SAFETY DATA SHEET

SECTION 1 : IDENTIFICATION

Product Name:	**Fosaprepitant Dimeglumine for Injection**
Product Use/Restriction:	Anti-nausea medication for patients that undergo chemotherapy treatment.
Manufacturer Name:	Fresenius Kabi USA, LLC
Address:	Three Corporate Drive Lake Zurich, Illinois 60047
General Phone Number:	(847) 550-2300
Customer Service Phone Number:	(888) 386-1300
Health Issues Information:	(800) 551-7176
SDS Creation Date:	April 12, 2012
SDS Revision Date:	June 10, 2015

SECTION 2 : HAZARD(S) IDENTIFICATION

GHS Pictograms:

Signal Word:	DANGER.
GHS Class:	Respiratory sensitisation. category 1. Skin Irritation. Category 2. Skin Sensitization. category 1. Reproductive toxicity. Effects on or via lactation.
Hazard Statements:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Causes skin irritation. May cause an allergic skin reaction. May cause harm to breast-fed children.
Precautionary Statements:	Obtain special instructions before use. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact during pregnancy and while nursing. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention. Specific treatment (see ... on this label). If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. Take off contaminated clothing and wash it before reuse. Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.
Emergency Overview:	This product is intended for therapeutic use only when prescribed by a physician. Potential adverse reactions from prescribed doses and overdoses are described in the package insert.
Route of Exposure:	Inhalation Ingestion Eye contact Skin Absorption. Injection.
Potential Health Effects:	
Eye:	Contact with eyes may cause irritation.
Skin:	Harmful in contact with skin.
Inhalation:	Harmful if inhaled.
Ingestion:	Harmful if swallowed.
Signs/Symptoms:	See package insert for possible adverse reactions. Occupational exposure has not been fully investigated.
Aggravation of Pre-Existing Conditions:	Individuals with a known hypersensitivity to the drug.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Ingredient Percent	EC Num.
Fosaprepitant Dimeglumine	265121-04-8	150 mg/vial	

edetate disodium	6381-92-6	18.8 mg/vial
Polysorbate 80	9005-65-6	75 mg/vial
Lactose anhydrous	64044-51-5	375 mg/vial
Sodium Hydroxide	1310-73-2	As needed to adjust pH
Hydrochloric acid	7647-01-0	As needed to adjust pH

SECTION 4 : FIRST AID MEASURES

Eye Contact:	Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.
Skin Contact:	Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists.
Inhalation:	If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.
Ingestion:	If conscious, flush mouth out with water immediately. Call a physician or poison control center immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.
Other First Aid:	For Adverse Event Information, please call (800) 551-7176.

SECTION 5 : FIRE FIGHTING MEASURES

Flash Point:	Not established.
Flash Point Method:	Not established.
Auto Ignition Temperature:	Not established.
Lower Flammable/Explosive Limit:	Not established.
Upper Flammable/Explosive Limit:	Not established.
Fire Fighting Instructions:	Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.
Extinguishing Media:	Use alcohol resistant foam, carbon dioxide, dry chemical, or water fog or spray when fighting fires involving this material. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Protective Equipment:	As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
Hazardous Combustion Byproducts:	Thermal decomposition products may include smoke and toxic fumes. Oxides of carbon, oxides of nitrogen and other organic substances may be formed. Other undetermined low molecular weight hydrocarbon compounds may be released in small quantities depending upon specific conditions of combustion.

SECTION 6 : ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Evacuate area and keep unnecessary and unprotected personnel from entering the spill area. Avoid personal contact and breathing dust. Use proper personal protective equipment as listed in Section 8.
Environmental Precautions:	Avoid runoff into storm sewers, ditches, and waterways.
Methods for containment:	This material will settle out of the air.
Methods for cleanup:	Use an industrial vacuum cleaner with a high efficiency filter to clean up dust. Avoid dust generation.

