

SAFETY DATA SHEET

1. Identification

Product identifier	ProZinc® (Protamine Zinc Recombinant Human Insulin)
Other means of identification	
Synonyms	Protamine Zinc Recombinant Human Insulin (rDNA Origin) Suspension
Recommended use	Recommended for the treatment of diabetes in dogs and cats.
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/I	Distributor information
Manufacturer	Boehringer Ingelheim Animal Health USA Inc.
Address	3239 Satellite Boulevard
	Duluth, GA 30096
Transportation emergency	For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or
	Night Within USA and Canada: 1-800-424-9300
	Outside USA and Canada: +1 703-527-3887 (collect calls accepted)
Medical Emergency	(888)637-4251
(24HR):	
Non-Emergency calls:	(888)637-4251
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	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling.
Storago	Store away from incompatible materials

Storage
DisposalStore away from incompatible materials.DisposalDispose of waste and residues in accordance with local authority requirements.Hazard(s) not otherwise
classified (HNOC)None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Zinc oxide	1314-13-2	proprietary
Glycerin	56-81-5	proprietary
Phenol	108-95-2	proprietary
Insulin (human)	11061-68-0	proprietary
Protamine sulfate	9009-65-8	proprietary

4 First-aid measures

4. First-aid measures	
Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Skin contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. Ingestion of a large quantity may cause nausea and systemic effects.
Indication of immediate medical attention and special treatment needed	Not for human use. For use in animals only. Treat symptomatically. Persons developing anaphylactic (life threatening) reactions, such as difficulty in breathing or unconsciousness, must receive immediate medical attention.
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 fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	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	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Avoid prolonged exposure. Use care in handling/storage. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store in upright position. Protect from light. Store away from incompatible materials (see Section 10 of the SDS). Store away from foodstuffs. Keep refrigerated. Store material between 2°C (36°F) and 8°C (46°F).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Form Components Value Туре Glycerin (CAS 56-81-5) PEL 5 mg/m3 Respirable fraction. 15 mg/m3 Total dust. Phenol (CAS 108-95-2) PEL 19 mg/m3 5 ppm

US. ACGIH Threshold Limit Components	Values Type		١	/alue
Phenol (CAS 108-95-2)	TWA		5	5 ppm
US. NIOSH: Pocket Guide to Components	o Chemical Hazards Type		١	/alue
Phenol (CAS 108-95-2)	Ceilir	ng	6	60 mg/m3
			,	15.6 ppm
	TWA		1	19 mg/m3
			Ę	5 ppm
Biological limit values				
ACGIH Biological Exposure	Indices			
Components	Value	Determinant	Specimen	Sampling Time
Phenol (CAS 108-95-2) 2	250 mg/g	Phenol with hydrolysis	Creatinine i urine	n *
* - For sampling details, pleas	se see the source docu	ument.		
Exposure guidelines				
US - California OELs: Skin	designation			
Phenol (CAS 108-95-2) US - Minnesota Haz Subs: S	Skin designation app		absorbed thro	bugh the skin.
Phenol (CAS 108-95-2) US - Tennessee OELs: Skin	designation	Skin de	esignation appl	lies.
Phenol (CAS 108-95-2) US ACGIH Threshold Limit	Values: Skin designa		absorbed thro	bugh the skin.
Phenol (CAS 108-95-2) US. NIOSH: Pocket Guide to			absorbed thro	bugh the skin.
Phenol (CAS 108-95-2) US. OSHA Table Z-1 Limits	for Air Contaminants		absorbed thro	bugh the skin.
Phenol (CAS 108-95-2)		Can be	absorbed thro	bugh the skin.
Appropriate engineering controls	applicable, use proc	cess enclosures, lo vels below recomn	cal exhaust ve nended exposi	rates should be matched to conditions. If ntilation, or other engineering controls to ure limits. If exposure limits have not been e level.
Individual protection measures, Eye/face protection	such as personal pro Wear safety glasses			
Skin protection Hand protection	Wear appropriate cl	nemical resistant d	oves	
-	Troal appropriate of	ionioar roostant y		
Skin protection Other	Wear suitable prote	ctive clothing		
Respiratory protection	If engineering contr	ols do not maintain able) or to an acce	ptable level (in	centrations below recommended exposure countries where exposure limits have not
Thermal hazards	Wear appropriate th			
General hygiene considerations		rinking, and/or sm		uch as washing after handling the material ly wash work clothing and protective
9. Physical and chemical	properties			
Appearance				
Physical state	Liquid.			

