# **SAFETY DATA SHEETS**

# This SDS packet was issued with item:

078438053

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078435038

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078520437



# SAFETY DATA SHEET

# 1. Identification

1. Identification			
Product identifier	Humulin®		
Other means of identification			
Item Code	HP8824, CS0993, CS0994, CS0995, HI0509, B02136, HI0010, HI0040, HI0080, HI0210, HI0212, HI0212, HI0213, HI0217, HI0218, HI0219, HI0240, HI0241, HI0242, HI0280, HI0310, HI0312, HI0313, HI0314, HI0317, HI0318, HI0319, HI0340, HI0412, HI0414, HI0417, HI0418, HI0419, HI0440, HI0442, HI0480, HI0500, HI0610, HI0612, HI0617, HI0619, HI0640, HI0710, HI0713, HI0714, HI0717, HI0718, HI0719, HI0740, HI0810, HI0814, HI0817, HI0818, HI0819, HI0840, HI0910, HI0914, HI0917, HI0918, HI0919, HI0940, HI1510, HI1514, HI1517, HI1518, HI1519, HI1540, HI1610, HI1614, HI1617, HI1618, HI1619, HI1640, HP8120, HP8130, HP8150, HP81 HP8170, HP8180, HP8190, HP8720, HP8730, HP8750, HP8760, HP8770, HP8780, HP8790, HP8803, HP8804, HP8805, MS8094, MS8095, MS8305, MS8306, ND1041, ND1042, ND1043, ND1044, ND1045, ND1046, VF0103, VF0104, VF0105, VF0106, VF0107, VF0108, VF0109, VF0110, VF0111, VF0116, VF0117, VF0147, VF0148, VF0149, VF0150, VF0179, VF0183, VF0228, VF0229, VL7613, VL7614, VL7615, ZD0070	60,	
Recommended use	Pharmaceutical		
Recommended restrictions	None known.		
Manufacturer/Importer/Supplier/	Distributor information		
Manufacturer			
Company name Address	Eli Lilly and Company Lilly Corporate Center		
Aduress	Indianapolis, IN 46285 United States		
Telephone	Phone: +1-317-276-2000		
E-mail	lilly_msds@lilly.com		
Emergency phone number	CHEMTREC: +1-800-424-9300		
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	Not available.		
Response	Not available.		
Storage	Not available.		

Hazard(s) not otherwise<br/>classified (HNOC)None known.Supplemental informationNot applicable.

# 3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Zinc-Insulin Crystals Human		11061-68-0	0.1 - 0.4
Composition comments	Product contains $\leq 0.3\%$ m-cresol and pheno Remaining components of this product are no below reportable levels.		ent at concentrations
Material name: Humulin®			SDS 11

Disposal

Not available.

#### 4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists. Take off contaminated clothing and wash before reuse.
Eye contact	Immediately flush eye(s) with plenty of water. Get medical attention.
Ingestion	No hazards which require special first aid measures.
Most important symptoms/effects, acute and delayed	None known.

# 5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing media	Use extinguishing media appropriate for surrounding fire. None known.
Specific hazards arising from the chemical	None known.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment.
General fire hazards	This product is an aqueous mixture which will not burn.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid inhalation of mists or aerosols.
Methods and materials for containment and cleaning up	Prevent runoff from entering drains, sewers, or streams. Use absorbent/adsorbent material to solidify liquids. Clean up promptly by sweeping or vacuum.
Environmental precautions	Avoid release to the environment.
7. Handling and storage	

# 7. Handling and storage Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. See Section 8 of the SDS for Personal Protective Equipment. Keep refrigerated. Do not allow material to freeze.

Conditions for safe storage, including any incompatibilities

# 8. Exposure controls/personal protection

#### **Occupational exposure limits**

Lilly (LEG) Components	Туре	Value	Form
Insulin, Lispro Crystals (CAS 133107-64-9)	STEG (15min)	600 ug/m3	Respirable
	TWA (12hrs)	120 ug/m3	Respirable
Biological limit values	No biological exposure limits noted for th	e ingredient(s).	
Appropriate engineering controls		Open handling is not recommended. Use appropriate control measures such as fume hood, ventilated enclosure, local exhaust ventilation, or down-draft booth.	
Individual protection measures	s, such as personal protective equipment		
Eye/face protection	Safety glasses with side shields recommended. If splash potential or dusty operations, wear goggles/faceshield.		
Skin protection			
Hand protection	Chemical resistant gloves.		
Other	Chemical-resistant gloves and impermea	ble body covering to minim	ize skin contact.
Respiratory protection	If the applicable occupational exposure level (OEL) is anticipated to be exceeded, wear an approved respirator with sufficient protection factor to control exposure below the OEL.		
Thermal hazards	Not available.		
General hygiene considerations	Engineering controls should be used as t Follow good workplace hygiene practices		· · ·

