

Revision date 27-Feb-2025 Version 6 Page 1/15

# Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1. Product identifier

Product Name Thrombin-JMI

Product Code(s) PZ01453

Synonyms THROMBIN, TOPICAL U.S.P. (BOVINE ORIGIN)

Trade Name: THROMBIN-JMI

**Item Code** H000009846,H000009847,H000012853,H000012854, H000010202, H000010204,

H000010206: H000012974

Chemical Family: Mixture

# 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Pharmaceutical product used as blood clotting agent

#### 1.3. Details of the supplier of the safety data sheet

Pfizer Inc Pfizer Ireland Pharmaceuticals

66 Hudson Boulevard East OSG Building

New York, New York 10001 Ringaskiddy, Co. Cork.

1-800-879-3477 Ireland

+353 21 4378701

E-mail address pfizer-MSDS@pfizer.com

#### 1.4. Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300 International Chemtrec (24 hours):+1-703-527-3887

## Section 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the substance or mixture

GHS - Classification: Regulated according to Regulation (EC) 1272/2008 and/or other applicable regulations.

Skin corrosion/irritationCategory 2- (H315)Serious eye damage/eye irritationCategory 2- (H319)Respiratory sensitizationCategory 1- (H334)Skin sensitizationCategory 1- (H317)

2.2. Label elements



Signal word Danger

Product Name Thrombin-JMI

Page 2/15 Revision date 27-Feb-2025 Version 6

Hazard statements H315 - Causes skin irritation

> H319 - Causes serious eye irritation H317 - May cause an allergic skin reaction

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

1272/2008)

Precautionary Statements - EU (§28, P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P272 - Contaminated work clothing should not be allowed out of the workplace P280 - Wear protective gloves/protective clothing/eye protection/face protection

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P321 - Specific treatment (see supplemental instructions on the administration of antidotes

on this label)

P363 - Wash contaminated clothing before reuse

P501 - Dispose of contents/container in accordance with local, regional, national, and

international regulations as applicable

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

2.3. Other hazards

Other hazards An Occupational Exposure Value has been established for one or more of the ingredients

(see Section 8).

PBT & vPvB

**Endocrine Disruptor Information** 

The product does not contain any substance(s) classified as PBT or vPvB.

This product does not contain any known or suspected endocrine disruptors.

Note:

This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

**Substances** Not applicable

3.2 Mixtures

Hazardous

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No.	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
				1272/2008 [CLP]			
Thrombin (CAS #: 9002-04-4)	15		232-648-7	Eye Irrit.2 (H319) Skin Irrit.2 (H315) Skin Sens.1 (H317) Resp.Sens.1 (H334) STOT SE.3	Not classified	No data available	No data available

Г					, ,	1	
				(H335)			
Sodium hydroxide	**	-	215-185-5	Skin Corr.1A	Eye Irrit. 2 ::	No data	No data
(CAS #: 1310-73-2)				(H314)	0.5%<=C<2%	available	available
					Skin Corr. 1A ::		
					C>=5%		
					Skin Corr. 1B ::		
					2%<=C<5%		
					Skin Irrit. 2 ::		
					0.5%<=C<2%		
+ Hydrochloric Acid	**	-	231-595-7	Acute Tox. 3	Eye Irrit. 2 ::	No data	No data
(CAS #: 7647-01-0)				(H331)	10%<=C<25%	available	available
				Skin Corr. 1A	Skin Corr. 1B ::		
				(H314)	C>=25%		
				Press. Gas	Skin Irrit. 2 ::		
					10%<=C<25%		
					STOT SE 3 ::		
					C>=10%		
NonHazardous							
Chemical name	Weight-%	REACH	EC No (EU	Classification	Specific	M-Factor	M-Factor
		registration	Index No)	according to	concentration		(long-term)
		number		Regulation	limit (SCL)		
				(EC) No.			
				1272/2008			
				[CLP]			
SODIUM CHLORIDE	*	-	231-598-3	Not classified	Not classified	No data	No data
(CAS #: 7647-14-5)						available	available
Mannitol	*	-	200-711-8	Not classified	Not classified	No data	No data
(CAS #: 69-65-8)						available	available

#### Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

Chemical name	Oral LD50 mg/kg		Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
SODIUM CHLORIDE 7647-14-5	3550	10000	No data available	No data available	No data available
Mannitol 69-65-8	13500	No data available	No data available	No data available	No data available
Sodium hydroxide 1310-73-2	325	1350	No data available	No data available	No data available
+ Hydrochloric Acid 7647-01-0	238	5010	No data available	No data available	563.3022

#### **Additional information**

- + Substance with a Union workplace exposure limit
- \* Proprietary
- \*\* to adjust pH

Non-hazardous ingredients provided for completeness. Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety. In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

Product Name Thrombin-JMI Revision date 27-Feb-2025

Page 4/15 Version 6

#### Section 4: FIRST AID MEASURES

#### 4.1. Description of first aid measures

**Inhalation** Remove to fresh air. Seek immediate medical attention/advice.

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

**Skin contact** Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek

medical attention.

**Ingestion** Never give anything by mouth to an unconscious person. Wash out mouth with water. Do

not induce vomiting unless directed by medical personnel. Seek medical attention

immediately.

## 4.2. Most important symptoms and effects, both acute and delayed

Most important symptoms and

effects

For information on potential signs and symptoms of exposure, See Section 2 - Hazards

Identification and/or Section 11 - Toxicological Information.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians None.

#### Section 5: FIRE-FIGHTING MEASURES

#### 5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical, CO2, alcohol-resistant foam or water spray.

#### 5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

Fine particles (such as dust and mists) may fuel fires/explosions.

Hazardous combustion products Formation of toxic gases is possible during heating or fire.

**Explosion data** 

Sensitivity to mechanical impact No information available. Sensitivity to static discharge No information available.

## 5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

# Section 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Personnel involved in clean-up should wear appropriate personal protective equipment (see

Section 8). Minimize exposure.

For emergency responders

Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Place waste in an appropriately labeled, sealed container for disposal. Care should be

Product Name Thrombin-JMI Revision date 27-Feb-2025

Page 5 / 15 Version 6

taken to avoid environmental release.

#### 6.3. Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Contain the source of the spill or leak. Collect spilled material by a method that controls dust generation. Avoid use of a filtered vacuum to clean spills of dry solids. Clean contaminated

surface thoroughly.

Prevention of secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections

See section 8 for more information. See section 13 for more information.

#### Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Restrict access to work area. Minimize dust generation and accumulation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash thoroughly after handling. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration

systems or other equivalent controls.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** 

Store as directed by product packaging.

7.3. Specific end use(s)

Specific use(s)

Pharmaceutical drug product.

# Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1. Control parameters

**Exposure Limits** 

Refer to available public information for specific member state Occupational Exposure

Limits.

**SODIUM CHLORIDE** 

 $\begin{array}{ccc} \text{Latvia} & & 5 \text{ mg/m}^3 \\ \text{Russia} & & \text{MAC: } 5 \text{ mg/m}^3 \\ \end{array}$ 

