

Safety Datasheet (SDS)

1. Identification of the substance/preparation and of the company/undertaking

1.1 Product Identifiers

Product Catalog #: CF1010

Product Name: Human Factor X (Factor 10) Chromogenic Activity Assay Kit

1.2 Relevant Identified Uses

Recommended Use: Intended for the in vitro determination of samples for **Research Use Only**. This product is not

intended for use in diagnostic procedures.

1.3 Details of Supplier of this SDS

Supplier Information: Assaypro LLC Phone: +1-636-447-9175

3400 Harry S Truman Blvd Phone: +1-636-447-9875 St. Charles, MO 63301, USA Fax: +1-636-395-7419

Email: support@assaypro.com

Emergency Phone Number: +1-636-447-917

2. Hazard Identification

2.1 Classification of Substance/Mixture

Assay Diluent and Sample Diluent contain Sodium Azide (0.02 %)*

*Not considered hazardous in this concentration. This classification was made according to latest edition of the Globally Harmonized System of Classification and Labeling Chemicals

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Not considered hazardous at this concentration.

Classification in accordance with Regulation EC No. 1272/2008 [CLP/GHS]

Not considered hazardous at this concentration.

Classification in accordance with Regulation EC No. 67/548/EEC

Not considered hazardous at this concentration.

2.2 Label Elements

Hazard Pictograms: N/A

Signal Word: N/A

Version 2.1 Revision Date: 6/1/2015 1 | P a g e

Hazard Statement: N/A

Precautionary Statements: N/A

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

N/A

3. Information on Ingredients

Description:

Assay Diluent: Aqueous, proprietary solution that contains 0.02% Sodium Azide Sample Diluent: Aqueous, proprietary solution that contains 0.02% Sodium Azide

3.1 Substance

Not applicable

3.2 Mixture

Contains	CAS No.	EC-No.	Index-No.	Concentration
Proprietary Solution	N/A	N/A	N/A	99.98 %
Sodium Azide (NaN ₃)	26628-22-8	247-852-1	011-004-00-7	0.02 % *

^{*} Not hazardous at this concentration.

4. First Aid Measures

4.1 Description of First Aid Measures

General Information: Consult a physician if you feel unwell. Show SDS when necessary.

After Inhalation: Remove to fresh air, seek medical advice.

After Skin Contact: Wash off with plenty of soap and water. Remove contaminated clothing. Seek medical attention immediately.

After Eye Contact: Rinse with water for several minutes. Seek medical attention immediately.

After Swallowing: DO NOT induce vomiting. Rinse mouth. Consult physician.

4.2 Most Important Symptoms & Effects

The most important known symptoms and effects are described in the labeling (see Section 2.2) and/or in Section 11.

4.3 Indication of Any Immediate Medical Attention/Special Treatment Needed

No data available.

5. Fire Fighting Measures

5.1 Extinguishing Media

Use dry powder.

5.2 Special Hazards Arising from Substance of Mixture

Dangerous decomposition is not anticipated.

5.3 Advice for Firefighters

Wear self-contained breathing apparatus if necessary

6. Accidental Release Measures

6.1 Personal Safety Precautions

Use appropriate personal protective equipment to prevent contamination of skin, eyes, and personal clothing.

6.2 Environmental Precautions

Keep away from drains. Discharge into the environment should be avoided.

6.3 Methods and Materials for Containment/Cleanup

Soak up spilled liquid with inert absorbent material and dispose of as hazardous waste. Keep in suitable closed containers for disposal.

7. Handling and Storage

7.1 Precautions for Handling

Avoid contact with skin and eyes.

7.2 Conditions for Safe Storage (Including Incompatibilities)

Keep container tightly closed in a dry and well-ventilated place. Never allow product to get in contact with water during storage. Do not store near acids. See product labeling for specific storage temperature requirements.

7.3 Specific End Use

Use as a laboratory reagent, for scientific research and development.

8. Exposure Controls/Personal Protection

8.1 Control Parameters

Chemical Identity	Туре	Exposure Limit Values	Source
Sodium Azide	Ceiling	0.100000 ppm	US. NIOSH Recommended
CAS No. 26628-22-8	Celling	0.100000 μμπ	Exposure Limits
			US. NIOSH Recommended
	Ceiling	0.300000 mg/m ³	Exposure Limits – Potential for
			Dermal Absorption
	Ceiling	0.110000	US. ACGIH Threshold Limit Values
		0.110000 ppm	 Potential for Dermal Absorption

8.2 Exposure Controls

Appropriate Engineering Controls: Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling

product.

