



04/05/2010

Kit Components

Product code	Description
197-1100	Novapath HIV-1 10 and 30 Kits Obsolete Kit
197-1101	

Components:

197-1008	Novapath HIV-1 Immunoblot Substrate Solution Obsolete Product
197-1009	Novapath HIV-1 Iblot Wash/Diluent Concentrate Obsolete Product
197-1010	Novapath HIV-1 AntiHuman IgG Enzyme Conjugate Obsolete Product
197-1011	Novapath HIV-1 Immunoblot Reactive 1 R1 Obsolete Product
197-1012	Novapath HIV-1 Immunoblot Reactive 2 R2 Obsolete Product
197-1013	Novapath HIV-1 Immunoblot NR Non-Reactive Obsolete Product
197-1015	Novapath Iblot HIV-1 Nitrocellulose Strips Obsolete Product

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

1 Identification of substance:

- **Product details:**
- **Trade name:** Novapath HIV-1 Immunoblot Substrate Solution
- **Catalog or product number:** 197-1008
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
4000 Alfred Nobel Drive
Hercules, California 94547 1(510)724-7000
- **Information department:** Technical services, customer support.
- **Emergency information:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Composition/Information on components:

- **Chemical characterization:**
- **CAS No. Description:**
7732-18-5 water
- **Identification number(s):**
- **EINECS Number:** 231-791-2
- **Additional information:** For the wording of the listed risk phrases refer to section 15.
- **Chemical characterization**

· **Listing of dangerous and non-hazardous components:**

77-86-1	Tris(hydroxymethyl)aminomethane	Xn, Xi; R 22-36	1.0-2.5%
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3 Hazards identification

- **Emergency overview:**
Contains a component that may be fetotoxic and/or teratogenic.
T Toxic
- **Information pertaining to particular dangers for man and environment**
R 61 May cause harm to the unborn child
- **Classification system**
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.
- **NFPA ratings (scale 0-4)**
Health = 0
Fire = 0
Reactivity = 0

4 First aid measures

- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.

(Contd. on page 2)

DUS

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot Substrate Solution

(Contd. of page 1)

· **After swallowing** Induce vomiting and call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Not required
- **Measures for environmental protection:** Dilute with plenty of water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Open and handle receptacle with care.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Components with limit values that require monitoring at the workplace:**

68-12-2 N,N-dimethylformamide

PEL (United States)	30 mg/m ³ , 10 ppm Skin
REL (United States)	30 mg/m ³ , 10 ppm Skin
TLV (United States)	30 mg/m ³ , 10 ppm Skin; BEI

26628-22-8 sodium azide

REL (United States)	Short-term value: C 0.3** mg/m ³ , C 0.1* ppm *as HN3 vapor; **as NaN3; Skin
TLV (United States)	Short-term value: C 0.29** mg/m ³ , C 0.11* ppm *as HN3 vapor **as NaN3

· **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 3)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot Substrate Solution

(Contd. of page 2)

- **Personal protective equipment**
- **General protective and hygienic measures**
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing
 Wash hands before breaks and at the end of work.
 Store protective clothing separately.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves**
 The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
 Synthetic gloves
- **Penetration time of glove material**
 The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form:	Liquid
Color:	Colorless
Odor:	Odorless

· **Change in condition**

Melting point/Melting range: 0°C
Boiling point/Boiling range: 100°C

- | | |
|-------------------------------------------|-----------------------------------------------|
| · Flash point: | Not applicable |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Vapor pressure at 20°C: | 23 hPa |
| · Density at 20°C: | 1 g/cm ³ |
| · Solubility in / Miscibility with | |
| Water: | Fully miscible |
| · pH-value at 20°C: | 9.6 |
| · Organic solvents: | 0.0 % |
| · Water: | 97.7 % |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions**
 This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.

