



SAFETY DATA SHEET

INNOVANCE® Heparin Calibrator

Section 1. Identification

Product identifier : INNOVANCE® Heparin Calibrator
 Product code : OPOB03, 10873867; OPOB05, 10873925
 Product type : Solid.

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® Heparin Calibrator 1	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® Heparin Calibrator 2	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® Heparin Calibrator 3	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® Heparin Calibrator 4	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® Heparin Calibrator 5	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.

Section 2. Hazards identification

Classification of the substance or mixture : Not classified.

Additional information : Potentially biohazardous material.
Not available.

GHS label elements

Signal word	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	No signal word. No signal word. No signal word. No signal word. No signal word.
Hazard statements	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Precautionary statements

Prevention	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Response	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Storage	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Disposal	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Supplemental label elements	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	None known. None known. None known. None known. None known.
Hazards not otherwise classified	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	None known. None known. None known. None known. None known.

Section 3. Composition/information on ingredients

Substance/mixture	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Mixture Mixture Mixture Mixture Mixture
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Any concentration shown as a range is to protect confidentiality or is due to batch variation.

Section 3. Composition/information on ingredients

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: INNOVANCE® Heparin Calibrator 1	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® Heparin Calibrator 2	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® Heparin Calibrator 3	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® Heparin Calibrator 4	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® Heparin Calibrator 5	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.
Inhalation	: INNOVANCE® Heparin Calibrator 1	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® Heparin Calibrator 2	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® Heparin Calibrator 3	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® Heparin Calibrator 4	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® Heparin Calibrator 5	Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Section 4. First aid measures

		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® Heparin Calibrator 1	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	INNOVANCE® Heparin Calibrator 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	INNOVANCE® Heparin Calibrator 3	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	INNOVANCE® Heparin Calibrator 4	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	INNOVANCE® Heparin Calibrator 5	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: INNOVANCE® Heparin Calibrator 1	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® Heparin Calibrator 2	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® Heparin Calibrator 3	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® Heparin Calibrator 4	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® Heparin Calibrator 5	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

Section 4. First aid measures

Eye contact	: INNOVANCE® Heparin Calibrator 1	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 2	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 3	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 4	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 5	No known significant effects or critical hazards.
Inhalation	: INNOVANCE® Heparin Calibrator 1	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 2	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 3	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 4	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 5	No known significant effects or critical hazards.
Skin contact	: INNOVANCE® Heparin Calibrator 1	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 2	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 3	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 4	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 5	No known significant effects or critical hazards.
Ingestion	: INNOVANCE® Heparin Calibrator 1	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 2	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 3	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 4	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 5	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.
Inhalation	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.
Skin contact	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.
Ingestion	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.

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

Section 4. First aid measures

- Notes to physician** : 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.
- 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** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
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 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** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. 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

None.

- 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® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Solid. Solid. Solid. Solid. Solid.
Color	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Yellowish. [Light] Yellowish. [Light] Yellowish. [Light] Yellowish. [Light] Yellowish. [Light]
Odor	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Odorless. Odorless. Odorless. Odorless. Odorless.
pH	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Flash point	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	[Product does not sustain combustion.] [Product does not sustain combustion.] [Product does not sustain combustion.] [Product does not sustain combustion.] [Product does not sustain combustion.]
Flammability (solid, gas)	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.
Relative density	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Not available. Not available. Not available. Not available. Not available.
Solubility(ies)	: Not available.	
Solubility in water	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Not available. Not available. Not available. Not available. Not available.
Partition coefficient: n-octanol/water	: INNOVANCE® Heparin Calibrator 1 INNOVANCE® Heparin Calibrator 2 INNOVANCE® Heparin Calibrator 3 INNOVANCE® Heparin Calibrator 4 INNOVANCE® Heparin Calibrator 5	Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.

Section 9. Physical and chemical properties

Auto-ignition temperature	: INNOVANCE® Heparin Calibrator 1	Not relevant/applicable due to nature of the product.
	INNOVANCE® Heparin Calibrator 2	Not relevant/applicable due to nature of the product.
	INNOVANCE® Heparin Calibrator 3	Not relevant/applicable due to nature of the product.
	INNOVANCE® Heparin Calibrator 4	Not relevant/applicable due to nature of the product.
	INNOVANCE® Heparin Calibrator 5	Not relevant/applicable due to nature of the product.
Viscosity	: INNOVANCE® Heparin Calibrator 1	Not relevant/applicable due to nature of the product.
	INNOVANCE® Heparin Calibrator 2	Not relevant/applicable due to nature of the product.
	INNOVANCE® Heparin Calibrator 3	Not relevant/applicable due to nature of the product.
	INNOVANCE® Heparin Calibrator 4	Not relevant/applicable due to nature of the product.
	INNOVANCE® Heparin Calibrator 5	Not relevant/applicable due to nature of the product.
<u>Aerosol product</u>		
Type of aerosol	: INNOVANCE® Heparin Calibrator 1	Not applicable.
	INNOVANCE® Heparin Calibrator 2	Not applicable.
	INNOVANCE® Heparin Calibrator 3	Not applicable.
	INNOVANCE® Heparin Calibrator 4	Not applicable.
	INNOVANCE® Heparin Calibrator 5	Not applicable.