General Information: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or

handling.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with

multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH

(US) or CEN (EU).

Version 2.1 Revision Date: 6/1/2015 3 | P a g e

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without

touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after

use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye Protection: Use equipment for eye protection tested and approved under appropriate government standards such as

NIOSH (US) or EN 166(EU).

9. Physical and Chemical Properties

Physical State	Liquid	Color	Colorless to cloudy
Odor	Not available	Odor Threshold	Not available
рН	Not available	Melting/Freezing Point	Not available
Boiling Point	Not available	Boiling Range	Not available
Flash Point	Not available	Evaporation Rate	Not available
Flammability	Not available	Upper/Lower Flammability	Not available
Explosive Limits	Not available	Vapor Pressure	Not available
Vapor Density	Not available	Relative Density	Not available
Solubility	Soluble in water	Partition Coefficient	Not available
Auto-Ignition Temp	Not available	Decomposition Temperature	Not available
Viscosity	Not available		

10. Stability and Reactivity

10.1 Reactivity

No relevant information available.

10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions

No relevant information available.

10.4 Conditions to Avoid

An explosion occurred when a mixture of sodium azide, methylene chloride, dimethyl sulfoxide, and sulfuric acid were being concentrated on a rotary evaporator.

10.5 Incompatible Materials

Halogenated hydrocarbon, metals, acids, acid chlorides, hydrazine, dimethyl sulfate, inorganic acid chlorides.

10.6 Hazardous Decomposition Products

 $Hazardous\ decomposition\ products\ formed\ under\ fire\ conditions-sodium\ oxides.$

Other decomposition products - no data available.

In the event of a fire, see Section 5.

11. Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity:

LD50 Oral - rat: 72 mg/kg

Inhalation: No data available.

Dermal: No data available.

Skin corrosion/irritation

May be harmful if absorbed through the skin; may cause skin irritation.

Serious eye damage/eye irritation:

May cause eye irritation.

Respiratory or skin sensitization:

No sensitizing effects known.

Carcinogenicity:

No effect known.

Reproductive toxicity:

No toxic effect known.

Specific target organ toxicity - single exposure:

No data available.

Specific target organ toxicity - repeated exposure:

No data available.

Aspiration hazard:

May be harmful if inhaled; may cause respiratory tract irritation.

Additional Information:

RTECS not available.

12. Ecological Information

12.1 Ecotoxicity

Toxicity to fish: Mortality LC50 - Pimephales promelas (fathead minnow) - 5.46 mg/L - 96 h (OECD Test Guideline 203)

Toxicity to algae: Static test EC50 - Pseudokirchneriella subcapitata - 0.35 mg/L - 96 h (OECD Test Guideline 201)

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

Sodium azide is toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

13. Disposal Considerations

13.1 Waste treatment methods

Product:

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

Special precautions: Avoid dispersal of spilt material to soil, waterways, drains, and sewers.

14. Transport Information

	Land Transport (ADR/DOT)	Inland Waterway Transport	Sea Transport (IMDG)	Air Transport (IATA)
		(ADN)		
14.1 UN Number	N/A	N/A	Not Regulated	Not Regulated
14.2 UN Proper Shipping Name	N/A	N/A	Not Regulated	Not Regulated
14.3 Transport Hazard Classes	N/A	N/A	Not Regulated	Not Regulated
14.4 Packing Group	N/A	N/A	Not Regulated	Not Regulated
14.5 Environmental Hazards	N/A	N/A	Not Regulated	Not Regulated
14.6 Special Precautions for User	No	No	No	No

^{*}Product is not considered dangerous for transport according to the above specifications.

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental regulations/legislation specific for the substance or mixture: Ensure all national/local regulations are observed.

SARA 302 Components: The following components are subject to reporting levels established by SARA Title III, Section 302:

Sodium Azide, CAS-No. 26628-22-8

SARA 313 Components: The following components are subject to reporting levels established by SARA Title III, Section 313:

Sodium Azide, CAS-No. 26628-22-8

SARA 311/312 Components: The following components are subject to reporting levels established by SARA Title III, Section 311/312:

Sodium Azide, CAS-No. 26628-22-8

Massachusetts Right To Know Components: Sodium Azide, CAS-No. 26628-22-8 Pennsylvania Right To Know Components: Sodium Azide, CAS-No. 26628-22-8 New Jersey Right To Know Components: Sodium Azide, CAS-No. 26628-22-8

California Prop. 65 Components: This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or

any other reproductive harm.

