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SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
211876	Vial Isovitalex Enrichment 10ml 5 Ea	No data available

Recommended restrictions

Recommended use: Laboratory Chemicals
Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name:	BD, Integrated Diagnostic Solutions
Address:	7 Loveton Circle Sparks, MD 21152 USA
Telephone:	1 844 823 5433
Fax:	not available
Contact Person:	Tech Services

Emergency telephone number: CHEMTREC 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2A

Label Elements

Hazard Symbol:

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Signal Word:	Warning
Hazard Statement:	H315: Causes skin irritation. H319: Causes serious eye irritation.
Precautionary Statements	
Prevention:	P264: Wash face, hands and any exposed skin thoroughly after handling. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response:	P302+P352: IF ON SKIN: Wash with plenty of soap and water. P332+P313: If skin irritation occurs: Get medical advice/attention. P362+P364: Take off contaminated clothing and wash it before reuse. P321: Specific treatment (see supplemental first aid instructions on this label). P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical advice/attention.
Other hazards which do not result in GHS classification:	None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Hydrochloric acid	No data available.	7647-01-0	1%
Potassium hydroxide (K(OH))	No data available.	1310-58-3	0.0325%
Nitric acid, iron(3+) salt (3:1)	No data available.	10421-48-4	0.0008%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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4. First-aid measures

Description of necessary first-aid measures

General information:	Causes serious eye irritation. Causes skin irritation.
Inhalation:	Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.
Skin Contact:	Promptly flush contaminated skin with soap or mild detergent and water. Promptly remove clothing if penetrated and flush the skin with water.
Eye contact:	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Ingestion:	DO NOT induce vomiting. Get medical attention immediately.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	No data available.
Hazards:	Causes serious eye irritation. Causes skin irritation.

Indication of immediate medical attention and special treatment needed

Treatment:	Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards:	Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water to keep fire exposed containers cool and disperse vapors.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	Avoid water in straight hose stream; will scatter and spread fire.
Special hazards arising from the substance or mixture:	Fire or excessive heat may produce hazardous decomposition products.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No unusual fire or explosion hazards noted.

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Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Contact local authorities in case of spillage to drain/aquatic environment. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.
Accidental release measures:	No data available.
Methods and material for containment and cleaning up:	Absorb spillage with suitable absorbent material. Prevent runoff from entering drains, sewers, or streams. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.
Environmental Precautions:	Avoid release to the environment.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	No special requirements under ordinary conditions of use and with adequate ventilation.
Safe handling advice:	When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as required.
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	Store in a cool, dry place. Keep container tightly closed. Keep from contact with oxidizing materials.
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters
Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values		Source
Hydrochloric acid	Ceiling	5 ppm	7 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000),

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				as amended
	Ceiling	5 ppm	7 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	ST ESL		130 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		5.7 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		8.4 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		190 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	Ceiling	5 ppm	7 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	Ceiling	2 ppm		US. ACGIH Threshold Limit Values, as amended
	Ceil_Time	5 ppm	7 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	Ceiling	5 ppm	7 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	IDLH	50 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
Potassium hydroxide (K(OH))	Ceiling		2 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	Ceiling		2 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
Potassium hydroxide (K(OH)) - Particulate.	AN ESL		2 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		20 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
Potassium hydroxide (K(OH))	Ceiling		2 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	Ceiling		2 mg/m3	US. ACGIH Threshold Limit Values, as amended
	Ceil_Time		2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Nitric acid, iron(3+) salt (3:1) - as Fe	TWA		1 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA		1 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
Nitric acid, iron(3+) salt (3:1)	ST ESL		10 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		1 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
Nitric acid, iron(3+) salt (3:1)	TWA PEL		1 mg/m3	US. California Code of Regulations, Title 8,

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- as Fe			Section 5155. Airborne Contaminants, as amended
	TWA	1 mg/m3	US. ACGIH Threshold Limit Values, as amended
	REL	1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values
No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: Material: Chemical resistant gloves
Additional Information: Wash hands after contact.Material: Suitable gloves can be recommended by the glove supplier.

