

MATERIAL SAFETY DATA SHEET



Conforms to 93/112/EC and ISO 11014-1

1. Chemical Product and Company Identification

Product Name: Diogenes Reagent

Product Number: CL-202A

Chemical Names/Description: Component of the Diogenes system for superoxide detection.

Manufacturer
National Diagnostics
305 Patton Drive
Atlanta, GA 30336

Telephone Numbers

(800) 526-3867
(404) 699-2121

Emergency Numbers

Chemtrec
(800) 424-9300 (U.S. & Canada)
01-703-527-3887 (outside U.S. & Canada)

2. Composition/Information on Ingredients

Component	% Comp.	CAS #	EINECS #
SODIUM ORTHOVANADATE	90-100	13721-39-6	237-287-9

Extinguishing media

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

Protective Equipment

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

Hazardous Combustion Products

N.A.

Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions.

NFPA Codes: Health N.A. Flammability N.A. Reactivity N.A.

6. Accidental Release Measures

Steps to be taken in case material is released or spilled

Contain spills with absorbing material such as sawdust. Sweep and place in covered disposal container. Wash area with water.

Waste Disposal Method

Disposal must be made in accordance with applicable federal, state, and local regulations.

Personal Precautions

Wear appropriate protective equipment as specified in section 8.

7. Handling and Storage

Handling

Avoid contact and inhalation. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

Storage

Keep in a tightly closed container, stored in a cooled, dry, ventilated area. Protect from physical damage. Isolate from incompatible materials (section 10).

Storage Temperature

20C

Disposal

Observe all national, state, and local regulations regarding disposal.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits

Component: SODIUM ORTHOVANADATE

ACGIH Threshold Limit Value (TLV): .05 mg/m³

OSHA Permissible Exposure Limit (PEL): .05 mg/m³

Engineering Controls

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborn Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source.

Respiratory Protection

For conditions of use where exposure to the dust or mist is apparent, a full-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator.

Eye Protection

Safety glasses.

Skin Protection

Wear protective gloves and clean body covering clothing.

Other Control Measures

9. Physical Properties

Boiling point	N.A.	Evaporation Rate	N.A.
Melting point	858 C	Solubility in water	N.A.
Vapor pressure (mmHg)	N.A.	pH	N.A.

Vapor density (Air = 1) N.A.
% volatile by volume N.A.

Specific gravity (H₂O = 1) N.A.

10. Stability and Reactivity

Stability

Stable under ordinary conditions (normal temperatures and pressures) of use and storage.

Conditions to Avoid

Incompatible materials, dust generation.

Hazardous Decomposition Products

No information available.

Hazardous Polymerization

Has not been reported

Incompatibles

SODIUM ORTHOVANADATE:

Strong oxidizing agents.

PROPRIETARY PHOSPHORS:

Strong oxidizing agents, strong acids, strong bases and strong reducing agents.

11. Toxicological Information

Product LD50 Values

Diogenes Reagent Oral Rat LD50 (mg/kg): 337
Diogenes Reagent Dermal Rabbit LD50 (mg/kg):

Component Cancer List Status

	NTP Carcinogen		IARC Category
	Known	Anticipated	
SODIUM ORTHOVANADATE	No	No	None
PROPRIETARY PHOSPHORS	No	No	None

12. Ecological Information

SODIUM ORTHOVANADATE

No information available.

PROPRIETARY PHOSPHORS

No information available.

13. Disposal Considerations

Observe all national, state, and local regulations regarding disposal.

14. Transport Information

D.O.T.

Proper Shipping Name: No information available.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

I.A.T.A.

Proper Shipping Name: No information available.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

I.M.O.

Proper Shipping Name: No information available.

Hazard Class: N.A.

UN Number: N.A.

Packing Group: N.A.

15. Regulatory Information**United States****TSCA Regulatory Statement**

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories

Component	Fire	Pressure	Reactivity	Acute	Chronic
SODIUM ORTHOVANADATE	N.A.	N.A.	N.A.	N.A.	N.A.
PROPRIETARY PHOSPHORS	N.A.	N.A.	N.A.	N.A.	N.A.

Europe**EEC Regulatory**

All intentional ingredients are listed on the European EINECS Inventory.

EEC LABEL SYMBOL AND CLASSIFICATION**R: 23/24/25****Toxic by inhalation, in contact with skin and if swallowed****S: 24/25****Avoid contact with skin and eyes.****16. Other Information****NFPA Codes: Health N.A. Flammability N.A. Reactivity N.A.**

MANUFACTURER DISCLAIMER: The information given herein is offered in good faith as accurate, but without guarantee. Conditions of the use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.