SAFETY DATA SHEET

Section 1: Identification

Product Identifier: Pre-coated ELISA Kit Assay (Product code containing #FI symbols)
Relevant Identified Uses of Substance or Mixture and Uses Advised Against:
Recommended Use: For Research Use Only
Uses Advised against: No information

Company:
Assay Genie
25 Windsor Place
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Ireland
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For information about this SDS, please contact: techsupport@assaygenie.com

Section 2: Hazard(s) Identification

Chemical Name	Physical form	Hazardous	Concentration	CAS#
Biotinylated Detection Ab/Ag	Odorless and colorless, liquid	Proclin 300	0.05%	96118-96-6
Dilution Buffer	Odorless and colorless, liquid	Proclin 300	0.05%	96118-96-6
HRP Conjugate	Odorless and colorless, liquid	Proclin 300	0.05%	96118-96-6
Standard	Odorless and white/faint yellow Clear powder/ solid	Proclin 300	0.05%	96118-96-6
Substrate	Odorless and colorless, liquid	H_2O_2	0.1%	124-43-6
Stop solution	Slight pungent and colorless, liquid	Sulfuric acid (H_2SO_4)	2%	7664-93-9

2.1. Hazard Classification

Proclin 300

Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]
Sensitization, skin- Category 1

Signal Word(s): WARNING

Hazard Statements:
H317: May cause an allergic skin reaction.

Pictograms: Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

Precautionary Statements:
P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P333+313: If skin irritation or rash occurs: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.

Description of other hazards: None known.

Sulfuric acid (H_2SO_4)
Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]
Skin Corrosion/Irritation- Category 2
Serious eye damage/eye irritation- Category 2A

Signal Word(s): WARNING

Hazard Statements:
H315: Causes skin irritation.
H319: Causes serious eye irritation.

Pictograms: Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

Precautionary Statements:
P264: Wash hands thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact.

Description of other hazards: None known.

Hydrogen Peroxide (H_2O_2)
This product do not contain any substances above any specific or generic concentration limits according to EC directives or respective national laws.

Pictograms: None.

Other Hazards: None.

Section 3: Composition/ Information on Ingredients

Chemical Name	Concentration %	CAS#	EC#
Water	96.34 %	7732-18-5	231-791-2
Sodium chloride	0.8%	7647-14-5	231-598-3
Disodium hydrogenorthophosphate	0.12%	7558-79-4	231-448-7
Potassium chloride	0.02%	7447-40-7	231-211-8
Potassium dihydrogen orthophosphate	0.02%	7778-77-0	231-913-4
Tween 20	0.05%	9005-64-5	500-018-3
BSA	0.2%	9048-46-8	-
Proclin 300	0.05%	96118-96-6	-
Sulfuric acid (H_2SO_4)	2%	7664-93-9	231-639-5
H_2O_2	0.1%	7722-84-1	231-765-0
Citric acid	0.2%	77-92-9	201-069-1
3,3',5,5'-tetramethylbenzidine	0.1%	54827-17-7	259-364-6

Section 4: First-Aid Measures

4.1. General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

4.2. Skin contact
Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

4.3. Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

4.4. Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

4.5. Swallowing/Ingestion
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5: Fire-Fighting Measures

5.1. Suitable extinguishing agents
Water spray, alcohol-resistant foam, dry chemical, carbon dioxide or appropriate foam. For small fires, use media such as "alcohol" foam, dry chemical or carbon dioxide. For large fires, apply water from as far as possible. Use large quantities of water applied as a mist or spray. Solid streams of water may be ineffective. Cool affected containers with flooding quantities of water.

5.2. Special protective equipment for firefighters
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

5.3. Special hazards arising from the substance or mixture
Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.

Section 6: Accidental Release Measures

6.1. Personal safety precautions
Use appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2. Measures for environmental protection
Prevent further leakage or spillage if safe to do so. Do not let enter drains. Discharge into the environment must be avoided.

6.3. Measures for containment and cleaning
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Section 7: Handling and Storage

7.1. Advice Handling

- Wear appropriate protective clothing and safety gloves.
- Avoid inhalation.
- Avoid contact with eyes, skin and clothing.
- Mechanical exhaust required.

- Keep away from ignition sources, heat and flame.
- No smoking at working site.
- Incompatibilities: Strong oxidizing agents, Strong acids. Handling and unloading should be light, to prevent packaging broken, damp and cause losses.
- Working place should be equipped with appropriate varieties and quantities of firefighting equipment and leakage emergency treatment equipment.

7.2. Storage conditions

- Store in cool place. Keep container tightly closed in a dry and well-ventilated place.
- Keep away from heat, sparks and flame.
- Keep away from sources of ignition.
- Incompatible: Strong oxidizing agents, Strong acids.
- Storage place should be equipped with appropriate varieties and quantities of firefighting equipment and leakage emergency treatment equipment.

Section 8: Exposure Controls/Personal Protection

8.1. Engineering Controls

Mechanical exhaust required. Safety shower and eye bath.

8.2. Body protection

Wear suitable protective clothing according to the concentration and amount of the substance at the workplace.