Mannitol Russia

MAC: 10 mg/m<sup>3</sup>

Sodium hydroxide

2 mg/m<sup>3</sup>

ACGIH OEL (Ceiling) ACGIH TLV

Ceiling: 2 mg/m<sup>3</sup> 2 mg/m<sup>3</sup> STEL 4 mg/m<sup>3</sup>

Bulgaria

2.0 mg/m<sup>3</sup> 1 mg/m<sup>3</sup>

Czech Republic

Ceiling: 2 mg/m<sup>3</sup> Ceiling: 2 mg/m<sup>3</sup>

Denmark Estonia

Austria

1 mg/m<sup>3</sup>

	STEL: 2 mg/m <sup>3</sup>
Finland	Ceiling: 2 mg/m <sup>3</sup>
France	2 mg/m <sup>3</sup>
Hungary	1 mg/m <sup>3</sup>
	STEL: 2 mg/m <sup>3</sup>
Ireland	STEL: 2 mg/m <sup>3</sup>
Ceiling Limit Value	2 mg/m <sup>3</sup>
Latvia	0.5 mg/m <sup>3</sup>
Poland	STEL: 1 mg/m <sup>3</sup>
	0.5 mg/m <sup>3</sup>
Romania	1 mg/m <sup>3</sup>
	STEL: 3 mg/m <sup>3</sup>
Slovakia	2 mg/m <sup>3</sup>
Spain	STEL: 2 mg/m <sup>3</sup>
Switzerland	2 mg/m <sup>3</sup>
	STEL: 2 mg/m <sup>3</sup>
OSHA PEL	2 mg/m <sup>3</sup>
	(vacated) Ceiling: 2 mg/m <sup>3</sup>
United Kingdom	STEL: 2 mg/m <sup>3</sup>
+ Hydrochloric Acid	· ·
ACGIH OEL (Ceiling)	2 ppm
ACGIH TLV	Ceiling: 2 ppm
Austria	5 ppm
	8 mg/m <sup>3</sup>
	STEL 10 ppm
	STEL 15 mg/m <sup>3</sup>
Bulgaria	STEL: 10 ppm
•	STEL: 15.0 mg/m <sup>3</sup>
	5 ppm
	8.0 mg/m <sup>3</sup>
Czech Republic	8 mg/m³
·	Ceiling: 15 mg/m <sup>3</sup>
Estonia	5 ppm
	8 mg/m <sup>3</sup>
	STEL: 10 ppm
	STEL: 15 mg/m <sup>3</sup>
European Union	TWA: 5 ppm
·	TWA: 8 mg/m <sup>3</sup>
	STEL: 10 ppm
	STEL: 15 mg/m <sup>3</sup>
Finland	STEL: 5 ppm
	STEL: 7.6 mg/m <sup>3</sup>
Germany DFG	2 ppm I(2)
•	3.0 mg/m <sup>3</sup> I(2)
	Ceiling / Peak: 4 ppm
	Ceiling / Peak: 6 mg/m <sup>3</sup>
Germany TRGS	2 ppm
,	3 mg/m <sup>3</sup>
Hungary	8 mg/m <sup>3</sup>
5 ,	5 ppm

5 ppm 5 ppm STEL: 165 mg/m³ STEL: 10 ppm 8 mg/m³ 5 ppm STEL: 10 ppm STEL: 15 mg/m³ 5 ppm 8 mg/m³

Ireland

Italy MDLPS

Product Name Thrombin-JMI Revision date 27-Feb-2025

Latvia

Page 7/15 Version 6

STEL: 10 ppm STEL: 15 mg/m<sup>3</sup>

Ceiling Limit Value 2 ppm 3.0 mg/m<sup>3</sup>

> 5 ppm 8 mg/m<sup>3</sup> STEL: 10 ppm

STEL: 15 mg/m<sup>3</sup> Netherlands 5 ppm 8 mg/m<sup>3</sup>

STEL: 10 ppm STEL: 15 mg/m<sup>3</sup> STEL: 10 mg/m<sup>3</sup>

Poland 5 mg/m<sup>3</sup>

Romania 5 ppm 8 mg/m<sup>3</sup> STEL: 10 ppm STEL: 15 mg/m<sup>3</sup>

Russia MAC: 5 mg/m<sup>3</sup> Slovakia 5 ppm 8.0 mg/m<sup>3</sup> Spain

5 ppm 7.6 mg/m<sup>3</sup> STEL: 10 ppm STEL: 15 mg/m<sup>3</sup>

3 mg/m<sup>3</sup> STEL: 4 ppm STEL: 6 mg/m<sup>3</sup>

U.S. - OSHA - Final PELs - Ceiling Limits 5 ppm 7 mg/m<sup>3</sup>

**OSHA PEL** (vacated) Ceiling: 5 ppm

(vacated) Ceiling: 7 mg/m<sup>3</sup>

Ceiling: 5 ppm Ceiling: 7 mg/m<sup>3</sup> TWA: 1 ppm TWA: 2 mg/m<sup>3</sup> STEL: 5 ppm STEL: 8 mg/m<sup>3</sup>

2 ppm

Pfizer Occupational Exposure Band The Biotherapeutic Occupational Exposure Band (B-OEB) is an acceptable daily intake (OEB) Statement: (ADI) range, based on available hazard data with appropriate safety factors applied.

