

# **MSDS COVER SHEET**

**Product name: Peroxichrom**<sup>TM</sup>

(TMB Peroxidase substrate solution for ELISA)

Cat. No: D5015-400 (Peroxichrom<sup>TM</sup>: 400 ml)

<u>Date Printed: December 16, 2010</u> <u>Date Updated: December 16, 2010</u>



# **MATERIAL SAFETY DATA SHEET**

(Printed date: December 16, 2010)

# 1. Product and company identification

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

# 2. Composition/Information on ingredients

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

**Substance/preparation: Preparation** 

### **Physical Chemical Characteristics**

Boiling Point: >100 ℃ 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 (NOx)

# 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:**

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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