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

SAFETY DATA SHEET

INNOVANCE® VWF Ac

Section 1. Identification

Product identifier : INNOVANCE® VWF Ac

Product code : OPHL03, 10873906

Product type : Liquid.

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

Not applicable.

Manufactured/supplied : Sysmex Americas
577 Aptakisic RD
Lincolnshire, IL 60069
Company Phone Number: (224) 543-9500

Emergency telephone number ChemTel Inc.
1-800-255-3924 (North America)
1-813-248-0585 (International)

Section 2. Hazards identification

OSHA/HCS status :

INNOVANCE® VWF Ac Reagent I	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
INNOVANCE® VWF Ac Reagent II	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
INNOVANCE® VWF Ac Reagent III	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture : Not classified.

Additional information : Potentially biohazardous material.

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

GHS label elements

Signal word :

INNOVANCE® VWF Ac Reagent I	No signal word.
INNOVANCE® VWF Ac Reagent II	No signal word.
INNOVANCE® VWF Ac Reagent III	No signal word.

Section 2. Hazards identification

Hazard statements	:	INNOVANCE® VWF Ac Reagent I	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent II	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent III	No known significant effects or critical hazards.

Precautionary statements

Prevention	:	INNOVANCE® VWF Ac Reagent I	Not applicable.
		INNOVANCE® VWF Ac Reagent II	Not applicable.
		INNOVANCE® VWF Ac Reagent III	Not applicable.
Response	:	INNOVANCE® VWF Ac Reagent I	Not applicable.
		INNOVANCE® VWF Ac Reagent II	Not applicable.
		INNOVANCE® VWF Ac Reagent III	Not applicable.
Storage	:	INNOVANCE® VWF Ac Reagent I	Not applicable.
		INNOVANCE® VWF Ac Reagent II	Not applicable.
		INNOVANCE® VWF Ac Reagent III	Not applicable.
Disposal	:	INNOVANCE® VWF Ac Reagent I	Not applicable.
		INNOVANCE® VWF Ac Reagent II	Not applicable.
		INNOVANCE® VWF Ac Reagent III	Not applicable.
Supplemental label elements	:	INNOVANCE® VWF Ac Reagent I	None known.
		INNOVANCE® VWF Ac Reagent II	None known.
		INNOVANCE® VWF Ac Reagent III	None known.
Hazards not otherwise classified	:	INNOVANCE® VWF Ac Reagent I	None known.
		INNOVANCE® VWF Ac Reagent II	None known.
		INNOVANCE® VWF Ac Reagent III	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	INNOVANCE® VWF Ac Reagent I	Mixture
		INNOVANCE® VWF Ac Reagent II	Mixture
		INNOVANCE® VWF Ac Reagent III	Mixture

Ingredient name	%	CAS number
INNOVANCE® VWF Ac Reagent II		
sodium azide	≤0.1	26628-22-8

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

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	:	INNOVANCE® VWF Ac Reagent I	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.
		INNOVANCE® VWF Ac Reagent II	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.
		INNOVANCE® VWF Ac Reagent III	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.

Section 4. First aid measures

Inhalation	:	INNOVANCE® VWF Ac Reagent I	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.
		INNOVANCE® VWF Ac Reagent II	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		INNOVANCE® VWF Ac Reagent III	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.
Skin contact	:	INNOVANCE® VWF Ac Reagent I	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		INNOVANCE® VWF Ac Reagent II	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		INNOVANCE® VWF Ac Reagent III	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:	INNOVANCE® VWF Ac Reagent I	Wash out mouth with water. 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.
		INNOVANCE® VWF Ac Reagent II	Wash out mouth with water. 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.
		INNOVANCE® VWF Ac Reagent III	Wash out mouth with water. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	INNOVANCE® VWF Ac Reagent I	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent II	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent III	No known significant effects or critical hazards.

Section 4. First aid measures

Inhalation	:	INNOVANCE® VWF Ac Reagent I	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent II	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent III	No known significant effects or critical hazards.
Skin contact	:	INNOVANCE® VWF Ac Reagent I	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent II	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent III	No known significant effects or critical hazards.
Ingestion	:	INNOVANCE® VWF Ac Reagent I	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent II	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent III	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	:	INNOVANCE® VWF Ac Reagent I	No specific data.
		INNOVANCE® VWF Ac Reagent II	No specific data.
		INNOVANCE® VWF Ac Reagent III	No specific data.
Inhalation	:	INNOVANCE® VWF Ac Reagent I	No specific data.
		INNOVANCE® VWF Ac Reagent II	No specific data.
		INNOVANCE® VWF Ac Reagent III	No specific data.
Skin contact	:	INNOVANCE® VWF Ac Reagent I	No specific data.
		INNOVANCE® VWF Ac Reagent II	No specific data.
		INNOVANCE® VWF Ac Reagent III	No specific data.
Ingestion	:	INNOVANCE® VWF Ac Reagent I	No specific data.
		INNOVANCE® VWF Ac Reagent II	No specific data.
		INNOVANCE® VWF Ac Reagent III	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: carbon dioxide carbon monoxide 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 5. Fire-fighting measures

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 specialized 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.

