# MATERIAL SAFETY DATA SHEET



Ultrasensitive NOS Assay Kit Product Number: NS 78

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Product Name:Ultrasensative NOS Assay Kit .Product Number:NB 78

# Manufacturer:

Oxford Biomedical Research 2165 Avon Industrial Dr. Rochester Hills, MI 48309 (248) 852-8815

# **<u>Component Information:</u>**

Component	Contents	Volume	Storage	Cat. No.
Reaction Buffer	50 mM HEPES 0.5 mM EDTA	50 mL	4°C	NB 78-1
NADPH Part A	NADP+ , Glucose 6-Phosphate, L-Arginine (CAS Registry Number: (NADP+) 9013-03-0)	1.0 mL	-20°C	NB 78-2
NADPH Part B	Glucose 6-Phosphate dehydrogenase	1.0 mL	-20°C	NB 78-3
Nitrate Reductase	Nitrate Reductase (CAS Registry Number: 9013-03-0)	1 U	-20°C	NB 78-5
Nitrate Reductase Buffer	Proprietary buffer (CAS Registry Number: 56-81-5)	1.2 mL	4°C	NB 78-6
I GIOT Reagent #1	Sulfanilamide 3N HCl (CAS Registry Number (sulfanilamide) 63-74-1; (HCl): 7647-01-0)	7.0 mL	4°C	NB 78-7
	N-(1-Naphthyl) ethylenediamine dihydrochloride (CAS Registry Number: 1465-25-4)	7.0 mL	4°C	NB 78-8
Nitrite Standard	500 pmol / μL NaNO2 (CAS Registry Number: 7757-79-1)	1.5 mL	4°C	NB 78-9
Microtiter Plates	96-well low binding, flat-bottom and v-bottom plates	1 each	RT	NB 78-10
Reagent Reservoirs	Plastic troughs for dispensing reagents	3	RT	NB 78-4

# Hazardous Identification:

#### Acute Effects:

Hydrochloric Acid: Material is extremely destructive to the eyes, skin, mucous membranes, and the upper respiratory tract. Inhalation of material may be fatal due to the following: spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Exposure to material may cause the following: burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. N-(1-Naphthyl) ethlenediamine dihydrochloride: Material may cause irritation to the eyes, skin, mucous membranes, and the upper respiratory tract.

Sulfanilamide: May be harmful by ingestion, inhalation or absorption through skin. Material may cause irritation to the eyes, skin, mucous membranes, and the upper respiratory tract. Exposure to material may cause sensitization. Exposure to material may cause the following: nausea, vomiting, fever, cyanosis, dizziness, dermatitis, acidosis, hepatitis, acute renal tubular necrosis, and psychosis.

# **Chronic Effects:**

Sulfanilamide: There is limited evidence that Sulfanilamide is mutagenic. Until further testing has been done, it should be treated as a possible mutagen in humans.

# For All Other Components:

The physical, chemical and toxicological properties of these components have not been fully investigated. Standard laboratory and safety procedures should be used when handling this product or components therein. This includes, but is not limited to, wearing OSHA approved safety glasses, gloves and protective clothing. Avoid direct physical contact with the components of this product.

#### First Aid Measures (all components applicable):

In cases of skin contact, wash immediately with copious amounts of water far at least 15 minutes. Remove contaminated clothing and shoes and wash before wearing. Consult a physician. In cases of eye contact, flush immediately with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Consult a physician. In cases of inhalation, remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen and consult a physician. If breathing stops, give artificial respiration and consult a physician. In cases of ingestion, wash mouth with water and consult the local poison center and a physician.

#### Fire-Fighting Measure (all components applicable):

Extinguishing Media: Dry chemical powder, carbon dioxide, water spray, alcohol or polymer foam. Upon thermal decomposition, it may emit toxic gases. Extinguishing material should be appropriate for surroundings.

### Accidental Release Measures (all components applicable):

Steps taken if material is released or spilled: Evacuate area. Wear a self-contained breathing apparatus, rubber boots, and heavy rubber gloves. For the vial containing Hydrochloric Acid, cover with dry lime or soda ash and sweep up using non-sparking tools and place in a suitable container. For all other vials, absorb material on sand or vermiculite. Sweep up and place in a suitable container. Avoid raising dust. Hold for appropriate disposal. Wash spill site and ventilate area after material pickup is complete.

### Handling and Storage (all components applicable):

Store kit components according to the instructions included in the product insert. Reaction buffer is an irritant. Color Reagent #1 is harmful, corrosive, and an irritant. May cause sensitization. Possible mutagen. Color Reagent #2 is an irritant. Avoid contact with material. Avoid prolonged or repeated exposure. Lab should be equipped with a safety shower and an eye wash station. Wash thoroughly after handling material.

Avoid contact with eyes, skin and clothing. Do not inhale. Avoid repeated exposure.

#### **Stability and Reactivity (all components applicable):**

Stable; avoid strong oxidizing agents; polymerization will not occur

### **Ecological Information (all components applicable):**

No information available.

#### Toxicological Information (all components applicable):

May cause skin and eye irritation, be harmful in absorbed through the skin, inhaled or if swallowed.

#### **Other Information(all components applicable):**

Material should only be handled by qualified, experienced professionals. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide for experienced personnel. Oxford Biomedical Research, Inc. shall not be held liable for any damage resulting from the handling or from contact with the above product.

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