

According to 91/155 EEC

This Material Safety Data Sheet applies to all the Diaclone Dual ELISpot sets

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:

Fluorescein Isothiocyanate Isomer I: is used to label FITC conjugated detection antibody.

BCIP / NBT is used as liquid alkaline phosphatase substrate system.

AEC: is used as HRP substrate.

Sodium Acetate: is used in AEC buffer.

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

Directives.

Note: BSA Bovine Serum Albumine from a certified BSE-free northamerican source is comprised in the kit.

2/ General information

The above information is believed to be correct but does not purport to be al 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: Dual ELISpot set

FITC conjugated detection antibody

Manufacturer: DIACLONE SAS

1, Bd Fleming F-25000 Besançon

France

Tel: +33 3 81 41 38 38 Fax: +33 3 81 41 36 36 e-mail: info@diaclone.com www.diaclone.com

Section 2 - Data on components					
Chemical characterization: Preparation					
Hazardous ingredients:	%	CAS Number	EC Number		
Fluorescent Isothiocyanate Isomer I	< 5%	3326-32-7	222-042-0		
	Xn R42/43				

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: not applicable

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

According to 91/155 EEC

Section 4 - First Aid Measures

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

After skin contact: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated cothing and shoes

After eye contact Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lid.

After ingestion Allow the victim to rinse his mouth and then drink 2-4 cupfuls of water, and seek medical advice.

Section 5 - Fire Fighting Measures

Suitable extinguishing agents

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipement No special measures required

Section 6 - Accidental Release Measures

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.

Measures for environmental protections

Prevent seepage into sewage system, workpits and cellars.

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).

Use neutralizing agent.

Dispose contaminated material as waste according to section 13.

Ensure adequate ventilation.

Section 7- Handling and storage

Handling:

Information for safe handling: Avoid contact with eyes, skin and clothing. Keep container tightly closed. Use with **Information about fire - and explosion protection:**

The product listed in this MSDS contains sodium azide, a chemical highly toxic in pure form. At product

Storage:

Requirement to be met by storerooms and receptables: Store in a cool, dry, well-ventilated area. Information about storage in one common storage facility: Keep in tightly closed container.

Further information about storage conditions: None

Storage class:

Class according to regulation on flammable liquids: void

Section 8 - Exposure Controls / Personal Protection

01/08/2010

Additional information about design of technical facilities: No further data; see section 7

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

According to 91/155 EEC

Section 9 - Physical and Chemical Properties

Form: Liquid Colour: pale yellow 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

Densitiy: N/A

Solubility in / Miscibility with

water: fully miscible

Section 10 - Stability and Reactivity

Thermal decomposition: No decomposition if used according to specifications

Reactivity and under what conditions: Incompatible with alcohols, bases, amines, acides.

Dangerous decomposition products:

Toxic fumes of carbon monoxide, carbon dioxide and nitrous oxides.

Section 11 - Toxicological Information

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

Effects of acute exposure to Product:

Nocif in case of ingestion, inhlation or skin contact.

Irritant effect on the skin, and eyes.

Effects of chronic exposure to Product:

Long term exposure may cause asthma, nausea, dizzi and headache.

Exposure Limits Irritancy Sensitization To Product Carcinogenicity

N/A N/A N/A

Terratogenicity Reproductive Toxicity Mutagenicity Synergistic Products

N/A N/A N/A

Section 12 - Ecological Information

General Notes: Information not yet available

Section 13 - Disposal considerations

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

Section 14 - Transport Information

Special shipping information: N/A

Section 15 - Regulations

Labelling according to European labelling guidelines:

Observe the general safety regulations when handling chemicals.

Section 16 - Other information

This information is prepared on our present 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: 01 August 2010

According to 91/155 EEC

Section 1 - Identification of substance

Product Identification: Dual ELISpot set

Ready-to-use BCIP/NBT substrate buffer

Manufacturer: DIACLONE SAS

1, Bd Fleming F-25000 Besançon

France

Tel: +33 3 81 41 38 38 Fax: +33 3 81 41 36 36 e-mail: info@diaclone.com www.diaclone.com

Section 2 - Data on components

Chemical characterization: Preparation

Hazardous ingredients:	%	CAS Number	EC Number
BCIP (5-Bromo-4-chloro-3-indoxyl phosphate)	0,03% w/v	6578-06-9	229-506-1
	Xi;R36/37/38		
NBT (Nitro blue tetrazolium chloride)	0,06% w/v	298-83-9	206-067-4

Xn R20/21/22-68

Section 3 - Hazard Identification

Hazard Description: harmful

Irritating to eyes, repsiratory system and skin

Harmful if swallowed, inhalated or absorbed through skin.

Avoid contact with metals. Air and light sensitive Refrigerate for best storage

Section 4 - First Aid Measures

After skin contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

After eye contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lid.

After ingestion <u>Do not</u> induce vomiting; allow the victim to rinse his mouth and then drink 2-4 cupfuls of water, and seek medical advice.

Section 5 - Fire Fighting Measures

Suitable extinguishing agents

Use dry chemical, carbon dioxyde or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipement No special measures required

Section 6 - Accidental Release Measures

Person-related safety precautions: Not required.

Measures for environmental protections:

Evacuate area and ventilate area.

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Absorb on sand or vermiculite and place in closed containers for waste disposal.

Avoid splashing.

Section 7- Handling and storage

Refer to section 8.