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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
INNOVANCE® VWF Ac Reagent II sodium azide	**ACGIH TLV (United States, 1/2021).** C: 0.29 mg/m³, (as Sodium azide) C: 0.11 ppm, (as Hydrazoic acid vapor) **OSHA PEL 1989 (United States, 3/1989).** **Absorbed through skin.** CEIL: 0.1 ppm, (as HN3) CEIL: 0.3 mg/m³, (as NaN3) **NIOSH REL (United States, 10/2020).** **Absorbed through skin.**

Section 8. Exposure controls/personal protection

	CEIL: 0.1 ppm, (as HN3) CEIL: 0.3 mg/m³, (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 : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Physical state	: INNOVANCE® VWF Ac Reagent I	Liquid.
	INNOVANCE® VWF Ac Reagent II	Liquid.
	INNOVANCE® VWF Ac Reagent III	Liquid.
Color	: INNOVANCE® VWF Ac Reagent I	White.
	INNOVANCE® VWF Ac Reagent II	Colorless.
	INNOVANCE® VWF Ac Reagent III	Clear.
Odor	: INNOVANCE® VWF Ac Reagent I	Odorless.
	INNOVANCE® VWF Ac Reagent II	Odorless.
	INNOVANCE® VWF Ac Reagent III	Odorless.
pH	: INNOVANCE® VWF Ac Reagent I	8.25
	INNOVANCE® VWF Ac Reagent II	7.1
	INNOVANCE® VWF Ac Reagent III	8.25
Flash point	: INNOVANCE® VWF Ac Reagent I	[Product does not sustain combustion.]
	INNOVANCE® VWF Ac Reagent II	[Product does not sustain combustion.]
	INNOVANCE® VWF Ac Reagent III	[Product does not sustain combustion.]
Flammability (solid, gas)	: INNOVANCE® VWF Ac Reagent I	Not relevant/applicable due to nature of the product.
	INNOVANCE® VWF Ac Reagent II	Not relevant/applicable due to nature of the product.
	INNOVANCE® VWF Ac Reagent III	Not relevant/applicable due to nature of the product.
Relative density	: INNOVANCE® VWF Ac Reagent I	1.06
	INNOVANCE® VWF Ac Reagent II	1
	INNOVANCE® VWF Ac Reagent III	1.02

Section 9. Physical and chemical properties

Solubility(ies) :

Not available.

Solubility in water :	INNOVANCE® VWF Ac Reagent I	Not available.
	INNOVANCE® VWF Ac Reagent II	Not available.
	INNOVANCE® VWF Ac Reagent III	Not available.
Partition coefficient: n-octanol/water :	INNOVANCE® VWF Ac Reagent I	Not relevant/applicable due to nature of the product.
	INNOVANCE® VWF Ac Reagent II	Not relevant/applicable due to nature of the product.
	INNOVANCE® VWF Ac Reagent III	Not relevant/applicable due to nature of the product.
Auto-ignition temperature :	INNOVANCE® VWF Ac Reagent I	Not available.
	INNOVANCE® VWF Ac Reagent II	Not available.
	INNOVANCE® VWF Ac Reagent III	Not available.
Viscosity :	INNOVANCE® VWF Ac Reagent I	Not relevant/applicable due to nature of the product.
	INNOVANCE® VWF Ac Reagent II	Not relevant/applicable due to nature of the product.
	INNOVANCE® VWF Ac Reagent III	Not relevant/applicable due to nature of the product.

Aerosol product

Type of aerosol :	INNOVANCE® VWF Ac Reagent I	Not applicable.
	INNOVANCE® VWF Ac Reagent II	Not applicable.
	INNOVANCE® VWF Ac Reagent III	Not applicable.

Section 10. Stability and reactivity

Reactivity :	INNOVANCE® VWF Ac Reagent I	No specific test data related to reactivity available for this product or its ingredients.
	INNOVANCE® VWF Ac Reagent II	No specific test data related to reactivity available for this product or its ingredients.
	INNOVANCE® VWF Ac Reagent III	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability :	INNOVANCE® VWF Ac Reagent I	The product is stable.
	INNOVANCE® VWF Ac Reagent II	The product is stable.
	INNOVANCE® VWF Ac Reagent III	The product is stable.

