

1. Identification

Product identifier	Recombinant Human Factor VIIa	
Other means of identification		
Product code	407REC/N	
Recommended use	Research use only.	
Recommended restrictions	Use in accordance with supplier's recommendations.	
Manufacturer/Importer/Supplier/Distributor information		
Corporate Headquarters	BioMedica Diagnostics Inc. 94 Wentworth Road, PO Box 1030 Windsor, Nova Scotia CANADA B0N 2T0	
Contact person	Corporate Phone: 1-902-798-5105 Corporate Fax: 1-902-798-1025 Email: info@biomedicadiagnostics.com Website: www.biomedicadiagnostics.com	
Emergency Telephone Numbers	US, Canada, Puerto Rico & Virgin Islands 1-800-255-3924 International +1-813-248-0585 Australia 1-300-954-583 Brazil 0-800-591-6042 China 400-120-0751 India 000-800-100-4086 Mexico 01-800-099-0731	
Contract number	MIS9591327	

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	None.
Precautionary statement	
Prevention	Observe good laboratory hygiene practices.
Response	Wash with plenty of water.
Storage	Store away from incompatible materials.
Disposal	Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)	None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Sodium chloride	7647-14-5	40 - 50
Calcium chloride	10043-52-4	15 - 25
Glycylglycine	556-50-3	15 - 25

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

4. First-aid measures

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Get medical attention if any discomfort continues.

Skin contact	For skin contact flush with large amounts of water while removing contaminated clothing. Get medical attention if irritation develops and persists.
Eye contact	In case of contact, immediately flush eyes with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. Get medical attention if irritation persists.
Ingestion	Rinse mouth thoroughly if dust is ingested. Get medical advice/attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Dust may cause eye, skin and respiratory tract irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water spray, carbon dioxide, dry chemical or alcohol-resistant foam.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Sodium oxides.
Special protective equipment and precautions for firefighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	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	No special precautions are necessary beyond normal good hygiene practices. See Section 8 of the SDS for additional personal protection advice when handling this product.
Methods and materials for containment and cleaning up	Avoid dust formation. Sweep or scoop up and remove.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Avoid contact with skin and eyes.
Conditions for safe storage, including any incompatibilities	Store in a cool, dry, well-ventilated place. Store in a closed container away from incompatible materials. Store away from and do not mix with incompatible materials such as acids, oxidizers, organics, reducing agents, and all metals except titanium.

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).
Exposure guidelines	Follow standard monitoring procedures.
Appropriate engineering controls	No special ventilation requirements.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear dust-resistant safety goggles.
Skin protection	
Hand protection	It is a good industrial hygiene practice to minimize skin contact. Chemical resistant gloves are recommended.
Other	It is a good industrial hygiene practice to minimize skin contact.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	White powder.
Physical state	Solid.
Form	Powder.
Color	White.
Odor	None.
Odor threshold	Not available.
pH	6.7
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Water soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non reactive under normal conditions of storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Does not occur.
Conditions to avoid	Keep away from heat.
Incompatible materials	Strong oxidizing agents. Strong acids.
Hazardous decomposition products	Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust may irritate skin.
Eye contact	Dust in the eyes will cause irritation.
Ingestion	May cause discomfort if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics	Mechanical irritation of skin, eyes and respiratory system. Symptoms include: Cough, redness.
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Information on toxicological effects

Acute toxicity May cause discomfort if swallowed. May cause irritation of respiratory tract.

Components	Species	Test Results	Species	Test Results
Sodium chloride (CAS 7647-14-5)			Calcium chloride, anhydrous (CAS 10043-52-4)	
Acute			Acute	
<i>Dermal</i>			<i>Dermal</i>	
LD50	Rabbit	> 10000 mg/kg	LD50	Rabbit > 5000 mg/kg
<i>Oral</i>			<i>Oral</i>	
LD50	Rat	> 3980 mg/kg	LD50	Rat 2301 mg/kg
<i>Other</i>				
LD50	Mouse	2602 mg/kg		
Skin corrosion/irritation	Dust may irritate skin.		Prolonged eye contact may cause irritation.	
Serious eye damage/eye irritation	Dust may irritate the eyes.		Severe eye irritant.	
Respiratory or skin sensitization				
Respiratory sensitization	Not classified.		Not classified.	
Skin sensitization	Not classified.		Not classified.	
Germ cell mutagenicity	Not classified.		Not classified.	
Carcinogenicity	Not classified.		Not classified.	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)				
Not listed.				
Reproductive toxicity	Not classified.		Not classified.	
Specific target organ toxicity - single exposure	Not classified.		Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.		Not classified.	
Aspiration hazard	Not classified.		Not classified.	
Further information	No other specific acute or chronic health impact noted.		No other effects known.	

12. Ecological information

Ecotoxicity: Components	Species	Test Results
Sodium chloride (CAS 7647-14-5)		
Aquatic		
Crustacea	EC50 Water flea (<i>Daphnia magna</i>)	874 mg/l, 48 hours
Calcium chloride, anhydrous (CAS 10043-52-4)		
	EC50 Water flea (<i>Daphnia magna</i>)	2400 mg/l, 48 hours
	EC50 Algae (<i>Pseudokirchneriella subcapitata</i>)	2900 mg/l, 72 hours
	LC50 Fish (<i>Primephales promelas</i>)	4630 mg/l, 96 hours
Persistence and degradability	No data available.	
Bioaccumulative potential	No data available.	
Mobility in soil	Not available.	
Mobility in general	The product is soluble in water.	
Other adverse effects	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.	

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contaminated instruments and surfaces should be disinfected in accordance with your employer's chemical-specific and universal/standard precautions.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose in accordance with all applicable regulations.
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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)

Hazard categories 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 chemical No

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 (SDWA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

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)	Yes
Canada	Domestic Substances List (DSL)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
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)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
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 01-December-2017

Revision date 24-October-2017

Version # 02

NFPA ratings



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