MATERIAL SAFETY DATA SHEET

DIONEX

Product Number:
037157

Product Description:
FIVE ANION STANDARD

DIONEX Corporation
1228 Titan Way
P.O. Box 3603
Sunnyvale, California
94088-3603

Emergency Phone:
1-800-424-9300 (CHEMTREC)
Information Phone: (408) 737-0700
Date Prepared: 27 January 1998
Prepared By:
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The following information is believed to be accurate and is currently the best information available to us. However, we make no warranties, express or implied, with respect to the information supplied and we assume no liability resulting from its use.

HAZARDOUS INGREDIENTS/IDENTITY INFORMATION (Section II)

HAZARDOUS COMPONENTS	PERCENT	CAS NO.
Deionized Water	99.9%	7732-18-5
Sodium Fluoride (20 mg/L F^-)	0.004%	7681-49-4
Sodium Chloride (30 mg/L Cl^-)	0.005%	7647-14-5
Sodium Nitrate (100 mg/L NO_3^-)	0.014%	7631-99-4
Potassium Phosphate (monobasic, 150 mg/L PO_4^-)	0.022%	7778-77-0
Disodium Sulfate (150 mg/L SO_4^-)	0.022%	7757-82-6

PHYSICAL/CHEMICAL CHARACTERISTICS (Section III)

BOILING POINT: approximately 100° C
SPECIFIC GRAVITY (H_20 = 1): approximately 1
MELTING POINT: approximately 0° C
SOLUBILITY IN WATER: The solution is approximately 99.9% water
APPEARANCE AND ODOR: Clear odorless solution

FIRE AND EXPLOSION HAZARD DATA (Section IV)

FLASH POINT (METHOD USED): N/A
(Note that the solution is approximately 99.9% water)
FLAMMABLE LIMITS:
LEL: Undetermined
UEL: Undetermined
EXTINGUISHING MEDIA:
Carbon Dioxide, Foam, Dry Chemical
SPECIAL FIRE FIGHTING PROCEDURES: As a general rule, firefighters subject to products of combustion should wear full-protectiveclothing including self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Because of the high water content, this solution poses no fire or explosion hazard.

REACTIVITY DATA (Section V)

STABILITY
UNSTABLE:
STABLE: X
CONDITIONS TO AVOID:
INCOMPATIBILITY (MATERIALS TO AVOID):
Materials that react violently with water.
HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
The components other than water are stable inorganic salts.
Common reaction products are not hazardous.
HAZARDOUS POLYMERIZATION:
MAY OCCUR:
WILL NOT OCCUR: X
CONDITIONS TO AVOID:

HEALTH HAZARD DATA (Section VI)

HAZARD CLASS:

COMPONENT	NFPA RATINGS (SCALE 0-4)		
	Health	Fire	Reactivity
Sodium Fluoride (pure)	2	0	0
Sodium Chloride (pure)	0	0	0
Sodium Nitrate (pure)	0	0	0
Potassium Phosphate (monobasic, pure)	0	0	0
Disodium Sulfate (pure)	0	0	0

ROUTES OF ENTRY
INHALATION?: X
SKIN?: X
INGESTION?: X
HEALTH HAZARDS (ACUTE AND CHRONIC): Compounds other than water may cause eye and/or eye irritation. Compounds other than water can be irritating to mucous membranes and upper respiratory tract.

Toxic Hazards
TOXICITY DATA (ref #1)

SODIUM FLUORIDE	EYE-RBT	20 MG/24H SEV
	ORL-MUS TDLO:	28 MG/KG/(11-21D PREG):TER
	IPR-MUS TDLO:	24 MG/KG/(14-21D PREG):TER
	ORL-HMN TDLO:	4 MG/KG TFX:CNS
	ORL-HMN LDLO:	75 MG/KG
	ORL-RAT LD50:	180 MG/KG
	IPR-RAT LD50:	22 MG/KG
	SCU-RAT LDLO:	125 MG/KG
	ORL-MUS LDLO:	97 MG/KG
	SKN-MUS LDLO:	300 MG/KG
	IPR-MUS LD50:	49 MG/KG
	SCU-MUS LDLO:	40 MG/KG
	ORL-DOG LDLO:	75 MG/KG
	IPR-DOG LDLO:	50 MG/KG
	SCU-DOG LDLO:	155 MG/KG
	IVN-DOG LDLO:	80 MG/KG
	IMS-DOG LDLO:	40 MG/KG
	SCU-CAT LDLO:	14 MG/KG
	DNR-BCS	86 MG/L
	CYT-MUS: OTH	200 MG/L
	CYT-DOM: OTH	25 MG/L

