(2012 OSHA Hazard Communication Standard (29 CFR 1910.1200))

SAFETY DATA SHEET

IMMULITE® 2000 Insulin

SIEMENS

MSDS no. L2KIN2_6

Section 1. Identification

GHS product identifier : IMMULITE® 2000 Insulin

Product code : L2KIN2/6, 10381455, 10381456

Other means of identification :

Insulin Reagent Wedge	L2INA2
Insulin Controls	LINC1, LINC2, 10387032, 10387033, LINCM, 10286614
Insulin Adjustors	LINL, LINH

Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Manufactured/supplied :

Siemens Healthcare Diagnostics Inc.
511 Benedict Avenue
Tarrytown, NY 10591-5097 USA
1-877-229-3711

(800) 424-9300 (CHEMTREC) (24/365)

Section 2. Hazards identification

OSHA/HCS status :

Insulin Reagent Wedge	This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Insulin Controls	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Insulin Adjustors	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture :

Insulin Reagent Wedge	Not classified.
Insulin Controls	ACUTE TOXICITY: ORAL - Category 4 ACUTE TOXICITY: SKIN - Category 4
Insulin Adjustors	ACUTE TOXICITY: ORAL - Category 4 ACUTE TOXICITY: SKIN - Category 4

Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

GHS label elements

Hazard pictograms :

Signal word :

Insulin Reagent Wedge	No signal word.
Insulin Controls	Warning
Insulin Adjustors	Warning

Hazard statements :

Insulin Reagent Wedge	No known significant effects or critical hazards.
Insulin Controls	H302 + H312 - Harmful if swallowed or in contact with skin.
Insulin Adjustors	H302 + H312 - Harmful if swallowed or in contact with skin.

Section 2. Hazards identification

Precautionary statements

Prevention	:	Insulin Reagent Wedge	Not applicable.
		Insulin Controls	P280 - Wear protective gloves/protective clothing/eye protection/face protection. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.
		Insulin Adjustors	P280 - Wear protective gloves/protective clothing/eye protection/face protection. P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.
Response	:	Insulin Reagent Wedge	Not applicable.
		Insulin Controls	P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. P302 + P352 + P312 + P363 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Wash contaminated clothing before reuse.
		Insulin Adjustors	P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. P302 + P352 + P312 + P363 - IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Wash contaminated clothing before reuse.
Storage	:	Insulin Reagent Wedge	Not applicable.
		Insulin Controls	Not applicable.
		Insulin Adjustors	Not applicable.
Disposal	:	Insulin Reagent Wedge	Not applicable.
		Insulin Controls	P501 - Dispose of contents and container in accordance with all local, regional, and national regulations.
		Insulin Adjustors	P501 - Dispose of contents and container in accordance with all local, regional, and national regulations.
Supplemental label elements	:	Insulin Reagent Wedge	None known.
		Insulin Controls	None known.
		Insulin Adjustors	None known.
Hazards not otherwise classified	:	Insulin Reagent Wedge	None known.
		Insulin Controls	None known.
		Insulin Adjustors	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Insulin Reagent Wedge	Mixture
		Insulin Controls	Mixture
		Insulin Adjustors	Mixture

Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Insulin Reagent Wedge aminocaproic acid	1.32	60-32-2
Insulin Controls sodium azide	1.37	26628-22-8
Insulin Adjustors sodium azide	1.37	26628-22-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact :

Insulin Reagent Wedge: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Insulin Controls: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Insulin Adjustors: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

Inhalation :

Insulin Reagent Wedge: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Insulin Controls: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Insulin Adjustors: Remove victim to fresh air and keep at rest

Section 4. First aid measures

in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Insulin Reagent Wedge

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Insulin Controls

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Insulin Adjustors

Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Insulin Reagent Wedge

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Insulin Controls

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give

Section 4. First aid measures

			anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
		Insulin Adjustors	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	Insulin Reagent Wedge	No known significant effects or critical hazards.
		Insulin Controls	No known significant effects or critical hazards.
		Insulin Adjustors	No known significant effects or critical hazards.
Inhalation	:	Insulin Reagent Wedge	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
		Insulin Controls	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
		Insulin Adjustors	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	:	Insulin Reagent Wedge	No known significant effects or critical hazards.
		Insulin Controls	Harmful in contact with skin.
		Insulin Adjustors	Harmful in contact with skin.
Ingestion	:	Insulin Reagent Wedge	No known significant effects or critical hazards.
		Insulin Controls	Harmful if swallowed.
		Insulin Adjustors	Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact	:	Insulin Reagent Wedge	No specific data.
		Insulin Controls	No specific data.
		Insulin Adjustors	No specific data.
Inhalation	:	Insulin Reagent Wedge	No specific data.
		Insulin Controls	No specific data.
		Insulin Adjustors	No specific data.