Skin and Body Protection: Wear a lab coat or similar protective clothing.

Respiratory Protection: 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.

Hygiene measures: Observe good industrial hygiene practices.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	According to product specification.
Odor:	Characteristic
Odor Threshold:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.

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Flammability:	No data available.
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	Not applicable
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	No data available.
Viscosity	
Dynamic viscosity:	Not determined.
Kinematic viscosity:	Not determined.
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	Completely Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	No data available.
Bulk density:	No data available.
Relative vapor density:	No data available.

Particle characteristics	
Particle Size:	No data available.
Particle Size Distribution:	No data available.
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available.
Crystallinity:	No data available.
Surface treatment:	No data available.

Other information

Metal Corrosion:	Non-corrosive per US Department of Transportation testing protocol.

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10. Stability and reactivity

Reactivity:	Material is stable under normal conditions.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Material is stable under normal conditions.
Conditions to avoid:	Avoid exposure to high temperatures or direct sunlight.
Incompatible Materials:	Water reactive material. Metals. Avoid contact with oxidizers or reducing agents. Avoid contact with acids.
Hazardous Decomposition Products:	Contact with acids liberates toxic gas. Stable; however, may decompose if heated.

11. Toxicological information

Information on toxicological effects

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on likely routes of exposure

Acute toxicity (list all possible routes of exposure)

Oral

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	LD 50 (Rat): 365 mg/kg Experimental result, Supporting study LD 50 (Rat): 388 mg/kg Experimental result, Key study LD 50 (Rat): 333 mg/kg Experimental result, Key study
Nitric acid, iron(3+) salt (3:1)	LD 50 (Rat): 3,250 mg/kg LD 50 (Rat): 2,625 mg/kg Read-across from supporting substance (structural analogue or surrogate), Supporting study LD 50 (Mouse): 1,025 mg/kg Read-across from supporting substance (structural analogue or surrogate), Supporting study LD 50 (Rat): > 2,000 mg/kg

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	Read-across from supporting substance (structural analogue or surrogate), Key study

Dermal

Product:	ATEmix: 144,900 mg/kg
Components:	
Hydrochloric acid	LD 50 (Mouse): 1,449 mg/kg
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	LD 50 (Rat): > 2,000 mg/kg Read-across from supporting substance (structural analogue or surrogate), Key study

Inhalation

Product:	No data available.
Components:	
Hydrochloric acid	LC 50 (Rat, 4 h): 1405 ppm LC 50 (Rat, 1 h): 2810 ppm LOAEL (Guinea pig, 30 min): <= 320 ppm Gas; 2 = reliable with restrictions; Experimental result, Supporting study, Gas LC 50 (Mouse, 5 min): 2644 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Rat, 5 min): 40989 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation LC 50 (Rat, 5 min): 4701 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation LC 50 (Mouse, 5 min): 13745 ppm Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Mouse, 5 min): 3.2 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Rat, 5 min): 8.3 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation LD (Guinea pig, 30 min): >= 1040 ppm Gas; 2 = reliable with restrictions; Experimental result, Supporting study, Gas LC 50 (Mouse, 5 min): 16.5 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Supporting study, Inhalation LC 50 (Rat, 5 min): 45.6 mg/l Inhalation; 2 = reliable with restrictions; Experimental result, Key study, Inhalation
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Repeated dose toxicity

Product:	No data available.
Components:	
Hydrochloric acid	NOAEL (Mouse(Female, Male), Inhalation, 4 - 91 d): 20 ppm(m) Experimental result, Key study Inhalation NOAEL (Rat(Female, Male), Inhalation, 4 - 91 d): 10 ppm(m) Experimental result, Key study Inhalation NOAEL (Rat(Female, Male), Inhalation, 4 - 91 d): 20 ppm(m) Experimental result, Key study Inhalation LOAEL (Mouse(Female, Male), Inhalation, 4 - 91 d): 50 ppm(m) Experimental result, Key study Inhalation