Physical state	Liquid.
Form	Liquid suspension
Color	Milky white.
Odor	Slight phenolic.
Odor threshold	Not available.

рН	7.1 - 7.4	
Melting point/freezing point	Not available.	
Initial boiling point and boiling	Not available.	
range		
Flash point	> 300.0 °F (> 148.9 °C)	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not applicable.	
Upper/lower flammability or exp	losive limits	
Flammability limit - lower (%)	Not available.	
Flammability limit - upper (%)	Not available.	
Explosive limit - lower (%)	Not available.	
Explosive limit - upper (%)	Not available.	
Vapor pressure	Not available.	
Vapor density	Not available.	
Relative density	1.001	
Solubility(ies)		
Solubility (water)	Not available.	
Partition coefficient (n-octanol/water)	Not available.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
Viscosity	Not available.	
10. Stability and reactivity		
Reactivity Chemical	The product is stable and non-reactive un	der normal conditions of use, storage and transport.
stability Possibility of	Material is stable under normal conditions	
hazardous reactions	No dangerous reaction known under cond	itions of normal use.
Conditions to avoid	Contact with incompatible materials. High	temperatures. Freezing. Sunlight.
Incompatible materials	Strong oxidizing agents.	
Hazardous decomposition products	Thermal decomposition or combustion ma oxides, sulfur oxides, nitrogen oxides.	y produce: carbon dioxide, carbon monoxide, zinc
11. Toxicological informat	ion	
Information on likely routes of e	xposure	
Inhalation	No adverse effects due to inhalation are e	xpected. Skin
contact	No adverse effects due to skin contact are	expected.
Eye contact	Direct contact with eyes may cause tempo	prary irritation.
Ingestion	Expected to be a low ingestion hazard.	
Symptoms related to the	Direct contact with eyes may cause tempo	prary irritation. Ingestion of a large quantity may cause
physical, chemical and	nausea and systemic effects.	
toxicological characteristics		
Information on toxicological effe		
Acute toxicity	Not expected to be acutely toxic.	
Components	Species	Test Results
Glycerin (CAS 56-81-5)		
<u>Acute</u>		
Oral LD50	Rat	12600 mg/kg
	nal	12600 mg/kg

Components	Species	Test Results
Phenol (CAS 108-95-2)		
Acute		
Dermal		<i>"</i>
LD50	Rat	525 mg/kg
Oral	Det	
LD50	Rat	317 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause	
Serious eye damage/eye irritation	Direct contact with eyes may caus	e temporary irritation.
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cau	
Germ cell mutagenicity	mutagenic or genotoxic.	act or any components present at greater than 0.1% are
Carcinogenicity	-	e a carcinogen by IARC, ACGIH, NTP, or OSHA.
	Evaluation of Carcinogenicity	
Phenol (CAS 108-95-2) NTP Report on Carcinogens Not listed.		Not classifiable as to carcinogenicity to humans.
	Substances (29 CFR 1910.1001-	1053)
Not regulated. Reproductive toxicity	This product is not expected to ca	use reproductive or developmental effects.
Specific target organ toxicity -	Not classified.	
single exposure	NUT Classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Possible hyper sensitization (deve	lopment of abnormal sensitivity).
12. Ecological information		
Ecotoxicity		vironmentally hazardous. However, this does not exclude the ills can have a harmful or damaging effect on the environment.
Components	Species	Test Results
Glycerin (CAS 56-81-5)		
Aquatic		
Crustacea	EC50 Crustacea	> 10000 mg/l, 24 Hours
* Estimates for product may be	e based on additional component da	ta not shown.
Persistence and degradability	No data is available on the degrad	ability of this product.
Bioaccumulative potential	No data available.	
Partition coefficient n-octan Glycerin (CAS 56-81-5)	ol / water (log Kow) -1.	76
Phenol (CAS 108-95-2)	1.4	16
Mobility in soil	No data available.	
Other adverse effects		ffects (e.g. ozone depletion, photochemical ozone creation bal warming potential) are expected from this component.
13. Disposal consideration	IS	
	Collect and realize or dispass in a	ealed containers at licensed waste disposal site.
Disposal instructions	Collect and reclaim or dispose in s	calcu containers at nechocu waste disposal site.
•	Dispose in accordance with all app	-