(Contd. on page 4)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot Substrate Solution

(Contd. of page 3)

· **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values for hazardous components per OSHA criteria:**

68-12-2 N,N-dimethylformamide

Oral	LD50	7600 mg/kg (rat)
Dermal	LD50	5000 mg/kg (rbt)
Inhalative	LC50/4 h	9400 mg/l (mus)

· **Primary irritant effect:**

· **on the skin:** No irritant effect.

· **on the eye:** No irritant effect.

· **Sensitization:** No sensitizing effects known.

12 Ecological information:

· **Additional ecological information:**

· **General notes:** Generally not hazardous for water.

13 Disposal considerations

· **Product:**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to hazardous waste disposers.

Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

· **DOT regulations:**

· **Hazard class:** -

· **Land transport ADR/RID (cross-border)**

· **ADR/RID class:** -

· **Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

(Contd. on page 5)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot Substrate Solution

(Contd. of page 4)

- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -

15 Regulations

- SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)

- Section 302/304 (40CFR355.30 / 40CFR355.40):

Substance not listed.

- Section 313 (40CFR372.65):

68-12-2 | N,N-dimethylformamide

- TSCA (Toxic Substances Control Act):

Substance is listed.

- Carcinogenic categories

- IARC (International Agency for Research on Cancer)

68-12-2 | N,N-dimethylformamide

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- NTP (National Toxicology Program)

Substance is not listed.

- OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

- Markings according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

- Code letter and hazard designation of product:

T Toxic

- Risk phrases:

61 May cause harm to the unborn child

- Safety phrases:

53 Avoid exposure - obtain special instructions before use.

20 When using do not eat or drink.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately.

- National regulations

- Technical instructions (air):

Class	Share in %
NK	1.0-2.5

- Water hazard class: Generally not hazardous for water.

16 Other information:

This information is based 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.

(Contd. on page 6)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot Substrate Solution

(Contd. of page 5)

· **Department issuing MSDS:** Environmental Health and Safety.

· **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· * **Data compared to the previous version altered.**

DUS

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

1 Identification of substance:

- **Product details:**
- **Trade name:** Novapath HIV-1 Iblot Wash/Diluent Concentrate
- **Catalog or product number:** 197-1009
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
4000 Alfred Nobel Drive
Hercules, California 94547
1(510)724-7000
- **Information department:** Technical services, customer support.
- **Emergency information:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Composition/Information on components:

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with non-hazardous additions.

· **Listing of dangerous and non-hazardous components:**

7732-18-5	water		50-100%
7647-14-5	sodium chloride	Xi; R 36/38	5-10%
9005-64-5	Tween 20		2.5-5%
77-86-1	Tris(hydroxymethyl)aminomethane	Xn, Xi; R 22-36	1.0-2.5%
26628-22-8	sodium azide	T+, N; R 28-32-50/53	0.01-0.1%

- **Additional information** For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

- **Emergency overview:**
Xn Harmful
- **Routes of exposure:** Ingestion
- **Information pertaining to particular dangers for man and environment**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
R 22 Harmful if swallowed.
R 32 Contact with acids liberates very toxic gas.
- **Classification system**
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.

4 First aid measures

- **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.

(Contd. on page 2)

DUS

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 Iblot Wash/Diluent Concentrate

(Contd. of page 1)

- **After skin contact** Generally the product does not irritate the skin.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Immediately call a doctor.
- **Information for doctor**
- **The following symptoms may occur:** Breathing difficulty

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Mount respiratory protective device.
- **Measures for environmental protection:**
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).
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**

7647-01-0 hydrochloric acid

PEL (United States)	Short-term value: C 7 mg/m ³ , C 5 ppm
REL (United States)	Short-term value: C 7 mg/m ³ , C 5 ppm
TLV (United States)	Short-term value: C 2.98 mg/m ³ , C 2 ppm

26628-22-8 sodium azide

REL (United States)	Short-term value: C 0.3** mg/m ³ , C 0.1* ppm *as HN3 vapor; **as NaN3; Skin
TLV (United States)	Short-term value: C 0.29** mg/m ³ , C 0.11* ppm *as HN3 vapor **as NaN3

- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 3)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 Iblot Wash/Diluent Concentrate

(Contd. of page 2)

- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form:	liquid
Color:	Yellow
Odor:	Odorless

· **Change in condition**

Melting point/Melting range: undetermined
Boiling point/Boiling range: 100°C

· **Flash point:** Not applicable

· **Auto igniting:** Product is not selfigniting.

