Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

QuickStep ELISA Kit

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Recommend use For research use only
Uses advised against No information available

1.3 Supplier Identification

25 Windsor Place
Dublin 2
D02 VY42
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+353 (01) 15639720

For further information please contact: ***techsupport@assaygenie.com***

Section 2: Hazards identification

Component	Physical Form	Hazardous	Concentration	CAS No.
Assay diluent	Odourless and colourless, liquid	Proclin 300	0.04%	96118-96-6
HRP Conjugate	Odourless and colourless, liquid	Proclin 300	0.04%	96118-96-6
Standard	Odourless and white/faint yellow Clear powder/solid	Proclin 300	0.04%	96118-96-6
Substrate	Odourless and colourless, liquid	Carbamide peroxide(CP)	0.05%	124-43-6
Stop solution	Slightly pungent and colourless, liquid	Sulfuric acid(H_2SO_4)	9.8%	7664-93-9

2.1 Classification of the Substance or Mixture (According to GHS)

Classification according to GHS.
Signal Word: WARNING

Danger symbol: 

2.1.1 Proclin 300

H317: May cause an allergic skin reaction.

2.1.2 Sulfuric acid (H_2SO_4)

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

2.1.3 Carbamide peroxide (CP)

H302: Harmful if swallowed.
H312: Harmful in contact with skin.
H332: Harmful if inhaled.
H335: May cause respiratory irritation.

2.2 Precaution Statement (According to GHS)

2.2.1 Proclin 300

P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.
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.

2.2.2 Sulfuric acid (H_2SO_4)

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.
P332+313: If skin irritation occurs: Get medical advice/attention.
P305+351+338: IF IN EYES: Rinse with water for several minutes. Remove contact lenses, if necessary. Continue rinsing.

2.2.3 Carbamide peroxide (CP)

P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+352: IF ON SKIN: Wash with plenty of soap and water.

Section 3: Composition/information on ingredients

Component	Percent	CAS No.	EC No.
Sodium chloride	0.8%	7647-14-5	231-598-3
Potassium chloride	0.02%	7447-40-7	231-211-8
Disodium phosphate dodecahydrate	0.12%	10039-32-4	231-448-7
Potassium dihydrogen phosphate	0.02%	7778-77-0	231-913-4
Tris	1%	77-86-1	201-064-4
EDTA	0.1%	60-00-4	200-449-4
Glycerol	5%	56-81-5	200-289-5
Tween20	0.5%	9005-64-5	500-018-3
BSA	1%	9048-46-8	--
Mannitol	2%	69-65-8	200-711-8
PVP40	0.35%	9003-39-8	--
Proclin 300	0.04%	96118-96-6	--

Carbamide peroxide(CP)	0.05%	124-43-6	204-701-4
Sulfuric acid (H_2SO_4)	1.5%	7664-93-9	231-639-5
Citric acid	0.2%	77-92-9	201-069-1
3,3',5,5' tetramethylbenzidine	0.1%	54827-17-7	259-364-6
Water	87.2%	7732-18-5	231-791-2

Section 4: First aid measures

4.1 Description of first aid measures

General advice If symptoms persist, call a physician.

Eye contact If any component of this contacts the eyes, flush the eyes with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Consult a physician.

Skin contact If any component of this kit contacts the skin, immediately wash skin with soap and copious amounts of water.

Inhalation If any component of this kit is inhaled, remove to fresh air. If not breathing, perform CPR and get immediate medical attention.

Ingestion If any component of this kit is swallowed, wash mouth out with water, provided person is conscious. Get medical attention.

4.2 Indication of any immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

Section 5: Fire-fighting measures

5.1 Extinguishing media

Flash points: N/A

Suitable extinguishing media

Suitable: 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.

Extinguishing media which shall not be used for safety reasons

No information available.

5.2 Special hazards

Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.

5.3 Advice for fire-fighters

Special protective equipment for fire-fighters

Wear NIOSH/MSHA approved self-contained breathing apparatus and protective clothing.

Section 6: Accidental release measurements

6.1 Personal precautions

Use personal protective equipment.
Avoid contact with the skin and the eyes.
Evacuate personnel to safe areas.
Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Try to prevent the material from entering drains or water courses.

6.3 Methods for containment

Prevent further leakage or spillage if safe to do so

6.4 Methods for cleaning up

Soak up with inert absorbent material.
Pick up and transfer to properly labeled containers.
After cleaning, flush away traces with water.

Section 7: Handling and storage

7.1 Advice on safe 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 minimal to prevent interference with packaging.
- Work place should be equipped with appropriate 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 firefighting equipment and leakage emergency treatment equipment.

7.3 Specific end use

Specific use(s) No information available.
Exposure scenario No information available.

