

The Native Antigen Company Building B Langford Locks Kidlington Oxfordshire OX5 1LH

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SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Purified *Bordetella pertussis* toxin (PT) IUPAC name: Pertussis toxin from Bordetella pertussis

Product number: PT-TNL CAS number: 70323-44-3

Company: The Native Antigen Company

Building B Langford Locks Kidlington Oxfordshire OX5 1LH

Tel+44 (0)1865 595230

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Acute toxicity, Inhalation (Category 3) Acute toxicity, Dermal (Category 3) Acute toxicity, Oral (Category 3)

Toxic by inhalation, in contact with skin and if swallowed.

Label elements

Pictogram



Signal word: Danger

Hazard statement(s) H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

Precautionary statement(s) P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing.

P284 Wear respiratory protection when dealing with powder

Hazard symbol(s) Toxic

R-phrase(s) R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

S-phrase(s) S45 In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible).

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.



www.thenativeantigencompany.com

VAT No: 102038475





3. COMPOSITION/INFORMATION ON INGREDIENTS

Pertussis toxin from *Bordetella pertussis*. Sample is of biological origin and is presented as a white lyophilized solid in a glass vial. Each vial contains no more than 1000µg.

Additional components present: 0.05M sodium phosphate buffer at pH7.2 and 0.5M sodium chloride.

4. FIRST AID MEASURES

If inhaled: If breathed in, move person into fresh air. If not breathing give artificial respiration.

Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly at eyewash station for at least 15 minutes and consult a

physician.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Resuspend powder in safety cabinet. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: 2 - 8 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

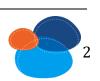
Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator







type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Handle with gloves.

Eye protection

Safety glasses

Skin and body protection

Laboratory coat

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

White powder, lyophilized

Safety data

pH: pH 7.2 when resuspended

Melting point:
Boiling point:
Flash point:
Ignition temperature:
Lower explosion limit:
Upper explosion limit:
In data available
no data available
no data available
no data available
no data available

Water solubility: soluble

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

Avoid multiple freeze thaw cycles

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

None known

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 intraperitoneal - mouse - 15 μ g/kg

Skin corrosion/irritation

no data available







Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

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.

Reproductive toxicity

no data available

Aspiration hazard

no data available

Potential health effects

Toxic if inhaled. May cause respiratory tract irritation.

Harmful if swallowed, although low pH in gut can degrade the toxin, reducing its effects.

Toxic if absorbed through skin. May cause skin irritation.

May cause eye irritation.

Signs and Symptoms of Exposure

Potentially neurotoxic.

Additional Information

RTECS: XW5883750

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

Toxin degrades easily

Bioaccumulative potential

Low

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.



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Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

UN Number: 3462

Class: 6.1 Packing group: I

Proper shipping name: TOXINS EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (Pertussis toxin

from Bordetella pertussis)

Shipped as Excepted Quantity transport class 6.1

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

16. OTHER INFORMATION

If inactivated, this product is not considered hazardous by ingestion; pertussis toxin is degraded by the low pH in the gut and is not absorbed. Take special care when working in conjunction with hypodermic needles. If i.v. or i.m. injection should occur, consult a physician.

Last update: 06 June 2012

Prepared by: The Native Antigen Company

Although the information, opinions and recommendations contained in this Safety Data Sheet are compiled from sources believed to be reliable, we accept no responsibility for the accuracy, sufficiency, or reliability or for any loss or injury resulting from the use of the information.