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

· **Vapor pressure at 20°C:** 23 hPa

· **Density:** Not determined

· **Solubility in / Miscibility with**

Water: Fully miscible

· **pH-value at 20°C:** 7.5

· **Solvent content:**

Organic solvents:	0.0 %
Water:	80.9 %

Solids content: 5.0 %

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Materials to be avoided:**

· **Dangerous reactions**

This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.

· **Dangerous products of decomposition:** No dangerous decomposition products known

DUS
(Contd. on page 4)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 Iblot Wash/Diluent Concentrate

(Contd. of page 3)

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
 The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
 The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
 Harmful

12 Ecological information:

- **Additional ecological information:**
- **General notes:**
 Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
 Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations

- **Product:**
- **Recommendation**
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
 Hand over to hazardous waste disposers.
 Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:** No

15 Regulations

- **SARA (Superfund Amendants and Reauthorization Act of 1986 - USA)**

· **Section 302/304 (40CFR355.30 / 40CFR355.40):**

7647-01-0	hydrochloric acid
26628-22-8	sodium azide

· **Section 313 (40CFR372.65):**

7647-01-0	hydrochloric acid
26628-22-8	sodium azide

(Contd. on page 5)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 Iblot Wash/Diluent Concentrate

(Contd. of page 4)

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

7647-01-0 hydrochloric acid

3

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

· Markings according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

· Code letter and hazard designation of product:

Xn Harmful

· Hazard-determining components of labelling:

sodium azide

· Risk phrases:

22 Harmful if swallowed.

32 Contact with acids liberates very toxic gas.

· Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36 Wear suitable protective clothing.

45 In case of accident or if you feel unwell, seek medical advice immediately.

· National regulations

· Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information:

This information is based 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.

· Department issuing MSDS: Environmental Health and Safety.

· Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

*** Data compared to the previous version altered.**

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

1 Identification of substance:

- **Product details:**
- **Trade name:** Novapath HIV-1 AntiHuman IgG Enzyme Conjugate
- **Catalog or product number:** 197-1010
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
4000 Alfred Nobel Drive
Hercules, California 94547
1(510)724-7000
- **Information department:** Technical services, customer support.
- **Emergency information:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Composition/Information on components:

- **Chemical characterization:**
- **CAS No. Description:**
7732-18-5 water
- **Identification number(s):**
- **EINECS Number:** 231-791-2
- **Additional information:** For the wording of the listed risk phrases refer to section 15.
- **Chemical characterization**

· **Listing of dangerous and non-hazardous components:**

26628-22-8	sodium azide	T+, N; R 28-32-50/53	0.01-0.1%
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3 Hazards identification

- **Emergency overview:**
Xn Harmful
- **Routes of exposure:** Ingestion
- **Information pertaining to particular dangers for man and environment**
R 22 Harmful if swallowed.
- **Classification system**
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.

4 First aid measures

- **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **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 swallowing** Immediately call a doctor.

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(Contd. on page 2)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 AntiHuman IgG Enzyme Conjugate

(Contd. of page 1)

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required
- **Measures for environmental protection:** Dilute with plenty of water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

7647-01-0 hydrochloric acid

PEL (United States)	Short-term value: C 7 mg/m ³ , C 5 ppm
REL (United States)	Short-term value: C 7 mg/m ³ , C 5 ppm
TLV (United States)	Short-term value: C 2.98 mg/m ³ , C 2 ppm