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	NOAEL (Guinea pig; Monkey; Rabbit(female), Inhalation, 2 - 20 d): 0.05 mg/l Experimental result, Supporting study Inhalation
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	NOAEL (Rat(Female, Male), Oral, 42 - 49 d): 100 mg/kg Read-across from supporting substance (structural analogue or surrogate), Supporting study Oral NOAEL (Rat(Female, Male), Oral, 13 Weeks): >= 57 mg/kg Read-across from supporting substance (structural analogue or surrogate), Key study Oral NOAEL (Rat(Female, Male), Oral, 13 Weeks): 277 - 314 mg/kg Read-across from supporting substance (structural analogue or surrogate), Key study Oral NOAEL (Rat(Female, Male), Oral, 13 Weeks): 5,000 ppm(m) Read-across from supporting substance (structural analogue or surrogate), Key study Oral NOAEL (Rat(Female, Male), Oral, 42 - 49 d): >= 1,000 mg/kg Read-across from supporting substance (structural analogue or surrogate), Supporting study Oral

Skin Corrosion/Irritation

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	Irritating

Serious Eye Damage/Eye Irritation

Product:	No data available.
Components:	
Hydrochloric acid	Category 1 in vivo Rabbit, 1 hrs: EU Category 1 in vivo Rabbit, 1 d: EU Category 1 in vivo Rabbit, 1 - 21 d: EU Category 1 in vivo Rabbit, 3 - 7 d: EU Category 1 in vivo Rabbit, 1 - 24 hrs: EU Category 1 in vivo Rabbit, 1 - 7 d: EU Category 1 in vivo Rabbit, 1 - 2 d: EU
Potassium hydroxide (K(OH))	Corrosive KOH 5% in vivo Rabbit, 24 hrs: Corrosive KOH 5% in vivo Rabbit, 5 min:
Nitric acid, iron(3+) salt (3:1)	Irritating

Respiratory or Skin Sensitization

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	Skin sensitization:, in vivo (Guinea pig): Non sensitising

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Nitric acid, iron(3+) salt (3:1)	No data available.

Carcinogenicity

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:
No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

In vivo

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Reproductive toxicity

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

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Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Aspiration Hazard

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Information on health hazards

Other hazards

Product:	No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
Hydrochloric acid	LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 282 mg/l Mortality LC 50 (Western mosquitofish (Gambusia affinis), 48 h): 282 mg/l Mortality LC 50 (Western mosquitofish (Gambusia affinis), 24 h): 282 mg/l Mortality
Potassium hydroxide (K(OH))	NOAEL (24 h): 28 mg/l Experimental result, Supporting study LD Lo (Salvelinus fontinalis, 24 h): 50 mg/l Experimental result, Supporting study LC 50 (Gambusia affinis, 96 h): 80 mg/l Experimental result, Supporting

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	study NOAEL (Gambusia affinis, 96 h): 56 mg/l Experimental result, Supporting study LC 50 (Poecilia reticulata, 24 h): 165 mg/l Experimental result, Supporting study
Nitric acid, iron(3+) salt (3:1)	LC 50 (Pimephales promelas, 96 h): 1,010 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 50 (Pimephales promelas, 96 h): 1,406 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 50 (Pimephales promelas, 96 h): 1,607 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study

Aquatic Invertebrates

Product:	No data available.
Components:	
Hydrochloric acid	LC 50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 260 mg/l Mortality LC 50 (Green or European shore crab (Carcinus maenas), 48 h): 240 mg/l Mortality
Potassium hydroxide (K(OH))	EC 100 (Dreissena polymorpha, 2 d): > 10 mg/l Experimental result, Supporting study ED 0 (Dreissena polymorpha, 2 d): < 1 mg/l Experimental result, Supporting study
Nitric acid, iron(3+) salt (3:1)	LC 50 (Daphnia magna, 48 h): 611 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study LC 50 (Daphnia magna, 48 h): 453 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study LC 50 (Daphnia magna, 48 h): 323 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study LC 50 (Daphnia magna, 48 h): 1,430 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Toxicity to microorganisms