15.2 Chemical Safety Assessment

For this substance, a chemical safety assessment is not required.

16. Other Information

Indication of Changes

This SDS has been revised on <u>June 1, 2015</u> to reflect current requirements after the adoption of Globally Harmonized Standards and according to Regulation (EC) No 1272/2008 and Regulation (EC) No 1907/2006.

2. Hazard Identification

2.1 Classification of Substance/Mixture

RVV contains Factor X activator from Russell's Viper (D. russelii) venom (<0.02 Units/vial)*

*Not considered hazardous in this concentration. This classification was made according to latest edition of the Globally Harmonized System of Classification and Labeling Chemicals

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Not considered hazardous at this concentration.

Classification in accordance with Regulation EC No. 1272/2008 [CLP/GHS]

Not considered hazardous at this concentration.

Classification in accordance with Regulation EC No. 67/548/EEC

Not considered hazardous at this concentration.

2.2 Label Elements

Hazard Pictograms: N/A

Signal Word: N/A

Hazard Statement: N/A

Precautionary Statements: N/A

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

This product contains less than 0.02 Units/vial of component(s) with an unknown toxicity that has been extracted from snake venom. While not classified as hazardous material, the toxicological properties of this product have not been thoroughly investigated. For more information, see Section 11.

3. Information on Ingredients

Description:

RVV: Proprietary lyophilized product that contains <0.02 Units/vial of Factor X activator from Russell's Viper (D. russelii) venom

3.1 Substance

Not applicable

3.2 Mixture

Contains	CAS No.	EC-No.	Index-No.	Concentration
Factor X activator from Russell's	79393-92-3	N/A	N/A	<0.02 Units/vial *
Viper venom Dimeric Protein,				
endopeptidase				

^{*} Not hazardous at this concentration.

4. First Aid Measures

4.1 Description of First Aid Measures

General Information: No special measures required, but consult a physician if you feel unwell. Show SDS when necessary.

After Inhalation: Remove to fresh air, seek medical advice.

After Skin Contact: Wash off with plenty of soap and water. Remove contaminated clothing. Seek medical attention immediately.

After Eye Contact: Rinse with water for several minutes. Seek medical attention immediately.

After Swallowing: Immediately call a POISON CENTER/Doctor.

4.2 Most Important Symptoms & Effects

The most important known symptoms and effects are described in the labeling (see Section 2.2) and/or in Section 11.

4.3 Indication of Any Immediate Medical Attention/Special Treatment Needed

No data available.

5. Fire Fighting Measures

5.1 Extinguishing Media

Use CO2, foam, dry powder or water.

5.2 Special Hazards Arising from Substance of Mixture

No relevant information is available.

5.3 Advice for Firefighters

Wear self-contained breathing apparatus if necessary.

6. Accidental Release Measures

6.1 Personal Safety Precautions

Use appropriate personal protective equipment to prevent inhalation and/or contamination of skin, eyes, and personal clothing.

6.2 Environmental Precautions

Keep away from drains. Discharge into the environment should be avoided.

6.3 Methods and Materials for Containment/Cleanup

Soak up spilled liquid with inert absorbent material. Keep in suitable closed containers for disposal.

7. Handling and Storage

7.1 Precautions for Handling

Avoid contact with skin and eyes and particle inhalation.

7.2 Conditions for Safe Storage (Including Incompatibilities)

Keep container tightly closed in a dry and well-ventilated place. See product labeling for specific storage temperature requirements.

7.3 Specific End Use

Use as a laboratory reagent, for scientific research and development.

8. Exposure Controls/Personal Protection

8.1 Control Parameters

A limit value has not been defined for this product.

8.2 Exposure Controls

Appropriate Engineering Controls: Avoid inhalation of particulate. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and

immediately after handling product.

General Information: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or

handling.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with

multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH

(US) or CEN (EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without

touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after

use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye Protection: Use equipment for eye protection tested and approved under appropriate government standards such as

NIOSH (US) or EN 166(EU).