8.3. Breathing equipment

Government approved respirator if needed.

8.4. Protection of hands/skin

Protective 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.

8.5. Eye/face protection

Chemical safety goggles if needed.

8.6. Other protection

No smoking, drinking and eating at working site. Wash thoroughly after handling.

Section 9: Physical and Chemical Properties

9.1. Information about the physical and chemical properties of the product

Proclin 300

- **Appearance:** Liquid
- **Odor:** No data available

- **Odor threshold:** No data available
- **pH:** 4.1 at 100 g/L
- **Melting point/melting range:** -40°C
- **Boiling point/boiling range:** 189°C
- **Flash point:** 118°C - closed cup
- **Evaporation rate:** No data available
- **Flammability:** No data available
- **Upper/lower flammability or explosive limits:** No data available
- **Auto ignition temperature:** No data available
- **Danger of explosion:** No data available
- **Vapor pressure:** No data available
- **Vapor density:** No data available
- **Relative density:** 1.03 g/cm^3
- **Solubility in/Miscibility with water:** Soluble
- **Partition coefficient:** No data available
- **Decomposition temperature:** No data available
- **Viscosity:** No data available
- **Explosive properties:** No data available

Sulfuric acid (H_2SO_4)

- **Appearance:** Colorless Liquid
- **Odor:** Pungent
- **Odor threshold:** No data available
- **pH:** ~1
- **Melting point/melting range:** No data available
- **Boiling point/boiling range:** No data available
- **Flash point:** No data available
- **Evaporation rate:** No data available
- **Flammability:** No data available
- **Upper/lower flammability or explosive limits:** No data available
- **Auto ignition temperature:** No data available
- **Danger of explosion:** No data available
- **Vapor pressure:** No data available
- **Vapor density:** No data available
- **Relative density:** No data available
- **Solubility in/Miscibility with water:** Soluble
- **Partition coefficient:** No data available
- **Decomposition temperature:** No data available
- **Viscosity:** No data available
- **Explosive properties:** No data available

Hydrongen Peroxide (H_2O_2)

- **Appearance:** Colorless liquid
- **Odor:** Odorless, or having an odor resembling that of ozone

- **Odor threshold:** No data available
- **pH:** Weak acid; H2O2 concn wt% = 35, 50, 70, 90; corresponding true pH: 4.6, 4.3,4.4,5.1
- **Melting point/freezing point:** −0.43°C
- **Boiling point/boiling range:** 126°C
- **Flash point:** Non-flammable
- **Evaporation rate:** No data available
- **Flammability:** Noncombustible Liquid, but a powerful oxidizer
- **Upper/lower flammability or explosive limits:** No data available
- **Auto ignition temperature:** No data available
- **Danger of explosion:** No data available
- **Vapor pressure:** 23.3 mm Hg (30°C)
- **Vapor density:** 1 (vs air)
- **Relative density:** 1.11g/m Lat 20°C
- **Solubility in/Miscibility with water:** Greater than or equal to 100 mg/mL at 72° F (NTP, 1992)
- **Partition coefficient:** noctanol/water: -1.36
- **Decomposition temperature:** No data available
- **Viscosity:** 1.245 centipoises (liquid)
- **Explosive properties:** No data available

Section 10: Stability and Reactivity

10.1. Information about the stability and reactivity

- **Reactivity:** No data available.
- **Chemical stability**: Stable under recommended storage conditions .
- **Conditions to avoid:** Heat, flames and sparks.
- **Incompatible materials:** Strong oxidizing agent, Light sensitive, Alcohols, Organic materials, Heavy metals, Powdered metals, Strong reducing agents, Amines, Mercaptans.
- **Possibility of hazardous reactions:** No data available.
- **Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions (Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas).

Section 11: Toxicological Information

11.1. Proclin 300

Acute toxicity:

- **Skin:** Corrosive Serious eye damage/eye irritation (Rabbit).
- **Eye:** Corrosive to eyes (Rabbit).
- **Respiratory or skin sensitization:** May cause sensitization by skin contact (Guinea Pig).
- **LD_{50} – Oral:** Rat- 862 mg/kg.
- **LD_{50} – Dermal:** Rabbit- 2,800 mg/kg.

Chronic effects:

- **Carcinogenic effects:** No component of this product present at levels greater than or equal to 0. 1% is identified as probable, possible or confirmed human carcinogen by IARC.

11.2. Sulfuric acid (H_2SO_4)

Acute toxicity:

- **Skin:** May be harmful if absorbed through skin. Can cause severe burns.
- **Eye:** Can cause severe burns.
- **Ingestion:** May be harmful if swallowed. Causes burns.
- **Inhalation:** Causes burns.
- **Respiratory or skin sensitization:** No data available
- **LD_{50} – Oral:** Rat- 1530 mg/kg.
- **LD_{50} – Dermal:** Rabbit- 2,730 mg/kg.
- **LD_{50} – Inhalation:** Rat- 850 mg/m^3 1h.

Chronic effects:

- **Carcinogenic effects:** No data available.
- **Germ cell mutagenicity:** No data available.
- **Reproductive toxicity:** No data available.
- **Aspiration hazard:** Can cause severe burns.