Waste from residues / unused products	product resid	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).			
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.				
14. Transport information					
DOT					
Not regulated as dangerous g	oods.				
ΙΑΤΑ					
Not regulated as dangerous g	oods.				
IMDG Not regulated as dangerous g	oode				
Transport in bulk according to	Not establis	hed			
Annex II of MARPOL 73/78 and the IBC Code					
15. Regulatory information	า				
US federal regulations			re not listed on TSCA.		
		AW REŠTRICI		urposes such as R&D o E BY OR ON ORDER C	
TSCA Section 12(b) Export N	Notification (4	10 CFR 707, Su	ıbpt. D)		
Not regulated. CERCLA Hazardous Substar	nce List (40 C	FP 302 4)			
Phenol (CAS 108-95-2)		n it 302.4)	Listed.		
SARA 304 Emergency releas	e notification	ı			
Phenol (CAS 108-95-2)		(1000 LBS		
OSHA Specifically Regulated	Substances	s (29 CFR 1910	0.1001-1053)		
Not regulated. Superfund Amendments and Re	authorization	Act of 1986 (9			
SARA 302 Extremely hazard		-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Chemical name CAS	S number	Reportable	Threshold	Threshold	Threshold
		quantity (pounds)	planning quantity (pounds)	planning quantity, lower value	planning quantity, upper value
		(pounds)	(pounds)	(pounds)	(pounds)
Phenol 108	8-95-2	1000		500	10000
SARA 311/312 Hazardous chemical	No				
SARA 313 (TRI reporting) Not regulated.					
Other federal regulations					
Clean Air Act (CAA) Section	112 Hazardo	us Air Pollutai	nts (HAPs) List		
Phenol (CAS 108-95-2) Clean Air Act (CAA) Section	112(r) Accide	ontal Palaasa I	Provention (10 CEP 69	2 1 2 0)	
Not regulated.		eniai Reiease i		5.130)	
Safe Drinking Water Act (SDWA)	Not regulate	d.			
FEMA Priority Substanc	es Respirato	ry Health and	Safety in the Flavor M	anufacturing Workpla	се
Glycerin (CAS 56-81 Phenol (CAS 108-95			Other Flavoring Su Low priority	bstances with OSHA Pl	EL's
US state regulations					
US. Massachusetts RTK - Su	ubstance List				
Glycerin (CAS 56-81-5) Phenol (CAS 108-95-2)					
US. New Jersey Worker and	Community F	Right-to-Know	Act		
Glycerin (CAS 56-81-5)		-			
ProZinc® (Protamine Zinc Recombina	nt Human Insuli	n)			SDS US

Phenol (CAS 108-95-2)

US. Pennsylvania Worker and Community Right-to-Know Law

Glycerin (CAS 56-81-5) Phenol (CAS 108-95-2)

US. Rhode Island RTK Glycerin (CAS 56-81-5) Phenol (CAS 108-95-2)

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Phenol (CAS 108-95-2)

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*		
Australia	Australian Inventory of Chemical Substances (AICS)	No		
Canada	Domestic Substances List (DSL)	No		
Canada	Non-Domestic Substances List (NDSL)	No		
China	Inventory of Existing Chemical Substances in China (IECSC)	No		
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No		
Europe	European List of Notified Chemical Substances (ELINCS)	No		
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No		
Korea	Existing Chemicals List (ECL)	No		
New Zealand	New Zealand Inventory	No		
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No		
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes		
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No		

*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	06-May-2015
Revision date	03-June-2019
Version #	03
Further information	Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling. HMIS® is a registered trade and service mark of the American Coatings Association (ACA).
HMIS® ratings	Health: 1 Flammability: 1 Physical hazard: 0
NFPA ratings	

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