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt	LC 50 (Nematode (Caenorhabditis elegans), 24 h): 0.00032 mg/l

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(3:1)	Mortality

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	NOAEL (Pimephales promelas, 12 Months): 0.24 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study NOAEL (Salvelinus namaycush, 146 d): 7.1 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Supporting study LOAEL (Pimephales promelas, 12 Months): 1.5 mg/l Read-across from supporting substance (structural analogue or surrogate), Key study LOAEL (Salvelinus namaycush, 146 d): 27.65 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Supporting study LOAEL (Salvelinus namaycush, 146 d): 6.25 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Supporting study

Aquatic Invertebrates

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	EC 50 (Daphnia magna, 21 d): 18 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Key study NOAEL (Daphnia magna, 21 d): 10 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Key study LOAEL (Daphnia magna, 21 d): 13 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Key study NOAEL (Daphnia magna, 21 d): 8.1 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Key study

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Toxicity to microorganisms

Product:	No data available.
Components:	

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Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	LC 50 (Nematode (Caenorhabditis elegans), 24 h): 0.00032 mg/l Mortality

Persistence and Degradability

Biodegradation

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

BOD/COD Ratio

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Mobility in soil:

Product	No data available.
Components:	
Hydrochloric acid	No data available.

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Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Results of PBT and vPvB assessment:

Product	No data available.
Components:	
Hydrochloric acid	No data available.
Potassium hydroxide (K(OH))	No data available.
Nitric acid, iron(3+) salt (3:1)	No data available.

Other adverse effects:

Other hazards
Product: None known.

13. Disposal considerations

General information: This material and its container must be disposed of as hazardous waste. Dispose of waste and residues in accordance with local authority requirements.

Disposal methods: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

14. Transport information

DOTUN number or ID number:	Not regulated.
UN Proper Shipping Name:	Not regulated.
Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
Packing Group:	Not regulated.
Marine Pollutant:	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.

Special precautions for user: Not regulated.

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IMDG

UN number or ID number:	Not regulated.
UN Proper Shipping Name:	Not regulated.
Transport Hazard Class(es)	
Class:	Not regulated.
Subsidiary risk:	Not regulated.
EmS No.:	Not regulated.
Packing Group:	Not regulated.
Environmental Hazards	
Marine Pollutant:	Not regulated.
Special precautions for user:	Not regulated.

IATA

UN number or ID number:	Not regulated.
Proper Shipping Name:	Not regulated.
Transport Hazard Class(es):	
Class:	Not regulated.
Subsidiary risk:	Not regulated.
Packing Group:	Not regulated.
Environmental Hazards	
Marine pollutant:	Not regulated.
Special precautions for user:	Not regulated.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
Hydrochloric acid
Potassium hydroxide (K(OH))
Nitric acid, iron(3+) salt (3:1)

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www.bd.com

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Skin Corrosion or Irritation, Serious eye damage or eye irritation

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

Chemical Identity	% by weight
Hydrochloric acid	1.0%

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

Chemical Identity
Hydrochloric acid
Hydrochloric acid

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Chemical Identity
Hydrochloric acid
Potassium hydroxide (K(OH))
Nitric acid, iron(3+) salt (3:1)

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

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

Chemical Identity
Hydrochloric acid
Potassium hydroxide (K(OH))
Nitric acid, iron(3+) salt (3:1)

US. Massachusetts RTK - Substance List

Chemical Identity
Hydrochloric acid

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Becton, Dickinson and Company
BD, Franklin Lakes, NJ
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Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

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

Issue Date:	04/12/2022
Version #:	2.2
Source of information:	European Chemicals Agency (ECHA): Information on Chemicals.
Further Information:	No data available.
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