SECTION 7 : HANDLING and STORAGE

Handling:	When handling pharmaceutical products, avoid all contact and inhalation of vapor, mists and/or fumes. Use with adequate ventilation. Use only in accordance with directions.
Storage:	Store at refrigerated temperatures 2 to 8°C (36 to 46°F).
Work Practices:	Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Hygiene Practices:	Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling dust, vapor or mist.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:	General ventilation is sufficient if this product is being used in a controlled medical setting (clinic, hospital, medical office) for its sole intended parenteral (injection) purpose. Otherwise, use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls including use of a biosafety cabinet / fume hood to control airborne levels below recommended exposure limits.
Eye/Face Protection:	Chemical splash goggles. Wear a face shield also when splash hazard exist.
Skin Protection Description:	Protective laboratory coat, apron, or disposable garment recommended.
Hand Protection Description:	Wear appropriate protective gloves. Consult glove manufacturer's data for permeability data. Nitrile rubber or natural rubber gloves are recommended.
Respiratory Protection:	No personal respiratory protective equipment is normally required when this product is being used/administered by a licensed healthcare practitioner (i.e. an end-user such as a clinician / doctor / nurse) for its sole intended parenteral (injection) purpose in a controlled medical setting. The need for respiratory protection will vary according to the airborne concentrations and environmental conditions. A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances. Consult the NIOSH web site (http://www.cdc.gov/niosh/npptl/topics/respirators/) for a list of respirator types and approved suppliers.
Other Protective:	Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

EXPOSURE GUIDELINES

Hydrochloric acid :

Guideline ACGIH:	TLV-STEL: 2 ppm(ceiling)
Guideline OSHA:	OSHA PEL-STEL 5 ppm Ceiling/Peak
British Columbia Canada :	OEL-ceiling./Peak.: 2 ppm

SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES

Physical State:	Lyophilized powder.
Color:	White to off-white.
Boiling Point:	Not established.
Melting Point:	Not established.
Solubility:	Soluble. in water.
Vapor Density:	Not established.
Vapor Pressure:	Not established.
Percent Volatile:	Not established.
pH:	Not established.
Molecular Formula:	$C_{23}H_{22}F_7N_4ZO_6P.2(C_7H_{17}NO_5)$
Molecular Weight:	1004.83
Flash Point:	Not established.
Flash Point Method:	Not established.
Auto Ignition Temperature:	Not established.

SECTION 10 : STABILITY and REACTIVITY

Chemical Stability:	Stable under normal temperatures and pressures.
Hazardous Polymerization:	Not reported.
Incompatible Materials:	May react with strong oxidizing agents (peroxides, permanganates, nitric acid, etc.).

SECTION 11 : TOXICOLOGICAL INFORMATION

Teratogenicity:	Pregnancy Category D: Can cause fetal harm when administered to a pregnant woman.

Fosaprepitant Dimeglumine :

RTECS Number:	HA3840000
Carcinogenicity:	may cause cancer

Other Toxicological Information:	Intravenous. - Rat LD50: 236 mg/kg [Details of toxic effects not reported other than lethal dose value] Intravenous. - Mouse LD50: 500 mg/kg [Details of toxic effects not reported other than lethal dose value] Intravenous. - Human TDLo: 10 mg/kg/22W (intermittent) [Behavioral - muscle weakness Gastrointestinal - nausea or vomiting Tumorigenic - active as anti-cancer agent] Intravenous. - Human TDLo: 7.5 mg/kg/2W (intermittent) [Blood - thrombocytopenia] Intravenous. - Human TDLo: 5 mg/kg/2W (intermittent) [Blood - leukopenia Blood - thrombocytopenia] Intravenous. - Human TDLo: 50 mg/kg/2W (intermittent) [Behavioral - headache Blood - thrombocytopenia Nutritional and Gross Metabolic - body temperature increase] Intravenous. - Human TDLo: 75 mg/kg/3W (intermittent) [Blood - granulocytopenia Blood - thrombocytopenia] Intravenous. - Mouse TDLo: 15 mg/kg [Reproductive - Maternal Effects - parturition Reproductive - Fertility - post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants) Reproductive - Fertility - litter size (e.g.numberfetuses per litter; measured before birth)] Intravenous. - Mouse TDLo: 15 mg/kg [Reproductive - Maternal Effects - other effects Reproductive - Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus) Reproductive - Effects on Embryo or Fetus - fetal death]

edetate disodium :