26628-22-8 sodium azide

REL (United States)	Short-term value: C 0.3** mg/m ³ , C 0.1* ppm *as HN3 vapor; **as NaN3; Skin
TLV (United States)	Short-term value: C 0.29** mg/m ³ , C 0.11* ppm *as HN3 vapor **as NaN3

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves

(Contd. on page 3)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 AntiHuman IgG Enzyme Conjugate

(Contd. of page 2)

- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form:	liquid
Color:	Colorless
Odor:	Odorless

· **Change in condition**

Melting point/Melting range: 0°C
Boiling point/Boiling range: 100°C

· **Flash point:** Not applicable

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

· **Vapor pressure at 20°C:** 23 hPa

· **Density at 20°C:** 1 g/cm³

· **Solubility in / Miscibility with**

Water: Fully miscible

· **pH-value at 20°C:** 7

· **Organic solvents:** 0.0 %

· **Water:** 97.7 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions**
This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effects known.

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 AntiHuman IgG Enzyme Conjugate

(Contd. of page 3)

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers. Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:** No

15 Regulations

- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

7647-01-0	hydrochloric acid
26628-22-8	sodium azide

- **Section 313 (40CFR372.65):**

7647-01-0	hydrochloric acid
26628-22-8	sodium azide

- **TSCA (Toxic Substances Control Act):**

Substance is listed.

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

7647-01-0	hydrochloric acid	3
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- **NTP (National Toxicology Program)**

Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

- **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

(Contd. on page 5)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 AntiHuman IgG Enzyme Conjugate

(Contd. of page 4)

- **Code letter and hazard designation of product:**
Xn Harmful
- **Risk phrases:**
22 Harmful if swallowed.
- **Safety phrases:**
36 Wear suitable protective clothing.
- **National regulations**
- **Water hazard class:** *Generally not hazardous for water.*

16 Other information:

This information is based 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.

- **Department issuing MSDS:** *Environmental Health and Safety.*
- **Contact:**
Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- *** Data compared to the previous version altered.**

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

1 Identification of substance:

- **Product details:**
- **Trade name:** Novapath HIV-1 Immunoblot Reactive 1 R1
- **Catalog or product number:** 197-1011
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
4000 Alfred Nobel Drive
Hercules, California 94547
1(510)724-7000
- **Information department:** Technical services, customer support.
- **Emergency information:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Composition/Information on components:

- **Chemical characterization:**
- **CAS No. Description:**
Inactivated HIV Positive Serum/Plasma
- **Additional information:** For the wording of the listed risk phrases refer to section 15.
- **Chemical characterization**

· **Listing of dangerous and non-hazardous components:**

26628-22-8	sodium azide	T+, N; R 28-32-50/53	0.01-0.1%
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3 Hazards identification

- **Emergency overview:**
Xn Harmful
- **Routes of exposure:** Ingestion
- **Information pertaining to particular dangers for man and environment**
R 22 Harmful if swallowed.
R 32 Contact with acids liberates very toxic gas.
- **Classification system**
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.

4 First aid measures

- **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **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. Then consult a doctor.
- **After swallowing** Immediately call a doctor.

(Contd. on page 2)

DUS

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 Immunoblot Reactive 1 R1

(Contd. of page 1)

- **Information for doctor**
- **The following symptoms may occur:** Breathing difficulty

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Mount respiratory protective device.
- **Measures for environmental protection:** Dilute with plenty of water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

26628-22-8 sodium azide

REL (United States)	Short-term value: C 0.3** mg/m ³ , C 0.1* ppm *as HN ₃ vapor; **as NaN ₃ ; Skin
TLV (United States)	Short-term value: C 0.29** mg/m ³ , C 0.11* ppm *as HN ₃ vapor **as NaN ₃

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.

(Contd. on page 3)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 Immunoblot Reactive 1 R1

(Contd. of page 2)

- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form:	liquid
Color:	Opaque
Odor:	Odorless

· **Change in condition**

Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

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

· **Density:** Not determined

· **Solubility in / Miscibility with**

Water:	Fully miscible
Organic solvents:	0.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions**
This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effects known.