Engineering control measures should be utilized to bring exposures into the relevant B-OEB; supplementary administrative controls and personal protective equipment are to be

used to achieve exposure control to the bottom of the band.

**Thrombin** 

Pfizer Occupational Exposure B-OEB 5 (control exposure to <10 μg/day)

Band (OEB): **SODIUM CHLORIDE** 

United Kingdom

Switzerland

Pfizer Occupational Exposure

Band (OEB):

OEB 1 (control exposure to the range of 1000ug/m<sup>3</sup> to 3000ug/m<sup>3</sup>)

Product Name Thrombin-JMI Revision date 27-Feb-2025

Page 8 / 15 Version 6

8.2. Exposure controls

**Engineering controls** Engineering controls should be used as the primary means to control exposures. Use

process containment, local exhaust ventilation, biosafety cabinet, or other engineering controls to maintain airborne levels within the B-OEB range. All operations should be fully

enclosed. No air recirculation permitted.

Personal protective equipment Contact your safety and health professional or safety equipment supplier for assistance in

selecting the correct protective clothing/equipment based on an assessment of the workplace conditions, other chemicals used or present in the workplace and specific operational processes. Refer to applicable national standards and regulations in the

selection and use of personal protective equipment (PPE).

**Eye/face protection** Wear safety glasses as minimum protection (goggles recommended). (Eye protection must

meet the standards in accordance with EN166, ANSI Z87.1 or international equivalent.).

Hand protection Wear impervious disposable gloves (e.g. Nitrile, etc.) as minimum protection (double

recommended). (Protective gloves must meet the standards in accordance with EN374,

ASTM F1001 or international equivalent.).

**Skin and body protection** Wear impervious disposable protective clothing when handling this compound. Full body

protection is recommended (scale dependent). (Protective clothing must meet the standards

in accordance with EN13982, ANSI 103 or international equivalent.).

**Respiratory protection**Under normal conditions of use, if the applicable Biotherapeutic Occupational Exposure

Band (B-OEB) is exceeded, wear an appropriate respirator with a protection factor sufficient to control exposures to below the B-OEB (e.g. particulate respirator with a full mask, P3 filter). (Respirators must meet the standards in accordance with EN136, EN143, ASTM

F2704-10 or international equivalent.).

Thermal hazards No information available.

Environmental exposure controls No information available.

#### Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Powder Color tan

OdorNo information available.Odor thresholdNo information available

Property Values

Melting point / freezing pointNo data availableBoiling point or initial boiling point and boiling rangeNo data available

Flammability (solid, gas)

No data available

Lower and upper explosion limit/flammability limit

Lower explosion limit
Upper explosion limit
No data available

Autoignition temperature

No data available

Decomposition temperature

SADT (°C) No data available

pH No data available
pH (as aqueous solution) No data available

Kinematic viscosity

No data available

Product Name Thrombin-JMI Revision date 27-Feb-2025

Page 9 / 15 Version 6

Dynamic viscosity

No data available
Solubility

No data available
Vapor pressure

No data available
Density and/or relative density
Bulk density
Liquid Density

No data available
No data available
No data available
No data available
Vapor density

No data available

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

Molecular formulaMixtureMolecular weightMixture

#### 9.2.1. Information with regard to physical hazard classes

No information available

#### 9.2.2. Other safety characteristics

No information available

## Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

**Reactivity** No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

**Explosion data** 

**Sensitivity to mechanical impact** No information available. **Sensitivity to static discharge** No information available.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No information available.

Hazardous polymerization Will not occur.

10.4. Conditions to avoid

**Conditions to avoid** Fine particles (such as dust and mists) may fuel fires/explosions.

10.5. Incompatible materials

Incompatible materials As a precautionary measure, keep away from strong oxidizers.

#### 10.6. Hazardous decomposition products

Hazardous decomposition products No data available.

#### Section 11: TOXICOLOGICAL INFORMATION

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

**General Information:** The information included in this section describes the potential hazards of the individual

ingredients

Short term May cause allergic skin reaction Dust may cause irritation

Known Clinical Effects: This product contains protein of bovine origin. Those with known sensitivity should avoid

contact. Serious allergic reactions, including anaphylaxis, have been reported. Extensive intravascular clotting and death may result if injected or allowed to enter large blood

vessels.