Section 10. Stability and reactivity

Reactivity	: INNOVANCE® Heparin Calibrator 1	No specific test data related to reactivity available for this product or its ingredients.
	INNOVANCE® Heparin Calibrator 2	No specific test data related to reactivity available for this product or its ingredients.
	INNOVANCE® Heparin Calibrator 3	No specific test data related to reactivity available for this product or its ingredients.
	INNOVANCE® Heparin Calibrator 4	No specific test data related to reactivity available for this product or its ingredients.
	INNOVANCE® Heparin Calibrator 5	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: INNOVANCE® Heparin Calibrator 1	The product is stable.
	INNOVANCE® Heparin Calibrator 2	The product is stable.
	INNOVANCE® Heparin Calibrator 3	The product is stable.
	INNOVANCE® Heparin Calibrator 4	The product is stable.
	INNOVANCE® Heparin Calibrator 5	The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.	
Conditions to avoid	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.
Incompatible materials	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.

Section 10. Stability and reactivity

Hazardous decomposition products	: INNOVANCE® Heparin Calibrator 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	INNOVANCE® Heparin Calibrator 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	INNOVANCE® Heparin Calibrator 3	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	INNOVANCE® Heparin Calibrator 4	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	INNOVANCE® Heparin Calibrator 5	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.

Irritation/Corrosion

Not available.

Conclusion/Summary

Skin	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.
Eyes	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.
Respiratory	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.

Sensitization

Not available.

Conclusion/Summary

Skin	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.
Respiratory	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.

Mutagenicity

Not available.

Section 11. Toxicological information

Conclusion/Summary : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Carcinogenicity

Not available.

Conclusion/Summary : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Reproductive toxicity

Not available.

Conclusion/Summary : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Teratogenicity

Not available.

Conclusion/Summary : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Potential acute health effects

Eye contact : INNOVANCE® Heparin Calibrator 1 No known significant effects or critical hazards.
 INNOVANCE® Heparin Calibrator 2 No known significant effects or critical hazards.
 INNOVANCE® Heparin Calibrator 3 No known significant effects or critical hazards.
 INNOVANCE® Heparin Calibrator 4 No known significant effects or critical hazards.
 INNOVANCE® Heparin Calibrator 5 No known significant effects or critical hazards.

Inhalation : INNOVANCE® Heparin Calibrator 1 No known significant effects or critical hazards.
 INNOVANCE® Heparin Calibrator 2 No known significant effects or critical hazards.
 INNOVANCE® Heparin Calibrator 3 No known significant effects or critical hazards.
 INNOVANCE® Heparin Calibrator 4 No known significant effects or critical hazards.
 INNOVANCE® Heparin Calibrator 5 No known significant effects or critical hazards.

Section 11. Toxicological information

Skin contact	: INNOVANCE® Heparin Calibrator 1	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 2	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 3	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 4	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 5	No known significant effects or critical hazards.
Ingestion	: INNOVANCE® Heparin Calibrator 1	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 2	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 3	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 4	No known significant effects or critical hazards.
	INNOVANCE® Heparin Calibrator 5	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.
Inhalation	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.
Skin contact	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.
Ingestion	: INNOVANCE® Heparin Calibrator 1	No specific data.
	INNOVANCE® Heparin Calibrator 2	No specific data.
	INNOVANCE® Heparin Calibrator 3	No specific data.
	INNOVANCE® Heparin Calibrator 4	No specific data.
	INNOVANCE® Heparin Calibrator 5	No specific data.

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

Short term exposure

Potential immediate effects	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.
Potential delayed effects	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.

Long term exposure

Potential immediate effects	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.

Section 11. Toxicological information

Potential delayed effects : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available. INNOVANCE® Heparin Calibrator 1
 Not available. INNOVANCE® Heparin Calibrator 2
 Not available. INNOVANCE® Heparin Calibrator 3
 Not available. INNOVANCE® Heparin Calibrator 4
 Not available. INNOVANCE® Heparin Calibrator 5

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

N/A

Interactive effects : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Other information : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Persistence and degradability

Conclusion/Summary : INNOVANCE® Heparin Calibrator 1 Not available.
 INNOVANCE® Heparin Calibrator 2 Not available.
 INNOVANCE® Heparin Calibrator 3 Not available.
 INNOVANCE® Heparin Calibrator 4 Not available.
 INNOVANCE® Heparin Calibrator 5 Not available.

Bioaccumulative potential

Not available.