9. Physical and Chemical Properties

Physical State	Lyophilized solid	Color	White
Odor	Not available	Odor Threshold	Not available
рН	Not available	Melting/Freezing Point	Not available
Boiling Point	Not available	Boiling Range	Not available
Flash Point	Not available	Evaporation Rate	Not available
Flammability	Not available	Upper/Lower Flammability	Not available
Explosive Limits	Not available	Vapor Pressure	Not available
Vapor Density	Not available	Relative Density	Not available
Solubility	Soluble in water	Partition Coefficient	Not available
Auto-Ignition Temp	Not available	Decomposition Temperature	Not available
Viscosity	Not available		

10. Stability and Reactivity

10.1 Reactivity

No relevant information available.

10.2 Chemical Stability

No relevant information available.

10.3 Possibility of Hazardous Reactions

No relevant information available.

10.4 Conditions to Avoid

Heat may cause this product to decompose.

10.5 Incompatible Materials

None known.

10.6 Hazardous Decomposition Products

Nature of decomposition products is unknown.

11. Toxicological Information

11.1 Information on Toxicological Effects

Acute toxicity:

This product contains less than 0.02 Units/vial of component(s) with an unknown toxicity that has been extracted from snake venom. While not classified as hazardous material, the toxicological properties of this product have not been thoroughly investigated. This product may be harmful by inhalation, ingestion, or skin absorption.

Skin corrosion/irritation

No data available. Classification of this product is derived from the starting material (snake venom extract). This product itself has not been evaluated for this type of risk.

Serious eye damage/eye irritation:

No data available. Classification of this product is derived from the starting material (snake venom extract). This product itself has not been evaluated for this type of risk.

Respiratory or skin sensitization:

No data available. Classification of this product is derived from the starting material (snake venom extract). This product itself has not been evaluated for this type of risk.

Carcinogenicity:

No data available.

Reproductive toxicity:

No data available.

Specific target organ toxicity - single exposure:

No data available.

Specific target organ toxicity - repeated exposure:

No data available.

Aspiration hazard:

May be harmful if inhaled; may cause respiratory tract irritation.

Additional Information:

RTECS not available.

12. Ecological Information

12.1 Ecotoxicity

No relevant information available.

12.2 Persistence and degradability

No relevant information available.

12.3 Bioaccumulative potential

No relevant information available.

12.4 Mobility in soil

No relevant information available.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

No relevant information available.

13. Disposal Considerations

13.1 Waste treatment methods

Product: Disposal should be made according to official regulations.

Contaminated packaging: Dispose of as unused product.

Special precautions: Avoid dispersal of spilt material to soil, waterways, drains, and sewers.

14. Transport Information

	Land Transport (ADR/DOT)	Inland Waterway Transport (ADN)	Sea Transport (IMDG)	Air Transport (IATA)
14.1 UN Number	N/A	N/A	Not Regulated	Not Regulated
14.2 UN Proper Shipping Name	N/A	N/A	Not Regulated	Not Regulated
14.3 Transport Hazard Classes	N/A	N/A	Not Regulated	Not Regulated
14.4 Packing Group	N/A	N/A	Not Regulated	Not Regulated
14.5 Environmental Hazards	N/A	N/A	Not Regulated	Not Regulated
14.6 Special Precautions for User	No	No	No	No

^{*}Product is not considered dangerous for transport according to the above specifications.

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety, health and environmental regulations/legislation specific for the substance or mixture: Ensure all national/local regulations are observed.

REACH Restrictions - Annex XVII: The components of this product are not subject to restrictions.

REACH Authorization - Annex XIV: The components of this product are not subject to authorization.

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 311/312.

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right To Know Act.

Pennsylvania Right To Know Components: No components are subject to the Pennsylvania Right To Know Act.

New Jersey Right To Know Components: No components are subject to the New Jersey Right To Know Act.

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

15.2 Chemical Safety Assessment

For this substance, a chemical safety assessment has not been carried out.

16. Other Information

Indication of Changes

This SDS has been revised on <u>June 1, 2015</u> to reflect current requirements after the adoption of Globally Harmonized Standards and according to Regulation (EC) No 1272/2008 and Regulation (EC) No 1907/2006.

END OF SDS

Notice to reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its distributors, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

The user is responsible for determining what type of PPE is appropriate for handling these materials.

Version 2.1 Revision Date: 6/1/2015 12 | P a g e