

Section 1. Chemical Product and Company IdentificationResponsible
Name

Pierce Administration

Common Name **Glycoprotein Carbohydrate Estimation Kit**

Code 0023260

Supplier Pierce Chemical Company

P.O. Box 117
Rockford, IL 61105
USA
815.968.0747

In Case of Emergency CALL CHEMTREC:

800.424.9300
OUTSIDE US:
202.483.7616

Print Date 3/20/2000

Validation Date **3/16/2000**

MSDS# 2598

Component/Item#	1) Sodium Meta-Periodate	1856176 0020504
	2) Glycoprotein Detection Reagent	1856177
	3) Glycoprotein Assay Buffer	1856178 1900294
	4) Lysozyme	1856179 1888320
	5) Bovine Serum Albumin	1856180 1889598
	6) Ovalbumin	1856181 1889599
	7) Apo-Transferrin	1856198 1889607
	8) Fetuin	1856183 1889601
	9) Alpha-1 Acid Glycoprotein	1856184 1889602

Manufacturer Pierce Chemical Company

P.O. Box 117
Rockford, IL 61105
USA
815.968.0747**Section 2. Composition and Information on Hazardous (OSHA) Ingredients**

Name	% by Weight	Exposure Limits
1) Sodium Meta-Periodate	20-35	Not available.
2) Glycoprotein Detection Reagent	20-35	Not available.

Section 3. Hazards Identification

Review the most current and approved institutional guideline, protocol, standard operating procedure(s) and MSDS(s) for the proper handling of institutional materials/equipment associated with the use of this Pierce product.

Emergency Overview Store in tightly closed container. Avoid contact with eyes, skin and clothing. Avoid prolonged contact with eyes, skin, and clothing. Do not ingest. Avoid breathing vapor or mist. Avoid contact with combustible materials. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Routes of Entry Absorbed through skin. Dermal contact. Eye contact. Inhalation. Ingestion.

Potential Acute Health Effects Very hazardous in case of skin contact (irritant), of inhalation (lung irritant). Hazardous in case of eye contact (irritant), of ingestion, . Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation.

Carcinogenic Effects Data **CARCINOGENIC EFFECTS:** Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

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Medical Conditions Repeated or prolonged exposure is not known to aggravate medical condition.

Aggravated by

Overexposure:

See Toxicological Information (section 11)

Section 4. First Aid Measures

SKIN: Wash contaminated skin with soap and water.

EYES: Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek medical attention.

Inhalation: Move exposed person to fresh air. If irritation persists, get medical attention.

Ingestion: Do not induce vomiting. If affected person is conscious, give plenty of water to drink. Seek medical attention.

Section 5. Fire Fighting Measures

Flammability of the Product May be combustible at high temperature.

<i>Flash Points</i>	1) Sodium Meta-Periodate	Not available.
	2) Glycoprotein Detection Reagent	Not available.
	3) Glycoprotein Assay Buffer	Not available.
	4) Lysozyme	Not available.
	5) Bovine Serum Albumin	Not available.
	6) Ovalbumin	Not available.
	7) Apo-Transferrin	Not available.
	8) Fetuin	Not available.
	9) Alpha-1 Acid Glycoprotein	Not available.

Fire Hazards in Presence of Various Substances Not considered to be flammable.

Fire Fighting Media Oxidizing material.

and Instructions Do not use water jet. Use flooding quantities of water. Avoid contact with organic materials.

Protective Clothing (Fire) Be sure to use an approved/certified respirator or equivalent.

Section 6. Accidental Release Measures

Small Spill and Leak Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill and Leak Oxidizing material.
Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Section 7. Handling and Storage

Handling Store in tightly closed container. Avoid contact with combustible materials.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from acids, alkalis, reducing agents and combustibles. See NFPA 43A, Code for the Storage of Liquid and Solid Oxidizers.

Section 8. Exposure Controls/Personal Protection

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection

Eyes Splash goggles.

Body Lab coat.

Respiratory Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hands Gloves.

Protective Clothing
(Pictograms)



Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Component	Physical State and Appearance	Color
1) Sodium Meta-Periodate	Solid. (Crystals solid.)	White.
2) Glycoprotein Detection Reagent	Solid. (Powdered solid.)	White.
3) Glycoprotein Assay Buffer	Liquid.	Clear Colorless.
4) Lysozyme	Solid.	Not available.
5) Bovine Serum Albumin	Solid.	Not available.
6) Ovalbumin	Solid.	Not available.
7) Apo-Transferrin	Solid.	Not available.
8) Fetuin	Solid.	Not available.
9) Alpha-1 Acid Glycoprotein	Solid.	Not available.