Section 8: Exposure controls/personal protection

8.1 Personal Protection

Eye/face protection	Tightly fitting safety goggles. Face-shield.
Skin and body protection	Wear suitable protective clothing according to the concentration and amount of the substance at the workplace. 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.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

8.2 ACGIH/OSHA Permissible Exposure Limit Data:

Not determined

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Proclin 300:

Appearance: Liquid
Odour: No data available
Odour threshold: No data available
pH 4.1 at 100 g/L
Melting point/freezing point: -40 °C
Initial boiling point and boiling range: 189 °C
Flash point: 118 °C - closed cup
Evaporation rate: No data available
Flammability (solid, gas): No data available
Upper/lower flammability or explosive limits: No data available
Vapour pressure: No data available
Vapour density: No data available
Relative density: 1.03 g/cm^3
Water solubility: Soluble
Partition coefficient: noctanol/water: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available

Explosive properties: No data available
Oxidizing properties: No data available

Sulfuric acid (H_2SO_4):

Appearance: Colorless Liquid
Odor: Pungent
Odor threshold: No data available
pH: ~1
Melting point/freezing point: No data available
Boiling point/Boiling range: No data available
Flash point: No data available
Evaporation rate: No data available
Flammablitiy (solid, gas): No data available
Upper/lower flammability or explosive limits: No data available
Vapor density: No data available
Vapor pressure: No data available
Relative density: No data available
Solubility in/Miscibility with Water: Soluble
Partition coefficient: noctoanol/water: No data available
Auto igniting: No data available
Decomposition temperature: No data available
Viscosity: No data available

Carbamide Peroxide (CP):

Appearance: White crystalline
Odour: No data available
Odour threshold: No data available
pH: No data available
Melting point/freezing point: 90 - 93 °C - lit.
Initial boiling point and boiling range: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability (solid, gas): No data available
Upper/lower flammability or explosive limits: No data available
Vapour pressure: 23.3 mmHg at 30 °C
Vapour density: No data available
Relative density: 1.390 g/cm^3 at 20 °C
Water solubility: No data available
Partition coefficient: noctanol/water: No data available
Auto-ignition temperature: No data available
Decomposition temperature: > 60 °C
Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: The substance or mixture is classified as oxidizing with the category 3.

Other safety information: Bulk density 0.6 - 0.7 g/L

Section 10: Stability and reactivity

10.1 Reactivity

No information available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Precautionary Statements

Wash hands thoroughly after handling. Wear protective gloves, clothing and eye and face protection.

10.4 Conditions to avoid

Heat, flames and sparks

10.5 Incompatible materials

Strong oxidizing agent, Light sensitive, Alcohols, Organic materials, Heavy metals, Powdered metals, Strong reducing agents, Amines, Mercaptans.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.

10.7 Hazardous polymerization

Hazardous polymerization does not occur.

10.8 Other toxic effects on humans

May cause slight irritation in case of eye contact, inhalation or ingestion.

Section 11: Toxicological information

11.1 Proclin 300

Acute toxicity

LD_{50} Oral - Rat - 862 mg/kg

LD_{50} Dermal - Rabbit - 2,800 mg/kg

Skin corrosion/irritation

Skin - Rabbit Result: Corrosive Serious eye damage/eye irritation

Eyes - Rabbit Result: Corrosive to eyes

Respiratory or skin sensitization - Guinea pig Result: May cause sensitization by skin contact.

IARC: 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

LD_{50} Oral - Rat - 1530 mg/kg

LD_{50} Dermal - Rabbit - 2,730 mg/kg

LD_{50} Inhalation - Rat - 850 mg/m^3 1 h

Skin corrosion/irritation: Can cause severe burns

Serious eye damage/irritation: Can cause severe burns

Germ cell mutagenicity: No data available

Carcinogenicity: No data available

Reproductive toxicity: No data available

Aspiration hazard: Can cause severe burns

Ingestion: May be harmful if swallowed. Causes burns.

Skin contact: May be harmful if absorbed through skin. Causes burns.

Eye contact: Causes eye burns.

11.3 Carbamide Peroxide (CP):

LD_{50} = 4060 mg/kg (skin-rat)

IARC: 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.

Section 12: Ecological information

No data available

Section 13: Disposal considerations

Waste disposal methods

Contact a licensed professional waste disposal service to dispose of this material. This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult the appropriate state, regional, or local regulations for additional requirements.

Waste from residues / unused products	Dispose of in accordance with local regulations
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal
Other information	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

Section 14: Transport information

RID/ADR: Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA: Non-Hazardous for Air Transport.

IMO: Non-Hazardous for Sea Transport.

Section 15: Regulatory information

This material safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008 and its amendments.

Section 16: Other information

This material is sold for in vitro use or research purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. 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.

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

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