



MSDS COVER SHEET

Product name: Peroxichrom ExcelTM

(TMB Peroxidase substrate solution for ELISA)

Cat. No : D5016-400 (PeroxichromTM : 400 ml)

Date Printed: December 16, 2010

Date Updated: December 16, 2010

MATERIAL SAFETY DATA SHEET

Date Printed: December 16, 2010

Date Updated: December 10, 2010

1. Product and company identification

Product name	Peroxichrom Excel™
Manufacturer/Supplier	GENOMINE INC. VENTURE BLDG. 307 POHANG TECHNO PARK POHANG, KYUNGBUK, 790-834, KOREA.
Application of the Substance / Preparation	<i>Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific applications.</i>
Information in case of emergency	+82 - 54 - 223 - 2463

2. Composition/Information on ingredients

<u>Chemical Name</u>	<u>CAS number</u>	<u>%</u>	<u>Hazardous</u>
PVP40 Polyvinylpyrrolidone	9003-39-8	1-5 %	Generally considered safe
Other component	NA	< 1%	No
Water	7732-18-5	> 94 %	No

Substance/preparation : Preparation

Physical Chemical Characteristics

Boiling Point: >100°C Vapor Pressure: NA Melting Point: NA

Vapor Density: NA Evaporation Rate: NA

Fire and Explosion Hazard Data

Flash Point: N/A

Flammability Limits: NA

3. Hazards identification

Emergency Overview

WHMIS Classification

Not WHMIS controlled.

Not a dangerous substance according to GHS.

HMIS Classification

Health hazard: 0

Flammability: 0

Physical hazards: 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Ingestion May be harmful if swallowed.

4. First aid measures

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

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

5. Fire-fighting measures

Conditions of flammability

Not flammable or combustible.

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.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides.

Explosion data - sensitivity to mechanical impact: no data available

Explosion data - sensitivity to static discharge: no data available

6. Accidental release measures

Personal precautions

Avoid dust formation. Avoid breathing vapors, mist or gas.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. Handling and storage

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

hygroscopic Keep in a dry place.

8. Exposure controls/personal protection

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired,

use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

General industrial hygiene practice.

Specific engineering controls

Use mechanical exhaust or laboratory fumehood to avoid exposure.

9. Physical and chemical properties

Appearance

Clear Liquid

Safety data

pH: no data available

Melting/freezing point: no data available

Boiling point: no data available

Flash point: no data available

Ignition temperature: no data available

Autoignition temperature: no data available

Lower explosion limit : no data available

Upper explosion limit : no data available

Vapour pressure : no data available

Density : no data available

Water solubility: no data available

Relative vapour density: no data available

Odour : no data available

Odour Threshold : no data available

Evaporation rate: no data available

10. stability and reactivity

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions: no data available

Conditions to avoid: no data available

Materials to avoid

Strong oxidizing agents

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Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO_x)

11. Toxicological information

Acute toxicity

Oral LD50

LD50 Oral - rat - 100,000 mg/kg

Remarks: Diarrhea

Inhalation LC50: no data available

Dermal LD50: no data available

Other information on acute toxicity: no data available

Skin corrosion/irritation

Skin - rabbit - No skin irritation

Serious eye damage/eye irritation: Eyes - rabbit - No eye irritation

Respiratory or skin sensitization: Will not occur

Germ cell mutagenicity: no data available

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its

IARC, ACGIH, NTP, or EPA classification.

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.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (1-Ethenyl-2-pyrrolidinone homopolymer)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as acarcinogen or potential carcinogen by ACGIH.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Signs and Symptoms of Exposure

Unexcreted particles may be phagocytized by cells of the reticuloendothelial system and deposited in storage sites in the liver, spleen, lung, and bone marrow resulting in the storage disease thesaurosis. Severity and symptoms depend on storage site and nature of the particle. Pathological changes are not necessarily attributed to the thesaurosis, but in some cases an inflammation or granulomatoma have occurred.

Synergistic effects : no data available

Additional Information: RTECS: TR8370000

12. Ecological information

Environmental Fate: No information found on PVP40.

Environmental Toxicity: No information found.

13. Disposal consideration

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product..

14. Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

15. Regulation information

DSL Status

All components of this product are on the Canadian DSL list.

WHMIS Classification

Not WHMIS controlled. Not WHMIS controlled.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. Other information

Disclaimer:

Genomine, Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose