

## Material Safety Data Sheet

According to 91 / 155 EEC

Handling and disposal of the product under normal laboratory conditions does not constitute a risk to personnel or environment.

### 1/ Data on components

Regarding components comprised in the kit, the following products are defined as hazardous chemical according the Directive 67/548/EEC.

Accordingly, Material Safety Data Sheet(s) for the following chemical(s) are enclosed:

**Sodium Azide (NaN<sub>3</sub>)** at a final concentration of 0.09% or 0.9% is used as a preservative in several components of the kit.

**ProClin 300** : at a final concentration from 0.01-0.1% is used as preservatives in the following components of the kit : HRP Diluent, Streptavidin-HRP

**Sulfuric Acid** : at a final concentration is used in Stop Reagent

**TMB (Tetramethylbenzidine)** is used as chromogen in the TMB solution

**H<sub>2</sub>O<sub>2</sub>**: at a final concentration of 0.01% is used in Amplification Diluent

Other chemical contained within these products do not meet definition of a hazardous chemical according EC Directives.

### 2/ General information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. GEN-PROBE DIACLONE SAS shall not be liable for any damages resulting from handling or from contact with the above products.

## Section 1 – Identification of Substance

Product Identification: **GEN-PROBE DIACLONE High Sensitivity ELISA kits including Amplification Steps**

Cat- n° : 850 900 .../ 850 870 .../ 850 890 .../ 850 880 .../ 850 810 ...

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## Section 2 – Data on Components

Component	Ingredient	%	CAS Number	EC Number	Classification (pure ingredients)
Coated Microwell strips	-	-	-	-	NA
Standards		-	-	-	NA
Controls		-	-	-	NA
Biotin detection Antibody	NaN3	0.09%	26628-22-8	247-852-1	T+: R28, R38; N:R50/53
Streptavidin- HRP	ProClin 300	0.1%	55965-84-9	203-821-4	C:R2/21/22-34-43 N:R51/53
Standard diluent Buffer	NaN3	0.9% (Xn)	26628-22-8	247-852-1	T+: R28, R38; N:R50/53
Standard diluent : human serum	NaN3	0.09%	26628-22-8	247-852-1	T+: R28, R38; N:R50/53
Biotinylated Antibody Diluent	NaN3	0.09%	26628-22-8	247-852-1	T+: R28, R38; N:R50/53
HRP Diluent	ProClin 300	0.1%	55965-84-9	203-821-4	C:R2/21/22-34-43 N:R51/53
Amplifier	-	-	-	-	
Amplifier Diluent	Hydrogen Peroxyde	0.01%	7722-84-1	231-765-0	R5,O ; R8,C ; R35, Xn ;R20/22
Washing Buffer	-				Not Hazardous
Substrate Solution: TMB 3,3',5,5'Tetramethylbenzidine	triethylenetetramine	0.001%	54827-17-7	259-364-6	Xi:R36/37/38
Stop Reagent	Sulfuric Acid	1N	7664-93-9	231-639-5	C:R35

### Additional information

The data and advice relate to the concentrations not of the lyophilized powder, but of the prepared solution.

## Section 3 – Hazard Identification

Hazard Description: Sulfuric Acid : C Corrosive

Information concerning to particular hazards to man and environment: causes burns

Hazard description : H2O2 : Harmful if swallowed. Irritating to respiratory system and skin.  
Risk of serious damage to eyes.

Hazard Description :others : not applicable.

Information concerning to particular hazards to man and environment: not applicable.

## Section 4 - First Aid Measures

**General information:** No special measures required.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact** Generally the product does not irritate the skin.

**After eye contact** Rinse opened eye for several minutes under running water.

**After ingestion** If symptoms persist consult doctor. Do not induce vomiting

## Section 5 – Fire Fighting Measures

Suitable extinguishing agents.

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment. No special measures required.

## Section 6 – Accidental Release Measures

**Person-related safety precautions:** Not required.

**Measures for environmental protections :** Dilute with plenty of water.

Do not allow to enter sewers / surface or ground water.

**Measures for cleaning / collecting:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

## Section 7 – Handling and storage

**Handling:**

**Information for safe handling:** Avoid breathing dust, vapour, mist or gas. Avoid contact with eyes, skin and clothing. Keep container tightly closed. Use with adequate ventilation.