DUS

(Contd. on page 4)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 Immunoblot Reactive 1 R1

(Contd. of page 3)

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers. Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:** No

15 Regulations

- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

26628-22-8 sodium azide

- **Section 313 (40CFR372.65):**

26628-22-8 sodium azide

- **TSCA (Toxic Substances Control Act):**

26628-22-8 sodium azide

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

- **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

- **Code letter and hazard designation of product:**

Xn Harmful

- **Risk phrases:**

22 Harmful if swallowed.

(Contd. on page 5)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath HIV-1 Immunoblot Reactive 1 R1

(Contd. of page 4)

32 Contact with acids liberates very toxic gas.

· Safety phrases:

20 When using do not eat or drink.

23 Do not breathe fumes

25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

· National regulations

· **Water hazard class:** Generally not hazardous for water.

16 Other information:

This information is based 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.

· **Department issuing MSDS:** Environmental Health and Safety.

· Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· *** Data compared to the previous version altered.**

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

1 Identification of substance:

- **Product details:**
- **Trade name:** Novapath HIV-1 Immunoblot Reactive 2 R2
- **Catalog or product number:** 197-1012
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
4000 Alfred Nobel Drive
Hercules, California 94547
1(510)724-7000
- **Information department:** Technical services, customer support.
- **Emergency information:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Composition/Information on components:

- **Chemical characterization:**
- **CAS No. Description:**
Inactivated HIV Positive Serum/Plasma
- **Additional information:** For the wording of the listed risk phrases refer to section 15.
- **Chemical characterization**

· **Listing of dangerous and non-hazardous components:**

26628-22-8	sodium azide	T+, N; R 28-32-50/53	0.01-0.1%
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3 Hazards identification

- **Emergency overview:**
Xn Harmful
- **Routes of exposure:** Ingestion
- **Information pertaining to particular dangers for man and environment**
R 22 Harmful if swallowed.
R 32 Contact with acids liberates very toxic gas.
- **Classification system**
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.

4 First aid measures

- **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **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. Then consult a doctor.
- **After swallowing** Immediately call a doctor.

(Contd. on page 2)

DUS

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot Reactive 2 R2

(Contd. of page 1)

- **Information for doctor**
- **The following symptoms may occur:** Breathing difficulty

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Mount respiratory protective device.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with limit values that require monitoring at the workplace:**

26628-22-8 sodium azide

REL (United States)	Short-term value: C 0.3** mg/m ³ , C 0.1* ppm *as HN ₃ vapor; **as NaN ₃ ; Skin
TLV (United States)	Short-term value: C 0.29** mg/m ³ , C 0.11* ppm *as HN ₃ vapor **as NaN ₃

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.

(Contd. on page 3)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot Reactive 2 R2

(Contd. of page 2)

- **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form:	liquid
Color:	Opaque
Odor:	Odorless

· **Change in condition**

Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

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

· **Density:** Not determined

· **Solubility in / Miscibility with**

Water:	Fully miscible
Organic solvents:	0.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions**
This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effects known.

DUS

(Contd. on page 4)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot Reactive 2 R2

(Contd. of page 3)

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.
Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:** No

15 Regulations

- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

26628-22-8	sodium azide
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- **Section 313 (40CFR372.65):**

26628-22-8	sodium azide
------------	--------------

- **TSCA (Toxic Substances Control Act):**

26628-22-8	sodium azide
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- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

- **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

- **Code letter and hazard designation of product:**

Xn Harmful

- **Risk phrases:**

22 Harmful if swallowed.

(Contd. on page 5)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot Reactive 2 R2

(Contd. of page 4)

32 Contact with acids liberates very toxic gas.

· Safety phrases:

20 When using do not eat or drink.

23 Do not breathe fumes

25 Avoid contact with eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

· National regulations

· **Water hazard class:** Generally not hazardous for water.

16 Other information:

This information is based 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.