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Conditions of Instability Reacts violently with water especially when water is added to the product. Heating may cause an explosion. Keep away from heat (Sodium Azide)

Incompatibility with Various Substances Reactive with reducing agents, combustible materials, organic materials, metals. Slightly reactive to reactive with acids.

Section 11. Toxicological Information

Other Toxic Effects on Humans Hazardous in case of eye contact (irritant), of ingestion, .

Special Remarks on Other Toxic Effects on Humans To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated. (Glycoprotein Detection Reagent)

Section 12. Ecological Information

Toxicity of the Products of Biodegradation	1) Sodium Meta-Periodate	The products of degradation are less toxic than the product itself.
	2) Glycoprotein Detection Reagent	The products of degradation are less toxic than the product itself.
	3) Glycoprotein Assay Buffer	Not available.
	4) Lysozyme	Not available.
	5) Bovine Serum Albumin	Not available.
	6) Ovalbumin	Not available.
	7) Apo-Transferrin	Not available.
	8) Fetuin	Not available.
	9) Alpha-1 Acid Glycoprotein	Not available.

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Section 13. Disposal Considerations

Waste Information Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Stream Not available.

Consult your local or regional authorities.

Section 14. Transport Information

DOT Classification CLASS 5.1: Oxidizing material.



Proper shipping name Oxidizing substances, liquid, N.O.S., 5.1, UN3139, II

TDG Classification CLASS 5.1: Oxidizing material.



Proper shipping name Oxidizing substances, liquid, N.O.S., 5.1, UN3139, II

Special Provisions for Not available.
Transport

ADR/RID Classification CLASS 5.1: Oxidizing material.

IMO/IMDG Classification CLASS 5.1: Oxidizing material.

ICAO/IATA Classification CLASS 5.1: Oxidizing material.

Section 15. Regulatory Information

HCS Classification CLASS: Oxidizer.
CLASS: Target organ effects.

U.S. Federal Regulations TSCA 4(a) proposed test rules: Sodium Meta-Periodate
TSCA 8(b) inventory: Sodium Meta-Periodate; Glycoprotein Detection Reagent; Assay Buffer
Component 1; Sodium Azide; Bovine Serum Albumin; Ovalbumin; Apo-Transferrin
TSCA 8(d) H and S data reporting: Sodium Azide
SARA 302/304/311/312 extremely hazardous substances: Sodium Azide
SARA 302/304 emergency planning and notification: Sodium Azide
SARA 302/304/311/312 hazardous chemicals: Strong base; Sodium Azide
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Strong base: immediate health hazard; Sodium Azide: immediate health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: Strong base

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

WHMIS (Canada) CLASS C: Oxidizing material.

CEPA DSL: Sodium Meta-Periodate; Strong base; Sodium Azide; Bovine Serum Albumin; Ovalbumin; Apo-Transferrin; Fetuin

CEPA NDSL: Glycoprotein Detection Reagent; Sodium Azide

International Regulations

EINECS Not available.

DSCL (EEC) R8- Contact with combustible material may cause fire.
R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.
R36/37/38- Irritating to eyes, respiratory system and skin.

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International Lists Australia (NICNAS): Milli-Q Water; Strong base; Assay Buffer Component 2; Sodium Azide; Bovine Serum Albumin

Korea (TCCL): Glycoprotein Detection Reagent; Milli-Q Water; Strong base; Sodium Azide

Philippines (RA6969): Milli-Q Water; Strong base; Sodium Azide; Bovine Serum Albumin

State Regulations Pennsylvania RTK: Strong base: (environmental hazard, generic environmental hazard); Sodium Azide: (environmental hazard)

Florida: Sodium Azide

Minnesota: Sodium Azide

Massachusetts RTK: Strong base; Sodium Azide

New Jersey: Strong base; Sodium Azide

California prop. 65: No products were found.

Section 16. Other Information

Hazardous Material
Information System
(U.S.A.)

Health	*	1
Fire Hazard		1
Reactivity		0
Personal Protection		h

National Fire Protection
Association (U.S.A.)



Validated by Pierce Administration on 3/16/2000.

Verified by Pierce Administration.

Printed 3/20/2000.

Notice to Reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.