Product Name Thrombin-JMI Revision date 27-Feb-2025

Page 10 / 15 Version 6

Acute toxicity Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Causes serious eye irritation. Classification is based on mixture calculation methods based

on component data.

Skin corrosion/irritation Causes skin irritation. Classification is based on mixture calculation methods based on

component data.

Respiratory or skin sensitization May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing

difficulties if inhaled. Classification is based on mixture calculation methods based on

component data.

STOT - single exposure
STOT - repeated exposure
Reproductive toxicity
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.
Based on available data, the classification criteria are not met.

#### Acute Toxicity: (Species, Route, End Point, Dose)

Thrombin

Rat Subcutaneous LD50 > 40 mg/kg

Rat IP LD50 > 40 mg/kg

Mouse Subcutaneous LD50 > 50 mg/kg

**SODIUM CHLORIDE** 

Rat Sub-tenon injection (eye) LC50/1hr > 42 g/m<sup>3</sup>

Rat Oral LD 50 3 g/kg Mouse Oral LD 50 4 g/kg Rabbit Dermal LD 50 > 10 g/kg

Mannitol

Rat Oral LD 50 13500 mg/kg Mouse Oral LD 50 22 g/kg

#### Sodium hydroxide

Mouse IP LD50 40 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
SODIUM CHLORIDE	= 3550 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 42 mg/L (Rat)1 h
Mannitol	= 13500 mg/kg (Rat)	-	-
Sodium hydroxide	= 325 mg/kg (Rat)	= 1350 mg/kg ( Rabbit )	-
+ Hydrochloric Acid	238 - 277 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	= 1.68 mg/L (Rat)1 h

**Acute Toxicity Comments:** 

A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable at the highest dose used in the test.

#### Irritation / Sensitization: (Study Type, Species, Severity)

SODIUM CHLORIDE

Skin irritation Rabbit Mild Eye irritation Rabbit Mild

+ Hydrochloric Acid

Skin irritation Severe Eye irritation Severe

Sodium hydroxide

Eye Irritation Rabbit Severe Skin Irritation Rabbit Severe Skin Irritation / Sensitization

Thrombin is an antigenic substance of bovine origin and has caused sensitivity and allergic

reactions including anaphylaxis. Not a significant irritant in clinical use

Product Name Thrombin-JMI Revision date 27-Feb-2025

Page 11 / 15 Version 6

Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

Thrombin

In Vitro Bacterial Mutagenicity (Ames) Salmonella Negative

+ Hydrochloric Acid

Bacterial Mutagenicity (Ames) Salmonella Negative

In Vivo Micronucleus Rat Negative

Carcinogenicity None of the components of this formulation are listed as a carcinogen by IARC, NTP or

OSHA. See below

+ Hydrochloric Acid

IARC Group 3 (Not Classifiable)

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Based on available data, the classification criteria are not met.

11.2.2. Other information

Other adverse effects No information available.

#### Section 12: ECOLOGICAL INFORMATION

**Environmental Overview:** The environmental characteristics of this material have not been fully evaluated. Releases

to the environment should be avoided.

12.1. Toxicity

No information available

12.2. Persistence and degradability

**Persistence and degradability** No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** No information available.

12.4. Mobility in soil

**Mobility in soil** No information available.

#### 12.5. Results of PBT and vPvB assessment

#### PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
SODIUM CHLORIDE	Not PBT/vPvB PBT assessment does not apply
Sodium hydroxide	Not PBT/vPvB PBT assessment does not apply
+ Hydrochloric Acid	Not PBT/vPvB PBT assessment does not apply

Product Name Thrombin-JMI Revision date 27-Feb-2025 Page 12 / 15 Version 6

#### 12.6. Endocrine disrupting properties

**Endocrine disrupting properties** Based on available data, the classification criteria are not met.

12.7. Other adverse effects

Other adverse effects No information available.