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

Conditions to avoid :	INNOVANCE® VWF Ac Reagent I	No specific data.
	INNOVANCE® VWF Ac Reagent II	No specific data.
	INNOVANCE® VWF Ac Reagent III	No specific data.
Incompatible materials :	INNOVANCE® VWF Ac Reagent I	No specific data.
	INNOVANCE® VWF Ac Reagent II	No specific data.
	INNOVANCE® VWF Ac Reagent III	No specific data.
Hazardous decomposition products :	INNOVANCE® VWF Ac Reagent I	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	INNOVANCE® VWF Ac Reagent II	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	INNOVANCE® VWF Ac Reagent III	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
INNOVANCE® VWF Ac Reagent II				
sodium azide	LD50 Dermal	Rabbit	20 mg/kg	-
	LD50 Dermal	Rat	50 mg/kg	-
	LD50 Oral	Rat	27 mg/kg	-

Conclusion/Summary : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Irritation/Corrosion

Not available.

Conclusion/Summary

Skin : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Eyes : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Respiratory : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Sensitization

Not available.

Conclusion/Summary

Skin : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Respiratory : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Mutagenicity

Not available.

Conclusion/Summary : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Carcinogenicity

Not available.

Conclusion/Summary : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Reproductive toxicity

Not available.

Conclusion/Summary : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Teratogenicity

Not available.

Conclusion/Summary : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	:	INNOVANCE® VWF Ac Reagent I	Not available.
		INNOVANCE® VWF Ac Reagent II	Not available.
		INNOVANCE® VWF Ac Reagent III	Not available.

Potential acute health effects

Eye contact	:	INNOVANCE® VWF Ac Reagent I	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent II	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent III	No known significant effects or critical hazards.
Inhalation	:	INNOVANCE® VWF Ac Reagent I	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent II	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent III	No known significant effects or critical hazards.
Skin contact	:	INNOVANCE® VWF Ac Reagent I	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent II	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent III	No known significant effects or critical hazards.
Ingestion	:	INNOVANCE® VWF Ac Reagent I	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent II	No known significant effects or critical hazards.
		INNOVANCE® VWF Ac Reagent III	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	INNOVANCE® VWF Ac Reagent I	No specific data.
		INNOVANCE® VWF Ac Reagent II	No specific data.
		INNOVANCE® VWF Ac Reagent III	No specific data.
Inhalation	:	INNOVANCE® VWF Ac Reagent I	No specific data.
		INNOVANCE® VWF Ac Reagent II	No specific data.
		INNOVANCE® VWF Ac Reagent III	No specific data.
Skin contact	:	INNOVANCE® VWF Ac Reagent I	No specific data.
		INNOVANCE® VWF Ac Reagent II	No specific data.
		INNOVANCE® VWF Ac Reagent III	No specific data.
Ingestion	:	INNOVANCE® VWF Ac Reagent I	No specific data.
		INNOVANCE® VWF Ac Reagent II	No specific data.
		INNOVANCE® VWF Ac Reagent III	No specific data.

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

Short term exposure

Potential immediate effects	:	INNOVANCE® VWF Ac Reagent I	Not available.
		INNOVANCE® VWF Ac Reagent II	Not available.
		INNOVANCE® VWF Ac Reagent III	Not available.
Potential delayed effects	:	INNOVANCE® VWF Ac Reagent I	Not available.
		INNOVANCE® VWF Ac Reagent II	Not available.
		INNOVANCE® VWF Ac Reagent III	Not available.

Long term exposure

Potential immediate effects	:	INNOVANCE® VWF Ac Reagent I	Not available.
		INNOVANCE® VWF Ac Reagent II	Not available.
		INNOVANCE® VWF Ac Reagent III	Not available.

Section 11. Toxicological information

Potential delayed effects : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available. — INNOVANCE® VWF Ac Reagent I
Not available. — INNOVANCE® VWF Ac Reagent II
Not available. — INNOVANCE® VWF Ac Reagent III

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
INNOVANCE® VWF Ac Reagent II					
sodium azide	27	20	N/A	N/A	N/A

Interactive effects : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Other information : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
INNOVANCE® VWF Ac Reagent II			
sodium azide	Acute EC50 9200 µg/l Marine water	Algae - Macrocystis pyrifera	96 hours
	Acute EC50 6.4 mg/l Fresh water	Crustaceans - Simocephalus serrulatus - Larvae	48 hours
	Acute EC50 4.2 mg/l Fresh water	Daphnia - Daphnia pulex - Larvae	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

Conclusion/Summary : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Persistence and degradability

Conclusion/Summary : INNOVANCE® VWF Ac Reagent I — Not available.
INNOVANCE® VWF Ac Reagent II — Not available.
INNOVANCE® VWF Ac Reagent III — Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Section 12. Ecological information

Soil/water partition coefficient (K_{OC})	:	INNOVANCE® VWF Ac Reagent I	Not available.
		INNOVANCE® VWF Ac Reagent II	Not available.
		INNOVANCE® VWF Ac Reagent III	Not available.
Mobility	:	INNOVANCE® VWF Ac Reagent I	Not available.
		INNOVANCE® VWF Ac Reagent II	Not available.
		INNOVANCE® VWF Ac Reagent III	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.