· **Department issuing MSDS:** Environmental Health and Safety.

· Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· *** Data compared to the previous version altered.**

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

1 Identification of substance:

- **Product details:**
- **Trade name:** Novapath HIV-1 Immunoblot NR Non-Reactive
- **Catalog or product number:** 197-1013
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
4000 Alfred Nobel Drive
Hercules, California 94547 1(510)724-7000
- **Information department:** Technical services, customer support.
- **Emergency information:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Composition/Information on components:

- **Chemical characterization:**
- **CAS No. Description:**
Human Source Material
- **Identification number(s):**
- **EINECS Number:** 268-338-3
- **Additional information:** For the wording of the listed risk phrases refer to section 15.
- **Chemical characterization**

· **Listing of dangerous and non-hazardous components:**

26628-22-8	sodium azide	T+, N; R 28-32-50/53	0.01-0.1%
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3 Hazards identification

- **Emergency overview:**
Xn Harmful
- **Routes of exposure:** Ingestion
- **Information pertaining to particular dangers for man and environment**
R 22 Harmful if swallowed.
R 32 Contact with acids liberates very toxic gas.
- **Classification system**
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.

4 First aid measures

- **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Immediately call a doctor.

(Contd. on page 2)

DUS

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot NR Non-Reactive

(Contd. of page 1)

- **Information for doctor**
- **The following symptoms may occur:** Breathing difficulty

5 Fire fighting measures

- **Suitable extinguishing agents**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Person-related safety precautions:** Mount respiratory protective device.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

Components with limit values that require monitoring at the workplace:

26628-22-8 sodium azide

REL (United States)	Short-term value: C 0.3** mg/m ³ , C 0.1* ppm *as HN3 vapor; **as NaN3; Skin
TLV (United States)	Short-term value: C 0.29** mg/m ³ , C 0.11* ppm *as HN3 vapor **as NaN3

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves

(Contd. on page 3)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot NR Non-Reactive

(Contd. of page 2)

- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form:	liquid
Color:	Opaque
Odor:	Odorless

· **Change in condition**

Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined

· **Flash point:** Not applicable

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

· **Density:** Not determined

· **Solubility in / Miscibility with**

Water:	Fully miscible
Organic solvents:	0.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions**
This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot NR Non-Reactive

(Contd. of page 3)

13 Disposal considerations

- **Product:**
- **Recommendation**
*Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
 Hand over to hazardous waste disposers.
 Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.*
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*

14 Transport information

- **Maritime transport IMDG:**
- **Marine pollutant:** No

15 Regulations

- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

26628-22-8	sodium azide
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- **Section 313 (40CFR372.65):**

26628-22-8	sodium azide
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- **TSCA (Toxic Substances Control Act):**

26628-22-8	sodium azide
------------	--------------

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

- **NTP (National Toxicology Program)**

Substance is not listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

- **Markings according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

- **Code letter and hazard designation of product:**

Xn Harmful

- **Risk phrases:**

22 Harmful if swallowed.
 32 Contact with acids liberates very toxic gas.

- **Safety phrases:**

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 28 After contact with skin, wash immediately with plenty of soap and water
 36/39 Wear suitable protective clothing and eye/face protection.

(Contd. on page 5)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Novapath HIV-1 Immunoblot NR Non-Reactive

(Contd. of page 4)

- **National regulations**
- **Water hazard class:** Generally not hazardous for water.

16 Other information:

This information is based 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.

- **Department issuing MSDS:** Environmental Health and Safety.

- **Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

- *** Data compared to the previous version altered.**

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

1 Identification of substance:

- **Product details:**
- **Trade name:** Novapath Iblot HIV-1 Nitrocellulose Strips
- **Catalog or product number:** 197-1015
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Diagnostic Group
4000 Alfred Nobel Drive
Hercules, California 94547
1(510)724-7000
- **Information department:** Technical services, customer support.
- **Emergency information:**
1(800) 424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION, or ACCIDENT.