**PMT or vPvM properties**Based on available data, the classification criteria are not met.

## Section 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

#### Waste from residues/unused products

Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural wastewater and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

#### Section 14: TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

UN number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental Hazard(s):
Not applicable
Not applicable
Not applicable

#### Section 15: REGULATORY INFORMATION

## 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Thrombin** 

CERCLA/SARA Section 313 de minimus % Not Listed California Proposition 65 Not Listed TSCA Present EINECS 232-648-7 AICS

SODIUM CHLORIDE

CERCLA/SARA Section 313 de minimus % Not Listed
California Proposition 65 Not Listed
TSCA Present
EINECS 231-598-3
AICS Present

Product Name Thrombin-JMI Page 13 / 15
Revision date 27-Feb-2025 Version 6

Mannitol

CERCLA/SARA Section 313 de minimus % Not Listed California Proposition 65 Not Listed TSCA Present EINECS 200-711-8 AICS Present

Sodium hydroxide

Not Listed CERCLA/SARA Section 313 de minimus % 1000 lb **Hazardous Substances RQs California Proposition 65** Not Listed **TSCA** Present 215-185-5 **EINECS** AICS Present Schedule 5 Standard for Uniform Scheduling of Medicines and Poisons (SUSMP) Schedule 6

+ Hydrochloric Acid

CERCLA/SARA Section 313 de minimus % 1.0 % Hazardous Substances RQs 5000 lb **California Proposition 65** Not Listed **TSCA** Present 231-595-7 **EINECS AICS** Present Standard for Uniform Scheduling of Medicines and Schedule 5 Schedule 6 Poisons (SUSMP)

#### National regulations

**France** 

Occupational Illnesses (R-463-3, France)

o o o a patrioriar infriescos (it 100 o) i rainos	
Chemical name	French RG number
SODIUM CHLORIDE 7647-14-5	RG 78

#### Germany

Chemical Prohibition Ordinance (ChemVerbotsV)

Not applicable

TRGS 905 Not applicable

**Switzerland** 

Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018
Storage of Hazardous Material
WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20
Major Accidents Ordinance SR 814.012
Not applicable
Not applicable

**European Union** 

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorization per
	Annex XVII	REACH Annex XIV
Sodium hydroxide 1310-73-2	Use restricted. See entry 75.	-
+ Hydrochloric Acid 7647-01-0	Use restricted. See entry 75.	-

#### **Persistent Organic Pollutants**

Not applicable

Named dangerous substances per Seveso Directive (2012/18/EU)

Marilea darigerede edectarioco per ecveco Birece	110 (2012/10/20)	
Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
+ Hydrochloric Acid	25	250
7647-01-0		

## Ozone-depleting substances (ODS) Regulation (EU) 2024/590

Not applicable.

EU - Plant Protection Products (1107/2009/EC)

Chemical name	EU - Plant Protection Products (1107/2009/EC)
SODIUM CHLORIDE	Plant protection agent
7647-14-5	

Biocidal Products Regulation (EU) No 528/2012 (BPR)

21001ddi 1 10 ddoto 110 galation (20) 110 020,2012 (21 11)	
Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
+ Hydrochloric Acid	Product-type 2: Disinfectants and algaecides not intended
7647-01-0	for direct application to humans or animals

#### **Explosives Precursors Marketing and Use (2019/1148)**

Not applicable

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

TCSI - Taiwan Chemical Substance Inventory

#### 15.2. Chemical safety assessment

Chemical Safety Report

No information available

#### Section 16: OTHER INFORMATION

#### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of any hazard and/or precautionary statements referred to under Sections 2-15

H319 - Causes serious eye irritation. H317 - May cause an allergic skin reaction. H315 - Causes skin irritation. H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 - May cause respiratory irritation. H314 - Causes severe skin burns and eye damage. H331 - Toxic if inhaled.

**Data Sources:** 

Publicly available toxicity information. Safety data sheets for individual ingredients.

Product Name Thrombin-JMI Revision date 27-Feb-2025

Page 15 / 15 Version 6

Reason for revision Updated Section 2 - Hazard Identification. Updated Section 8 - Exposure Controls /

Personal Protection. Updated Section 11 - Toxicology Information. Updated Section 12 -

Ecological Information. Updated Section 16 - Other Information.

Revision date 27-Feb-2025

Prepared By Pfizer Global Environment, Health, and Safety

Pfizer Inc believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.