**Information about fire - and explosion protection:**

The product listed in this MSDS contains sodium azide, a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, concentration build-ups of sodium azide may react with lead and copper plumbing to form explosion.

**Storage:**

Requirement to be met by storerooms and receptacles: Store in a cool, dry, well ventilated area away from incompatible substances. Keep away from metal.

Information about storage in one common storage facility: Not required

Further information about storage conditions: None

Storage class: Store product and all components at 2-8°C

## Section 8 – Exposure Controls / Personal Protection

Additional information about design of technical facilities: No further data; see section

Ingredients with limit values that require monitoring at the workplace.

The product does not contain any relevant quantities of material with critical values that have to be monitored at the workplace.

**Personal protective equipment**

**General protective and hygienic measures**

The usual precautionary measures are to be adhered to when handling chemicals

**Respiratory protection:** Not required

**Protection of hands:** Protective gloves

**Eye Protection:** Goggles recommended during refilling

## Section 9 - Physical and Chemical Properties

**Form:** Liquid

**Colour:**

Components	Ingredients	Colour
Biotin Detection Antibody	NaN <sub>3</sub> (0.09%)	Colourless
Standard diluent Buffer	NaN <sub>3</sub> (0.9%)	Light Yellow
Standard diluent : human serum	NaN <sub>3</sub> (0.09%)	Opaque Yellow
Biotinylated Antibody Diluent	NaN <sub>3</sub> (0.09%)	Blue
Streptavidin-HRP	ProClin 300	Colourless
Amplifier	H <sub>2</sub> O <sub>2</sub>	Colourless
HRP Diluent	ProClin 300 (0.01%)	Colourless
Substrate TMB		Clear
Stop reagent	Sulfuric Acid	Colourless

**Odour:** Odourless

**Melting point/Melting range:** N/A

**Boiling point/Boiling range:** N/A

**Flash point:** Not applicable

**Autoignition temperature:** N/A

**Danger of explosion:** Product does not present an explosion hazard

**Density:** N/A

**Solubility in / Miscibility with water:** fully miscible

## Section 10 - Stability and Reactivity

**Thermal decomposition:** No decomposition if used according to specifications.

**Dangerous reaction :** Exothermic reaction with Water (concentrated Sulfuric Acid). Avoid contact with alkaline solutions, metal, metals powder, chlorates, nitrates, strong oxidizing or reducing materials, and combustible organic material.

**Risk**

Incompatible with bases, amines, alkali metals, copper, copper alloys (TMB)

**Dangerous decomposition products:** Toxic fumes of oxides of sulphur when heated to decomposition. Will react with water or steam to produce toxic and corrosive fumes. Reacts with carbonates to generate carbon dioxide gas, and with cyanide and sulfides to form poisonous hydrogen cyanide and hydrogen sulphide respectively. (concentrated Sulfuric Acid)

Toxic fumes of oxides of carbon monoxide, carbon dioxide, nitrous oxides, hydrogen chloride gas, hydrogen bromide gas, phosphorous oxides (TMB)

## Section 11 - Toxicological Information

**Route of entry:** Skin Contact, Eye contact, Inhalation, Ingestion.

**Effects of acute exposure to Product:**

Acute poisoning may cause gastrointestinal irritation and renal failure. May be harmful if inhaled, swallowed or absorbed through the skin.

**Effects of chronic exposure to Product:**

Chronic ingestion may result in salicylism which is characterized by nausea, vomiting, gastrointestinal ulcers, and hemorrhagic strokes. Laboratory experiments have shown mutagenic effects. Target organs: Kidneys and central nervous system.

**Exposure Limits :** N/A

**Irritancy :** N/A

**Sensitization to Product:** N/A

**Carcinogenicity :**N/A

**Terratogenicity:** N/A

**Reproductive Toxicity:** N/A

**Mutagenicity:** N/A

**Synergistic Products :** N/A

## Section 12 – Ecological Information

General Notes: hazardous for water (Sulfuric acid )

Do not allow product to reach ground water, water course or sewage system.

## Section 13 – Disposal Considerations

Waste disposal: dispose of in accordance with local official environmental regulations.

## Section 14 – Transportation Information

Special shipping information: N/A

## Section 15 – Regulations

Labelling according to European labelling guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EC Directives.

## Section 16 – Other Information

This information is prepared on our present and best knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Prepared by: Marketing Department Phone n° +33 3 81 41 38 38 Date: 24/08/2010