2 Composition/Information on components:

- **Chemical characterization:**
- **CAS No. Description:**
Nitrocellulose membrane
- **Additional information:** For the wording of the listed risk phrases refer to section 15.

3 Hazards identification

- **Emergency overview:** Flammable.
- **Information pertaining to particular dangers for man and environment**
R 10 Flammable.
- **Classification system**
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.
- **NFPA ratings (scale 0-4)**
Health = 0
Fire = 1
Reactivity = 0

4 First aid measures

- **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 swallowing** Induce vomiting and call for medical help.

5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Protective equipment:** No special measures required.

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath Iblot HIV-1 Nitrocellulose Strips

(Contd. of page 1)

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment (See section 8). Keep unprotected persons away.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** Pick up mechanically.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
No special measures required.
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures** Wash hands before breaks and at the end of work.
- **Protection of hands:** Protective gloves.
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Synthetic gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
Safety glasses
Tightly sealed goggles.

9 Physical and chemical properties:

General Information

Form:	Solid material.
Color:	White
Odor:	Odorless

(Contd. on page 3)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath Iblot HIV-1 Nitrocellulose Strips

(Contd. of page 2)

- **Change in condition**
Melting point/Melting range: undetermined
Boiling point/Boiling range: undetermined
- **Flash point:** > 100°C
- **Flammability (solid, gaseous)** Flammable.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density at 20°C:** 1.68 g/cm³
- **Solubility in / Miscibility with**
Water: Insoluble
Organic solvents: 0.0 %
- **Solids content:** 100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values for hazardous components per OSHA criteria:**

Nitrocellulose membrane

Oral LD50 >5000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effects known.

12 Ecological information:

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation** Hand over to hazardous waste disposers.

(Contd. on page 4)

Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Novapath Iblot HIV-1 Nitrocellulose Strips

(Contd. of page 3)

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **DOT regulations:**
 - **Hazard class:** 4.1
 - **Identification number:** UN3270
 - **Packing group:** II
 - **Proper shipping name (technical name):** NITROCELLULOSE MEMBRANE FILTER
 - **Label:** 4.1
-
- **Land transport ADR/RID (cross-border)**
 - **ADR/RID class:** 4.1 Flammable solids, self-reactive substances and solid desensitised explosives
 - **UN-Number:** 1325
 - **Label:** 4.1
 - **Description of goods:** 1325 FLAMMABLE SOLID, ORGANIC, N.O.S. (Nitrocellulose membrane)
-
- **Maritime transport IMDG:**
 - **IMDG Class:** 4.1
 - **UN Number:** 3270
 - **Label:** 4.1
 - **Packing group:** II
 - **Marine pollutant:** No
 - **Proper shipping name:** NITROCELLULOSE MEMBRANE FILTER
-
- **Air transport ICAO-TI and IATA-DGR:**
 - **ICAO/IATA Class:** 4.1
 - **UN/ID Number:** 3270
 - **Label:** 4.1
 - **Packing group:** II
 - **Proper shipping name:** NITROCELLULOSE MEMBRANE FILTER

15 Regulations

· **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

· **Section 302/304 (40CFR355.30 / 40CFR355.40):**

Substance not listed.

· **Section 313 (40CFR372.65):**

Substance is not listed.

· **TSCA (Toxic Substances Control Act):**

Substance is not listed.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

Substance is not listed.

(Contd. on page 5)

Material Safety Data Sheet

Printing date 04/05/2010

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Trade name: Novapath Iblot HIV-1 Nitrocellulose Strips

(Contd. of page 4)

· NTP (National Toxicology Program)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

· Markings according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

· Risk phrases:

10 Flammable.

· Safety phrases:

16 Keep away from sources of ignition - No smoking.

· National regulations**· Water hazard class:** Generally not hazardous for water.**16 Other information:**

This information is based 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.

· Department issuing MSDS: Environmental Health and Safety.**· Contact:**

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

· * Data compared to the previous version altered.