Mobility in soil

Section 12. Ecological information

Soil/water partition coefficient (K_{oc})	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	Not available.
Mobility	: INNOVANCE® Heparin Calibrator 1	Not available.
	INNOVANCE® Heparin Calibrator 2	Not available.
	INNOVANCE® Heparin Calibrator 3	Not available.
	INNOVANCE® Heparin Calibrator 4	Not available.
	INNOVANCE® Heparin Calibrator 5	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.

Section 14. Transport information

DOT Classification

UN number	INNOVANCE® Heparin Calibrator 1	Not regulated.
	INNOVANCE® Heparin Calibrator 2	Not regulated.
	INNOVANCE® Heparin Calibrator 3	Not regulated.
	INNOVANCE® Heparin Calibrator 4	Not regulated.
	INNOVANCE® Heparin Calibrator 5	Not regulated.
UN proper shipping name	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Transport hazard class(es)	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Packing group	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Environmental hazards	INNOVANCE® Heparin Calibrator 1	No.
	INNOVANCE® Heparin Calibrator 2	No.
	INNOVANCE® Heparin Calibrator 3	No.
	INNOVANCE® Heparin Calibrator 4	No.
	INNOVANCE® Heparin Calibrator 5	No.
Additional information	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

Section 14. Transport information

TDG Classification

UN number	INNOVANCE® Heparin Calibrator 1	Not regulated.
	INNOVANCE® Heparin Calibrator 2	Not regulated.
	INNOVANCE® Heparin Calibrator 3	Not regulated.
	INNOVANCE® Heparin Calibrator 4	Not regulated.
	INNOVANCE® Heparin Calibrator 5	Not regulated.
UN proper shipping name	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Transport hazard class(es)	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Packing group	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Environmental hazards	INNOVANCE® Heparin Calibrator 1	No.
	INNOVANCE® Heparin Calibrator 2	No.
	INNOVANCE® Heparin Calibrator 3	No.
	INNOVANCE® Heparin Calibrator 4	No.
	INNOVANCE® Heparin Calibrator 5	No.
Additional information	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

ADR/RID

UN number	INNOVANCE® Heparin Calibrator 1	Not regulated.
	INNOVANCE® Heparin Calibrator 2	Not regulated.
	INNOVANCE® Heparin Calibrator 3	Not regulated.
	INNOVANCE® Heparin Calibrator 4	Not regulated.
	INNOVANCE® Heparin Calibrator 5	Not regulated.
UN proper shipping name	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Transport hazard class(es)	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Packing group	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

Section 14. Transport information

Environmental hazards	INNOVANCE® Heparin Calibrator 1	No.
	INNOVANCE® Heparin Calibrator 2	No.
	INNOVANCE® Heparin Calibrator 3	No.
	INNOVANCE® Heparin Calibrator 4	No.
	INNOVANCE® Heparin Calibrator 5	No.

Additional information	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

IMDG

UN number	INNOVANCE® Heparin Calibrator 1	Not regulated.
	INNOVANCE® Heparin Calibrator 2	Not regulated.
	INNOVANCE® Heparin Calibrator 3	Not regulated.
	INNOVANCE® Heparin Calibrator 4	Not regulated.
	INNOVANCE® Heparin Calibrator 5	Not regulated.

UN proper shipping name	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

Transport hazard class(es)	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

Packing group	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

Environmental hazards	INNOVANCE® Heparin Calibrator 1	No.
	INNOVANCE® Heparin Calibrator 2	No.
	INNOVANCE® Heparin Calibrator 3	No.
	INNOVANCE® Heparin Calibrator 4	No.
	INNOVANCE® Heparin Calibrator 5	No.

Additional information	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

IATA

UN number	INNOVANCE® Heparin Calibrator 1	Not regulated.
	INNOVANCE® Heparin Calibrator 2	Not regulated.
	INNOVANCE® Heparin Calibrator 3	Not regulated.
	INNOVANCE® Heparin Calibrator 4	Not regulated.
	INNOVANCE® Heparin Calibrator 5	Not regulated.

UN proper shipping name	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

Section 14. Transport information

Transport hazard class(es)	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Packing group	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-
Environmental hazards	INNOVANCE® Heparin Calibrator 1	No.
	INNOVANCE® Heparin Calibrator 2	No.
	INNOVANCE® Heparin Calibrator 3	No.
	INNOVANCE® Heparin Calibrator 4	No.
	INNOVANCE® Heparin Calibrator 5	No.
Additional information	INNOVANCE® Heparin Calibrator 1	-
	INNOVANCE® Heparin Calibrator 2	-
	INNOVANCE® Heparin Calibrator 3	-
	INNOVANCE® Heparin Calibrator 4	-
	INNOVANCE® Heparin Calibrator 5	-

Special precautions for user : INNOVANCE® Heparin Calibrator 1

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® Heparin Calibrator 2

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® Heparin Calibrator 3

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® Heparin Calibrator 4

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® Heparin Calibrator 5

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 Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)

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

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

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

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

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.