazard	Yes
	Pressure Hazard	No
	Reactivity Hazard	No

Section 313:	Isopropyl Alcohol, Methan	ol:	De Minimis Concentration: 1.0%
CERCLA Reportable Quantities:	Methanol: Potassium Hydroxide:	5000 lb 1000 lb	
Canada WHMIS:	This SDS is prepared in compliance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS). Therefore, it complies with the 2015 Workplace Hazardous Materials Information System (WHMIS) as well.		

International Inventories:

Country or Region	Inventory Name	On Inventory (Yes/No)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*A "Yes" indicates that the listed components of this product comply with the inventory requirements administered by the governing country or region.

16. OTHER INFORMATION

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