11.3. Hydrogen Peroxide (H_2O_2)

Acute toxicity:

- **Skin:** No data available.
- **Eye:** No data available.
- **Respiratory or skin sensitization:** No data available.
- **LD_{50} – Oral:** No data available.
- **LD_{50} – Dermal:** No data available.

Chronic effects:

- **Carcinogenic effects:** There is inadequate evidence in humans for the carcinogenicity of hydrogen peroxide. There is limited evidence in experimental animals for the carcinogenicity of hydrogen peroxide. Overall evaluation: Hydrogen peroxide is not classifiable as to its carcinogenicity to humans (Group 3).
- **Reproductive toxicity:** No data available.
- **STOT-single exposure:** The substance is corrosive to the eyes, skin and respiratory tract. Corrosive on ingestion. The vapor is severely irritating to the respiratory tract. Ingestion may cause strong foam formation with risk of asphyxiation and aspiration. Exposure to this substance may produce oxygen bubbles (embolism) in the blood, resulting in shock.
- **STOT-repeated exposure:** Repeated or chronic inhalation of the vapor may cause chronic inflammation of the upper respiratory tract. Lungs may be affected by repeated or prolonged exposure.
- **Aspiration hazard:** A harmful contamination of the air can be reached rather quickly on evaporation of this substance at 20°C.

Section 12: Ecological Information

12.1. Ecotoxicity

- **Proclin 300:** No data available.
- **Sulfuric acid (H_2SO_4):** No data available.
- **Hydrogen Peroxide (H_2O_2):** No data available.

12.2. Mobility

- **Proclin 300:** No data available.
- **Sulfuric acid (H_2SO_4):** No data available.
- **Hydrogen Peroxide (H_2O_2):** No data available.

12.3. Biodegradation

- **Proclin 300:** No data available.
- **Sulfuric acid (H_2SO_4):** No data available.
- **Hydrogen Peroxide (H_2O_2):** No data available.

12.4. Bioaccumulation

- **Proclin 300:** No data available.
- **Sulfuric acid (H_2SO_4):** No data available.
- **Hydrogen Peroxide (H_2O_2):** No data available.

12.5. Results of PBT and vPvB assessment

- **Proclin 300:** No data available.
- **Sulfuric acid (H_2SO_4):** No data available.
- **Hydrogen Peroxide (H_2O_2):** No data available.

12.6. Other adverse effects

- **Proclin 300:** No data available.
- **Sulfuric acid (H_2SO_4):** No data available.
- **Hydrogen Peroxide (H_2O_2):** No data available.

Section 13: Disposal Considerations

13.1. Waste disposal methods

Dispose of waste in accordance to applicable national, regional, or local regulations. Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

13.2. Contaminated packaging

Dispose in the same manner as unused product.

Section 14: Transport Information

- **ADR/RID** Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.
- **IATA Class:** Non-Hazardous for Air Transport.
- **IMO Class: :** Non-Hazardous for Sea Transport.

Section 15: Regulatory Information

15.1. Proclin 300

US Federal and State Regulations:

- **SARA 313 Components:** Not applicable.
- **SARA 311/312 Hazards:** Not applicable.
- **CERCLA Reportable Quantity:** Not applicable.
- **California Prop. 65 Components:** Not applicable.

15.2. Hydrogen Peroxide (H_2O_2)

US Federal and State Regulations:

- **SARA 313 Components:** Section 313 of Title III of the Superfund Amendments and Reauthorization Act of1986(SARA). This product does not contain any chemicals which are subject to there porting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
- **SARA 311/312 Hazards:**
    - **Acute Health Hazard:** No.
    - **Chronic Health Hazard:** No.
    - **Fire Hazard: No.**
    - **Sudden Release of Pressure Hazard:** No
- **Clean Water Act:** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).
- **California Prop. 65 Components:** This product does not contain any Proposition 65 chemicals.

15.3. Sulfuric acid (H_2SO_4):

US Federal and State Regulations:

- **SARA 313 Components:** Section 313 of Title III of the Superfund Amendments and Reauthorization Act of1986(SARA). This product contains a chemical or chemicals which are subject to there porting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:
    - **Sulphuric acid:** CAS# 7664-93-9, Weight 2%, SARA 313 - Threshold Values (1.0)
- **SARA 311/312 Hazards:**
    - **Acute Health Hazard:** No.
    - **Chronic Health Hazard:** No.
    - **Fire Hazard: No.**
    - **Sudden Release of Pressure Hazard:** No

- **Clean Water Act:** This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).
    - **Sulphuric acid:** CAS# 7664-93-9, CWA-Reportable (1000 lb).
- **California Prop. 65 Components:** This product contains the following Proposition 65 chemicals
    - **Sulphuric acid:** CAS# 7664-93-9, Weight 2%, Category (Carcinogen)

Section 16: Other Information

This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guild only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislation. The absence of warning must not, under and circumstance be taken to mean that no hazard exists.

Last reviewed: 07/2025

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

****End Of MSDS****