Section 4. First aid measures

Skin contact	:	Insulin Reagent Wedge	No specific data.
		Insulin Controls	No specific data.
		Insulin Adjustors	No specific data.
Ingestion	:	Insulin Reagent Wedge	No specific data.
		Insulin Controls	No specific data.
		Insulin Adjustors	No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam or dry chemical.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
halogenated compounds
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Insulin Controls sodium azide	**ACGIH TLV (United States, 6/2013). Notes: as hydrazoic acid vapor** C: 0.11 ppm, (as Hydrazoic acid vapor) Form: as Hydrazoic acid vapor **ACGIH TLV (United States, 6/2013).** C: 0.29 mg/m³, (as Sodium azide) Form: as Sodium azide **NIOSH REL (United States, 10/2013). Absorbed through skin. Notes: NAN3** CEIL: 0.3 mg/m³, (NAN3) **NIOSH REL (United States, 10/2013). Absorbed through skin. Notes: as HN3** CEIL: 0.1 ppm, (as HN3) **OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. Notes: as HN3** CEIL: 0.1 ppm, (as HN3) **OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. Notes: as NaN3** CEIL: 0.3 mg/m³, (as NaN3)
Insulin Adjustors sodium azide	**ACGIH TLV (United States, 6/2013). Notes: as hydrazoic acid vapor** C: 0.11 ppm, (as Hydrazoic acid vapor) Form: as Hydrazoic acid vapor **ACGIH TLV (United States, 6/2013).** C: 0.29 mg/m³, (as Sodium azide) Form: as Sodium azide **NIOSH REL (United States, 10/2013). Absorbed through skin. Notes: NAN3** CEIL: 0.3 mg/m³, (NAN3)

Section 8. Exposure controls/personal protection

	NIOSH REL (United States, 10/2013). **Absorbed through skin. Notes: as HN3** CEIL: 0.1 ppm, (as HN3) **OSHA PEL 1989 (United States, 3/1989).** **Absorbed through skin. Notes: as HN3** CEIL: 0.1 ppm, (as HN3) **OSHA PEL 1989 (United States, 3/1989).** **Absorbed through skin. Notes: as NaN3** CEIL: 0.3 mg/m³, (as NaN3)

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state	:	Insulin Reagent Wedge Insulin Controls Insulin Adjustors	Liquid. Solid. Solid.
Color	:	Insulin Reagent Wedge Insulin Controls Insulin Adjustors	Colorless. Off-white. Pale color.
Odor	:	Insulin Reagent Wedge Insulin Controls Insulin Adjustors	Odorless. Bland. Bland.
pH	:	Insulin Reagent Wedge Insulin Controls Insulin Adjustors	5.85 to 5.95 Not applicable. Not applicable.
Flash point	:	Insulin Reagent Wedge Insulin Controls Insulin Adjustors	Not available. [Product does not sustain combustion.] Not available.

Section 9. Physical and chemical properties

Flammability (solid, gas)	:	Insulin Reagent Wedge	Not available.
		Insulin Controls	Not available.
		Insulin Adjustors	Not available.
Relative density	:	Insulin Reagent Wedge	1
		Insulin Controls	>1
		Insulin Adjustors	>1
Solubility in water	:	Insulin Reagent Wedge	Not available.
		Insulin Controls	Not available.
		Insulin Adjustors	Not available.
Partition coefficient: n-octanol/water	:	Insulin Reagent Wedge	Not available.
		Insulin Controls	Not available.
		Insulin Adjustors	Not available.
Auto-ignition temperature	:	Insulin Reagent Wedge	Not available.
		Insulin Controls	Not available.
		Insulin Adjustors	Not available.
Viscosity	:	Insulin Reagent Wedge	Not available.
		Insulin Controls	Not available.
		Insulin Adjustors	Not available.

Section 10. Stability and reactivity

Reactivity	:	Insulin Reagent Wedge	No specific test data related to reactivity available for this product or its ingredients.
		Insulin Controls	No specific test data related to reactivity available for this product or its ingredients.
		Insulin Adjustors	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Insulin Reagent Wedge	The product is stable.
		Insulin Controls	The product is stable.
		Insulin Adjustors	The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Insulin Controls				
sodium azide	LD50 Dermal	Rabbit	20 mg/kg	-
	LD50 Dermal	Rat	50 mg/kg	-
	LD50 Oral	Rat	27 mg/kg	-
Insulin Adjustors				
sodium azide	LD50 Dermal	Rabbit	20 mg/kg	-
	LD50 Dermal	Rat	50 mg/kg	-
	LD50 Oral	Rat	27 mg/kg	-

Section 11. Toxicological information

Conclusion/Summary : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Insulin Reagent Wedge aminocaproic acid	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Conclusion/Summary

Skin : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Eyes : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Respiratory : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Sensitization

Not available.