Section 14. Transport information

DOT Classification

UN number	INNOVANCE® VWF Ac Reagent I	Not regulated.
	INNOVANCE® VWF Ac Reagent II	Not regulated.
	INNOVANCE® VWF Ac Reagent III	Not regulated.
UN proper shipping name	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Transport hazard class(es)	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Packing group	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Environmental hazards	INNOVANCE® VWF Ac Reagent I	No.
	INNOVANCE® VWF Ac Reagent II	No.
	INNOVANCE® VWF Ac Reagent III	No.
Additional information	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-

TDG Classification

UN number	INNOVANCE® VWF Ac Reagent I	Not regulated.
	INNOVANCE® VWF Ac Reagent II	Not regulated.
	INNOVANCE® VWF Ac Reagent III	Not regulated.
UN proper shipping name	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-

Section 14. Transport information

Transport hazard class(es)	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Packing group	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Environmental hazards	INNOVANCE® VWF Ac Reagent I	No.
	INNOVANCE® VWF Ac Reagent II	No.
	INNOVANCE® VWF Ac Reagent III	No.
Additional information	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-

ADR/RID

UN number	INNOVANCE® VWF Ac Reagent I	Not regulated.
	INNOVANCE® VWF Ac Reagent II	Not regulated.
	INNOVANCE® VWF Ac Reagent III	Not regulated.
UN proper shipping name	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Transport hazard class(es)	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Packing group	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Environmental hazards	INNOVANCE® VWF Ac Reagent I	No.
	INNOVANCE® VWF Ac Reagent II	No.
	INNOVANCE® VWF Ac Reagent III	No.
Additional information	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-

IMDG

UN number	INNOVANCE® VWF Ac Reagent I	Not regulated.
	INNOVANCE® VWF Ac Reagent II	Not regulated.
	INNOVANCE® VWF Ac Reagent III	Not regulated.
UN proper shipping name	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Transport hazard class(es)	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Packing group	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-

Section 14. Transport information

Environmental hazards	INNOVANCE® VWF Ac Reagent I	No.
	INNOVANCE® VWF Ac Reagent II	No.
	INNOVANCE® VWF Ac Reagent III	No.
Additional information	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-

IATA

UN number	INNOVANCE® VWF Ac Reagent I	Not regulated.
	INNOVANCE® VWF Ac Reagent II	Not regulated.
	INNOVANCE® VWF Ac Reagent III	Not regulated.
UN proper shipping name	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Transport hazard class(es)	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Packing group	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-
Environmental hazards	INNOVANCE® VWF Ac Reagent I	No.
	INNOVANCE® VWF Ac Reagent II	No.
	INNOVANCE® VWF Ac Reagent III	No.
Additional information	INNOVANCE® VWF Ac Reagent I	-
	INNOVANCE® VWF Ac Reagent II	-
	INNOVANCE® VWF Ac Reagent III	-

Special precautions for user :

INNOVANCE® VWF Ac Reagent I	**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.
INNOVANCE® VWF Ac Reagent II	**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.
INNOVANCE® VWF Ac Reagent III	**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 IMO instruments : Not applicable.

Section 15. Regulatory information

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

Clean Water Act (CWA) 311: disodium hydrogenorthophosphate

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

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)
INNOVANCE® VWF Ac Reagent II sodium azide	0.0951	Yes.	500	-	1000	-
INNOVANCE® VWF Ac Reagent III sodium azide	0.000712	Yes.	500	-	1000	-

SARA 304 RQ : 1899373.2 lbs / 862315.4 kg

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	%	Classification
INNOVANCE® VWF Ac Reagent II sodium azide	≤0.1	ACUTE TOXICITY (oral) - Category 2 ACUTE TOXICITY (dermal) - Category 1

State regulations

Massachusetts : The following components are listed: SUCROSE DUST

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : The following components are listed: .ALPHA.-D-GLUCOPYRANOSIDE, .BETA.-D-FRUCTOFURANOSYL

California Prop. 65

⚠ **WARNING**: This product can expose you to Gentamicin, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
INNOVANCE® VWF Ac Reagent I Gentamicin	-	-
INNOVANCE® VWF Ac Reagent III Gentamicin	-	-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Section 15. Regulatory information

Not listed.

Section 16. Other information

History

Date of issue/Date of revision : 3/19/2024

Version : 1

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 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations N/A = Not available SGG = Segregation Group

Indicates information that has changed from previously issued version.