	CYT-CTL:OTH	10 MG/L
	ORL-RBT LDLO:	100 MG/KG
	IPR-RBT LDLO:	250 MG/KG
	SCU-RBT LDLO:	100 MG/KG
	SCU-GPG LDLO:	100 MG/KG
	SCU-FRG LDLO:	448 MG/KG

Reported in EPA TSCA Inventory, 1980

SODIUM CHLORIDE	ORL-RAT TDLO:	145 GM/KG (7D PRE/1-22D PREG)
	SCU-MUS TDLO:	13440 MG/KG (2-6D PREG)
	SKN-RBT	50 MG/24H MLD
	SKN-RBT	500 MG/24H MLD
	EYE-RBT	100 MG MLD
	EYE-RBT	100 MG/24H SEV
	SCU-MUS TDLO:	1900 MG/KG (11D PREG)
	SCU-MUS TDLO:	1900 MG/KG (10D PREG)
	SCU-MUS TDLO:	2500 MG/KG (10D PREG)
	ORL-HMN TDLO:	12357 MG/KG/23D-C TFX:BPR
	ORL-RAT LD50:	3000 MG/KG
	SCU-RAT LDLO:	3500 MG/KG
	ORL-MUS LD50:	4000 MG/KG
	IPR-MUS LD50:	3602 MG/KG
	SCU-MUS LD50:	3150 MG/KG
	IVN-MUS LD50:	645 MG/KG
	IPR-DOF LDLO:	364 MG/KG
	IVN-DOG LDLO:	2 GM/KG
	ORL-RBT LDLO:	8 GM/KG
	IVN-RBT LDLO:	1100 MG/KG
	SCU-GPG LDLO:	2160 MG/KG
	IVN-GPG LDLO:	2910 MG/KG

Reported in EPA TSCA Inventory, 1980

SODIUM NITRATE	MMO-OMI	1100 PPM
	MNT-HAM-ORL	250 MG/KG
	OTR-HAM-ORL	250 MG/KG
	CYT-HAM:FBR	7500 MG/L/48H
	MSC-HAM-ORL	125 MG/KG
	ORL-RAT LDLO:	200 MG/KG

Reported in EPA TSCA Inventory, 1980

POTASSIUM PHOSPHATE (MONOBASIC) NO LISTINGS

Reported in EPA TSCA Inventory, 1980

DISODIUM SULFATE	ORL-MUS LD50:	5989 MG/KG
	IVN-MUS LDLO:	1220 MG/KG
	IVN-RBT LDLO:	4470 MG/KG

Reported in EPA TSCA Inventory, 1980

Reference #1DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS, By Irving Sax, 6th Edition, Van Nostrand Reinhold Company, Inc.

CARCINOGENICITY:

NTP?: Unknown

IARC MONOGRAPHS?: Unknown

OSHA REGULATED?: Unknown

SYMPTOMS AND SIGNS OF EXPOSURE:

Water in nonhazardous.

Sodium fluoride is an irritant

Sodium chloride is a mild irritant

Sodium nitrate is a mild irritant

Potassium phosphate (monobasic) a mild irritant

Sodium sulfate is a mild irritant.

Because of the very low concentration of the compounds in water the degree of irritation caused by the standard will be very low.

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MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
Any rash or soreness of skin or eyes may be made worst by exposure to this solution.
EMERGENCY AND FIRST AID PROCEDURES:
In case of contact, wash skin with copious amounts of water.
Flush eyes with copious amounts of water for at least 15 minutes.
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen.
Submit to medical examination.

PRECAUTIONS FOR SAFE HANDLING AND USE (Section VII)

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Wear appropriate protective clothing and eye protection.
Mop up and store is a suitable waste container.
Wash contaminated area with soap and water.
WASTE DISPOSAL METHOD:
Dispose of according to local, state and federal laws.
Because to the low concentrations of the salts in the standard, no special precautions are necessary.
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Work in areas with adequate ventilation.

CONTROL MEASURES (Section VII)

RESPIRATORY PROTECTION (SPECIFY TYPE)
No special precautions are necessary.
VENTILATION
LOCAL EXHAUST: Good laboratory ventilation is acceptable.
MECHANICAL (GENERAL):
SPECIAL:
OTHER:
PROTECTIVE GLOVES: Disposable laboratory gloves are adequate.
EYE PROTECTION: Glasses or goggles should be worn as a general laboratory requirement.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Labcoats
WORK/HYGIENIC PRACTICES: Wipe up any spills and wash hands after working in the laboratory.