RTECS Number:	AJ4580000
Eye:	Eye - Rabbit Standard Draize test. : 10 mg [mild]
Skin:	Acute Toxicity: LD50 Dermal Rabbit: 10 mg/kg
Inhalation:	Inhalation - Rat LC50 : >30 gm/m3/1H [Details of toxic effects not reported other than lethal dose value]
Ingestion:	Oral - Rat LD50 : 3530 mg/kg [Details of toxic effects not reported other than lethal dose value] Oral - Mouse LD50 : 6891 mg/kg [Details of toxic effects not reported other than lethal dose value]
Other Toxicological Information:	Intravenous. - Mouse LDLo: 1195 mg/kg [Details of toxic effects not reported other than lethal dose value] Intravenous. - Rabbit LDLo: 1300 mg/kg [Behavioral - toxic psychosis Behavioral - fluid intake Kidney/Ureter/Bladder - urine volume increased] Subcutaneous - Mouse LD50: 3200 mg/kg [Details of toxic effects not reported other than lethal dose value]

Polysorbate 80 :

RTECS Number:	WG2932500
Ingestion:	Oral - Rat LD50: 34500 uL/kg [Details of toxic effects not reported other than lethal dose value] Oral - Mouse LD50: 25 gm/kg [Details of toxic effects not reported other than lethal dose value]
Other Toxicological Information:	Intravenous. - Rat LD50: 1790 mg/kg [Details of toxic effects not reported other than lethal dose value] Intravenous. - Mouse LD50: 1790 mg/kg [Details of toxic effects not reported other than lethal dose value] Subcutaneous - Rat TDLo: 10 gm/kg/27W (intermittent) [Tumorigenic - equivocal tumorigenic agent by RTECS criteria Tumorigenic - tumors at site of application] Intraperitoneal. - Rat LD50: 6804 mg/kg [Details of toxic effects not reported other than lethal dose value] Intraperitoneal. - Mouse LD50: 7600 mg/kg [Details of toxic effects not reported other than lethal dose value] Intraperitoneal. - Rat TDLo: 80 uL/kg [Reproductive - Maternal Effects - uterus, cervix, vagina Reproductive - Maternal Effects - menstrual cycle changes or disorders Reproductive - Effects on Newborn - physical]

Sodium Hydroxide :

RTECS Number:	WB4900000
Eye:	Eye - Rabbit Standard Draize test.: 400 ug Eye - Rabbit Standard Draize test.: 50 ug/24H (RTECS)
Skin:	Administration onto the skin - Rabbit Standard Draize test.: 500 mg/24H
Ingestion:	Oral - Rabbit LDLo: 500 mg/kg [Details of toxic effects not reported other than lethal dose value]

Hydrochloric acid :

Inhalation:	Inhalation - Rat LC50: 45000 mg/m3/5M [Lungs, Thorax, or Respiration - Acute pulmonary edema] Inhalation - Rat LC50: 8300 mg/m3/30M [Lungs, Thorax, or Respiration - Acute pulmonary edema] Inhalation - Mouse LC50: 8300 mg/m3/30M [Lungs, Thorax, or Respiration - Acute pulmonary edema] (RTECS)

SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity:	No ecotoxicity data was found for the product.
Environmental Stability:	No environmental information found for this product.

SECTION 13 : DISPOSAL CONSIDERATIONS

Waste Disposal:	Dispose of in accordance with Local, State, Federal and Provincial regulations.

SECTION 14 : TRANSPORT INFORMATION

DOT Shipping Name:	Not Regulated.
DOT UN Number:	Not Regulated.

SECTION 15 : REGULATORY INFORMATION

edetate disodium :

TSCA Inventory Status:	Listed
EINECS Number:	204-823-8
Canada DSL:	Listed

Polysorbate 80 :

TSCA Inventory Status:	Listed
EINECS Number:	500-019-9
Canada DSL:	Listed

Sodium Hydroxide :

TSCA Inventory Status:	Listed
Canada DSL:	Listed

Hydrochloric acid :

Canada IDL:	Identified under the Canadian Hazardous Products Act Ingredient Disclosure List: 0.1%.845(502)

SECTION 16 : ADDITIONAL INFORMATION

HMIS Ratings:

HMIS Health Hazard:	2
HMIS Fire Hazard:	1
HMIS Reactivity:	1
HMIS Personal Protection:	X

SDS Creation Date:	April 12, 2012
SDS Revision Date:	June 10, 2015

Disclaimer: The information contained herein pertains to this material. It is the responsibility of each individual party to determine for themselves the proper means of handling and using these materials based on their purpose and intended use. Fresenius-Kabi assumes no liability resulting from the use of or reliance upon the information contained in this material safety data sheet. This material safety data sheet does not constitute the guaranty or specifications of the product.

Copyright© 1996-2018 Enviance. All Rights Reserved.