Material name: Humulin®

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# 9. Physical and chemical properties

9. Physical and chemical p	properties
Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Clear.
Odor	Odorless
Odor threshold	Not available.
рН	7 - 7.8
Melting point/freezing point	Not available.
Initial boiling point and boiling range	> 212 °F (> 100 °C)
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or expl	osive 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	Not available.
Solubility(ies)	
Solubility (water)	Slightly 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	The substance or mixture is not classified as oxidizing.
Specific gravity	1.004 - 1.008
10. Stability and reactivity	
Reactivity	Not water reactive.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	None under normal conditions.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition	No hazardous decomposition products are known.

# 11. Toxicological information

#### Information on toxicological effects

Acute toxicity	Not expected to be active orally.
Skin corrosion/irritation	Due to lack of data the classification is not possible.
Serious eye damage/eye irritation	Due to lack of data the classification is not possible.

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Respiratory or skin sensitization	1
<b>Respiratory sensitization</b>	Due to lack of data the classification is not possible.
Skin sensitization	Rhesus monkeys, extremely weak immunogenic potential. (Insulin, Lispro Crystals) Due to inconclusive data the classification is not possible.
Germ cell mutagenicity	Results in genetic toxicity assays (in vitro): Negative (Insulin, Lispro Crystals) Due to inconclusive data the classification criteria are not met.
Carcinogenicity	One-year subcutaneous injection studies demonstrated no evidence of carcinogenicity in rats. (Insulin, Lispro Crystals) This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Based on available data, the classification criteria are not met.
IARC Monographs. Overall I	Evaluation of Carcinogenicity
Not regulated.	d Substances (29 CFR 1910.1001-1050) ogram (NTP) Report on Carcinogens
Not listed.	
Reproductive toxicity	Mixed results reported in animal studies. Effects were attributed to hypoglycemia. Insulin itself is not considered a reproduction hazard. (Insulin, Lispro Crystals) Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure	Due to lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Animal studies have reported the following effects: Decreased blood sugar levels. (Subcutaneous) (Insulin, Lispro Crystals) Based on available data, the classification criteria are not met.
Aspiration hazard	No aspiration toxicity classification
Further information	Insulin is a naturally occurring hormone. May cause decreased blood sugar levels with intravenous or subcutaneous administration. Symptoms typically associated with low blood sugar may include shakiness, sweating, fatigue, hunger, irritability, confusion, and rapid heartbeat.

#### 12. Ecological information

Ecotoxicity	Not expected to be harmful to aquatic organisms.
Persistence and degradability	No data is available on the degradability of this product.
Bioaccumulative potential	No data available for this product.
Mobility in soil	No data available.
Other adverse effects	Not available.

#### 13. Disposal considerations

**Disposal instructions** 

Dispose of contents/container in accordance with local/regional/national/international regulations.

# 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### ΙΑΤΑ

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

Transport in bulk according toNot available.Annex II of MARPOL 73/78 andthe IBC Code

# 15. Regulatory information

US federal regulations This produ

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. One or more components are not listed on TSCA.

# CERCLA/SARA Hazardous Substances - Not applicable.

# TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Subst	ance List (40 CFR 302.4)	
Not listed.		
SARA 304 Emergency relea	ase notification	
Not regulated.		
0	ed Substances (29 CFR 1910.1001-1050)	
Not regulated.		
Superfund Amendments and R	eauthorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No	
SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
Clean Air Act (CAA) Sectio	n 112 Hazardous Air Pollutants (HAPs) List	
Not regulated.		
Clean Air Act (CAA) Sectio	n 112(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.		
Safe Drinking Water Act (SDWA)	Not regulated.	
International Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Nc
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply 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 Revision date Version #	05-16-2016 07-06-2017 04
List of abbreviations Disclaimer	TWA: Time Weighted Average STEL: Short Term Exposure Limit As of the date of issuance, we are providing available information relevant to the handling of this material in the workplace. All information contained herein is offered with the good faith belief that it is accurate. THIS MATERIAL SAFETY DATA SHEET SHALL NOT BE DEEMED TO CREATE ANY WARRANTY OF ANY KIND (INCLUDING WARRANTY OF MERCHANT ABILITY OR FITNESS FOR A PARTICULAR PURPOSE). In the event of an adverse incident associated with this material, this safety data sheet is not intended to be a substitute for consultation with appropriately trained personnel. Nor is this safety data sheet intended to be a substitute for product literature which may accompany the finished product. For additional information contact: Eli Lilly and Company Hazard Communication +1-317-651-9533
Revision information	First-aid measures: Ingestion Physical and chemical properties: Color