Conclusion/Summary

Skin : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Respiratory : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Mutagenicity

Not available.

Conclusion/Summary : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Carcinogenicity

Not available.

Conclusion/Summary : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Reproductive toxicity

Not available.

Conclusion/Summary : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Teratogenicity

Not available.

Conclusion/Summary : Insulin Reagent Wedge — Not available.
Insulin Controls — Not available.
Insulin Adjustors — Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Section 11. Toxicological information

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact	:	Insulin Reagent Wedge	No known significant effects or critical hazards.
		Insulin Controls	No known significant effects or critical hazards.
		Insulin Adjustors	No known significant effects or critical hazards.
Inhalation	:	Insulin Reagent Wedge	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
		Insulin Controls	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
		Insulin Adjustors	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	:	Insulin Reagent Wedge	No known significant effects or critical hazards.
		Insulin Controls	Harmful in contact with skin.
		Insulin Adjustors	Harmful in contact with skin.
Ingestion	:	Insulin Reagent Wedge	No known significant effects or critical hazards.
		Insulin Controls	Harmful if swallowed.
		Insulin Adjustors	Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	Insulin Reagent Wedge	No specific data.
		Insulin Controls	No specific data.
		Insulin Adjustors	No specific data.
Inhalation	:	Insulin Reagent Wedge	No specific data.
		Insulin Controls	No specific data.
		Insulin Adjustors	No specific data.
Skin contact	:	Insulin Reagent Wedge	No specific data.
		Insulin Controls	No specific data.
		Insulin Adjustors	No specific data.
Ingestion	:	Insulin Reagent Wedge	No specific data.
		Insulin Controls	No specific data.
		Insulin Adjustors	No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	:	Insulin Reagent Wedge	Not available.
		Insulin Controls	Not available.
		Insulin Adjustors	Not available.
Potential delayed effects	:	Insulin Reagent Wedge	Not available.
		Insulin Controls	Not available.
		Insulin Adjustors	Not available.

Long term exposure

Potential immediate effects	:	Insulin Reagent Wedge	Not available.
		Insulin Controls	Not available.
		Insulin Adjustors	Not available.
Potential delayed effects	:	Insulin Reagent Wedge	Not available.
		Insulin Controls	Not available.
		Insulin Adjustors	Not available.

Section 11. Toxicological information

Potential chronic health effects

Not available.

Conclusion/Summary : Not available. Insulin Reagent Wedge
Not available. Insulin Controls
Not available. Insulin Adjustors

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Insulin Reagent Wedge	
Oral	77720.2 mg/kg
Insulin Controls	
Oral	1970.8 mg/kg
Dermal	1459.9 mg/kg
Insulin Adjustors	
Oral	1970.8 mg/kg
Dermal	1459.9 mg/kg

Interactive effects : Insulin Reagent Wedge Not available.
Insulin Controls Not available.
Insulin Adjustors Not available.

Other information : Insulin Reagent Wedge Not available.
Insulin Controls Not available.
Insulin Adjustors Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Insulin Controls			
sodium azide	Acute EC50 0.348 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 4.2 to 6.2 mg/l Fresh water	Daphnia - Daphnia pulex - Larvae	48 hours
	Acute LC50 9000 µg/l Fresh water	Crustaceans - Gammarus lacustris	48 hours
	Acute LC50 0.68 mg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Chronic NOEC 5600 µg/l Marine water	Algae - Macrocystis pyrifera	96 hours
Insulin Adjustors			
sodium azide	Acute EC50 0.348 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 4.2 to 6.2 mg/l Fresh water	Daphnia - Daphnia pulex - Larvae	48 hours
	Acute LC50 9000 µg/l Fresh water	Crustaceans - Gammarus lacustris	48 hours
	Acute LC50 0.68 mg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Chronic NOEC 5600 µg/l Marine water	Algae - Macrocystis pyrifera	96 hours

Section 12. Ecological information

Conclusion/Summary :

Insulin Reagent Wedge	Not available.
Insulin Controls	Not available.
Insulin Adjustors	Not available.

Persistence and degradability

Conclusion/Summary :

Insulin Reagent Wedge	Not available.
Insulin Controls	Not available.
Insulin Adjustors	Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Insulin Reagent Wedge aminocaproic acid	-2.95	-	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) :

Insulin Reagent Wedge	Not available.
Insulin Controls	Not available.
Insulin Adjustors	Not available.

Mobility :

Insulin Reagent Wedge	Not available.
Insulin Controls	Not available.
Insulin Adjustors	Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Sodium azide may react with lead or copper plumbing to form highly explosive metal azides.

United States - RCRA Acute hazardous waste "P" List

Ingredient	CAS #	Status	Reference number
Insulin Controls			
Sodium azide	26628-22-8	Listed	P105
Insulin Adjustors			
Sodium azide	26628-22-8	Listed	P105

Section 14. Transport information

DOT Classification

UN number

Insulin Reagent Wedge	Not regulated.
Insulin Controls	Not regulated.
Insulin Adjustors	Not regulated.