Section 8 - Exposure Controls / Personal Protection

According to 91/155 EEC

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

Chemical safety goggles.

Use only in a chemical fume hood.

Compatible resistant gloves.

Avoid any skin or clothing contact.

Wash thoroughly after handling.

Keep tightly closed and refrigerate.

Section 9 - Physical and Chemical Properties

Form: Liquid

Colour: Clear to very pale yellow solution

Odour: Odourless

Melting point/Melting range: 0°C (water) Boiling point/Boiling range: 100°C (water)

Flash point: Not applicable Autoignition temperature: N/A

Danger of explosion: Product does not present an explosion hazard

Densitiy: N/A

Solubility in / Miscibility with

water: fully miscible

Section 10 - Stability and Reactivity

Thermal decomposition: No decomposition if used according to specifications

Reactivity and under what conditions:

Incompatibles with bases, amines, alkali metals, copper, copper alloys

Hazardous decomposition products

Toxic fumes of carbon monoxyde, carbon dioxyde, nitrous oxydes, hydrogen chloride gas, hydrogen bromide gas, phosphorous oxydes.

Section 11 - Toxicological Information

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

Effects of acute exposure to Product:

Harmful if swallowed, inhaled or absorbed through skin. Cause eyes adn skin irritation.

Material is irritating and destructive to tissue of the mucous membranes and upper respiratory tract.

Effects of chronic exposure to Product:

To the best of our knowledge, the chemical, physical and toxicological properties have not been throughly tested.

Section 12 - Ecological Information

General Notes: N/A

Section 13 - Disposal considerations

Waste disposal:

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equiped with an after burner and scrubber.

Observe all local official environmental regulations.

Section 14 - Transport Information

Special shipping information:

Does not need to be shipped as hazardous.

Section 15 - Regulations

Labelling according to European labelling guidelines:

Observe the general safety regulations when handling chemicals.

Section 16 - Other information

This information is prepared on our present 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: 01 August 2010

According to 91/155 EEC

Section 1 - Identification of substance

Product Identification: Dual ELISpot set

AEC Substrate

Manufacturer: DIACLONE SAS

1, Bd Fleming F-25000 Besançon

France

Tel: +33 3 81 41 38 38 Fax: +33 3 81 41 36 36 e-mail: info@diaclone.com www.diaclone.com

Section 2 - Data on components

Chemical characterization: Preparation

Hazardous ingredients:	%	CAS Number	EC Number
AEC 3-Amino-9-ethylcarbazole	2% w/v	132-32-1	205-057-7
	T, Carc. Cat		
Sodium acetate		127-09-3	N/A

Section 3 - Hazard Identification

Hazard Description: harmful if swallowed, inhaled or absorbed through skin.

May cause skin irritation.

Section 4 - First Aid Measures

After skin contact: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

After eye contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lid.

After ingestion Wash out mouth with water provided and then drink 2-4 cupfuls of water, and seek medical advice.

Section 5 - Fire Fighting Measures

Suitable extinguishing agents

Use dry chemical, carbon dioxyde or water spray. Fight larger fires with water spray or alcohol resistant foam. **Protective equipement** Use respirator and protective clothing. Toxic fumes could be emitted when water is evaporated with fire.

Section 6 - Accidental Release Measures

Person-related safety precautions: Not required.

Measures for environmental protections:

Evacuate area and ventilate area.

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Absorb on sand or vermiculite and place in closed containers for waste disposal.

Avoid splashing.

Section 7- Handling and storage

Refer to section 8.

Section 8 - Exposure Controls / Personal Protection

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

Chemical safety goggles.

Compatible resistant gloves.

Avoid any skin or clothing contact.

Wash thoroughly after handling.

Keep tightly closed and refrigerate.

According to 91/155 EEC

Section 9 - Physical and Chemical Properties

Form: Liquid

Colour: Clear deep reddish solution

Odour: Odourless

Melting point/Melting range: 0°C (water)
Boiling point/Boiling range: 100°C (water)

Flash point: Not applicable Autoignition temperature: N/A

Danger of explosion: Product does not present an explosion hazard

Densitiy: N/A

Solubility in / Miscibility with

water: fully miscible

Section 10 - Stability and Reactivity

Thermal decomposition: No decomposition if used according to specifications

Reactivity and under what conditions:

Incompatibles with strong oxidating agents and strong bases.

Hazardous decomposition products

Toxic fumes of carbon monoxyde, carbon dioxyde.

Section 11 - Toxicological Information

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

Effects of acute exposure to Product:

Harmful if swallowed, inhaled or absorbed through skin. May cause irritation.

Effects of chronic exposure to Product:

Carcinogen.

Lab experiments have shown mutagenic effects.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Effects of overexposure:

INHALATION: Adverse health effects from vapors and spray mists in poorly ventilated areas may include irritation of the mucous membranes of the nose, throat, respiratory tract and symptoms of headache and nausea.

SKIN CONTACT: Avoid all contact. May cause cancer.

EYE CONTACT: Avoid all contact.

Section 12 - Ecological Information

General Notes: N/A

Section 13 - Disposal considerations

Waste disposal:

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equiped with an after burner and scrubber.

Observe all local official environmental regulations.

Section 14 - Transport Information

Special shipping information:

Does not need to be shipped as hazardous.

Section 15 - Regulations

Labelling according to European labelling guidelines:

Observe the general safety regulations when handling chemicals.

Section 16 - Other information

This information is prepared on our present 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: 01 August 2010