SAFETY DATA SHEET

according to Regulation (EC) No.1907/2006

Version 6.0 Revision Date 2.4.2017

Material Safety Data Sheet
Piroctone Olamine msds

Section 1: Identification of the Substance/mixture and of the Company/Undertaking

Identification of the substance or preparation

Product Name	:	Piroctone Olamine
CAS#	:	68890-66-4
EINECS #	:	272-574-2
REACH No.	:	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
TSCA	:	TSCA 8(b) inventory: No products were found
Use of the substance/mixture	:	Antidandruff agent for shampoos.

Company/undertaking identification

Company	:	M.C.Biotec Inc. 47-505, Demin Huayuan Nantong, China
Tel	:	+86-139-13923033
Fax	:	+86-10-80115555 ext 441505
E-mail	:	mc@mcbiotec.com
website	:	www.mcbiotec.com

Emergency telephone number

Emergency Phone #	:	+86-139-13923033

Section 2: Hazards Identification

Emergency Overview

OSHA Hazards

Irritant

GHS Label elements, including precautionary statements

Pictogram 

Signal word Danger

Hazard statement(s)

H303 May be harmful if swallowed.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic organisms.

Precautionary statement(s)

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P403+ P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container to an approved waste disposal plant.

HMIS Classification

Health hazard:	2
Flammability:	1
Reactivity:	0
Personal protection	H

Section 3: Composition and Information on Ingredients

Synonyms : 1-Hydroxy-4-methyl-6-(2,4,4-trimethylpentyl)pyridin-2(1H)-one, compound with 2-aminoethanol (1:1)

Formula	:	$C_{14}H_{23}NO_2 \cdot C_2H_7NO$
Molecular Weight	:	298.42 g/mol
CAS-No.	:	68890-66-4
EC-No.	:	272-574-2

No components need to be disclosed according to the applicable regulations.

Section 4: First Aid Measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area.

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

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

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

no data available

Section 5: Fire Fighting Measures

Suitable extinguishing media

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

Special hazards arising from the substance or mixture

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

Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

no data available

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

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

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

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

6.4 Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

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.

Keep in a dry place.

Section 8: Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/face protection

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

Skin 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

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.

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).

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

Appearance	
Form	powder
Colour	White
Odour	no data available
Odour Threshold	no data available
Safety data	
pH	no data available
Melting point/freezing point	344.1 °C at 1,013 hPa
Initial boiling point and boiling range	130 - 135°C
Flash point	no data available
Evapouration rate	no data available
Flammability (solid, gas)	no data available
Autoignition temperature	no data available
Upper/lower flammability or explosive limits	no data available
Vapour pressure	no data available
Vapour density	no data available
Relative density	no data available
Water solubility	practically insoluble
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available

Viscosity	no data available
Explosive properties	no data available
Oxidizing properties	no data available
Other safety information	no data available

no data available

Section 10: Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available

Conditions to avoid

no data available

Materials to avoid

Strong acids and oxidizing agents, Strong oxidizing agents

Hazardous decomposition products

Other decomposition products - no data available.

In the event of fire: see section 5

Section 11: Toxicological Information

Acute toxicity

Oral LD50

LD50 Oral - rat - 8,100.0 mg/kg

Inhalation LC50

LC50 > 4.9 mg/l (rat)

Dermal LD50

LD50 > 2,000 mg/kg (rat)

Skin corrosion/irritation

Moderate irritant (rabbit)

Eye damage/eye irritation

Severe irritant (rabbit)

Sensitization

non-sensitizing (Guinea pig)

Germ cell mutagenicity

no data available

Carcinogenicity

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.

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

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

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

Ingestion May be harmful if swallowed.

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

Eyes Causes eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects

no data available

Additional Information

RTECS: Not available

Section 12: Ecological Information

Biodegradation: > 80 %

Method: OECD 302B / ISO 9888 / EEC 88/302C

The product can be largely eliminated from the water by abiotic processes, e.g. adsorption to activated sludge.

Biodegradation: 14 % (28 d)

Method: OECD 301 D

Biodegradation: 96 %

Method: OECD 303A

Fish toxicity: LC50 0.1 - 1 mg/l (96 h, golden orfe)

Daphnia toxicity: EC50 1.8 mg/l (48 h, Daphnia magna)

Method: OECD 202

Bacteria toxicity: EC50 583 mg/l

Method: OECD 209

Chemical oxygen demand (COD): 2,030 mg/g

Section 13: Disposal Considerations

Product

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

UN number

ADR/RID: - IMDG: - IATA: -

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Packaging group

ADR/RID: - IMDG: - IATA: -

Environmental hazards

ADR/RID:no IMDG:Marine pollutant: no IATA: -

Special precautions for user

no data available

Section 15: Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

Section 16: Other Information

Further information

The information above is based on our present knowledge. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. Users should make their own investigations to determine the suitability of the information for their particular purposes.