UN proper shipping name

Insulin Reagent Wedge	-
Insulin Controls	-
Insulin Adjustors	-

Section 14. Transport information

Transport hazard class(es)	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Packing group	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Environmental hazards	Insulin Reagent Wedge	No.
	Insulin Controls	No.
	Insulin Adjustors	No.
Additional information	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-

TDG Classification

UN number	Insulin Reagent Wedge	Not regulated.
	Insulin Controls	Not regulated.
	Insulin Adjustors	Not regulated.
UN proper shipping name	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Transport hazard class(es)	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Packing group	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Environmental hazards	Insulin Reagent Wedge	No.
	Insulin Controls	No.
	Insulin Adjustors	No.
Additional information	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-

Mexico Classification

UN number	Insulin Reagent Wedge	Not regulated.
	Insulin Controls	Not regulated.
	Insulin Adjustors	Not regulated.
UN proper shipping name	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Transport hazard class(es)	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Packing group	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-

Section 14. Transport information

Environmental hazards	Insulin Reagent Wedge	No.
	Insulin Controls	No.
	Insulin Adjustors	No.
Additional information	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-

ADR/RID

UN number	Insulin Reagent Wedge	Not regulated.
	Insulin Controls	Not regulated.
	Insulin Adjustors	Not regulated.
UN proper shipping name	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Transport hazard class(es)	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Packing group	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Environmental hazards	Insulin Reagent Wedge	No.
	Insulin Controls	No.
	Insulin Adjustors	No.
Additional information	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-

IMDG

UN number	Insulin Reagent Wedge	Not regulated.
	Insulin Controls	Not regulated.
	Insulin Adjustors	Not regulated.
UN proper shipping name	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Transport hazard class(es)	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Packing group	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Environmental hazards	Insulin Reagent Wedge	No.
	Insulin Controls	No.
	Insulin Adjustors	No.
Additional information	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-

IATA

Section 14. Transport information

UN number	Insulin Reagent Wedge	Not regulated.
	Insulin Controls	Not regulated.
	Insulin Adjustors	Not regulated.
UN proper shipping name	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Transport hazard class(es)	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Packing group	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-
Environmental hazards	Insulin Reagent Wedge	No.
	Insulin Controls	No.
	Insulin Adjustors	No.
Additional information	Insulin Reagent Wedge	-
	Insulin Controls	-
	Insulin Adjustors	-

Special precautions for user :	Insulin Reagent Wedge	**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
	Insulin Controls	**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
	Insulin Adjustors	**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

United States inventory (TSCA 8b): Not determined.

Clean Water Act (CWA) 307: zinc chloride

Clean Water Act (CWA) 311: zinc chloride

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

Section 15. Regulatory information

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ (lbs)	SARA 302 TPQ (gallons)	SARA 304 RQ (lbs)	SARA 304 RQ (gallons)
Insulin Reagent Wedge sodium azide	0.098	Yes.	500	-	1000	-
Insulin Controls sodium azide	1.37	Yes.	500	-	1000	-
Insulin Adjustors sodium azide	1.37	Yes.	500	-	1000	-

SARA 304 RQ : 105708.2 lbs / 47991.5 kg

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Insulin Reagent Wedge aminocaproic acid	1.32	No.	No.	No.	Yes.	No.
Insulin Controls sodium azide	1.37	No.	No.	No.	Yes.	No.
Insulin Adjustors sodium azide	1.37	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	**Insulin Controls** sodium azide	26628-22-8	1.37
	Insulin Adjustors sodium azide	26628-22-8	1.37
Supplier notification	**Insulin Controls** sodium azide	26628-22-8	1.37
	Insulin Adjustors sodium azide	26628-22-8	1.37

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : None of the components are listed.

California Prop. 65

Section 15. Regulatory information

WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Insulin Controls gentamicin, sulfate (salt)	No.	Yes.	No.	No.
Insulin Adjustors gentamicin, sulfate (salt)	No.	Yes.	No.	No.

International regulations

Chemical Weapons Convention List Schedule I Chemicals	:	Insulin Reagent Wedge	Not listed
		Insulin Controls	Not listed
		Insulin Adjustors	Not listed
Chemical Weapons Convention List Schedule II Chemicals	:	Insulin Reagent Wedge	Not listed
		Insulin Controls	Not listed
		Insulin Adjustors	Not listed
Chemical Weapons Convention List Schedule III Chemicals	:	Insulin Reagent Wedge	Not listed
		Insulin Controls	Not listed
		Insulin Adjustors	Not listed

Section 16. Other information

History

Date of issue/Date of revision : 1/22/2016.

Version : 1.05

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

Allergen : **Not available.**