

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product Name : Piroctone Olamine

CAS No. : 68890-66-4

1.2 Relevant identified uses of the substance or mixture and uses advised against use of the substance/mixture

Antidandruff agent, Preservative

Industry Sector : Personal Care

Type of use : Active ingredient for cosmetics

1.3 Details of the Supplier of the safety data sheet

FFK Towers, #445, 2nd & 3rd Floor,
17th Cross Road, Sector 4, HSR Layout,
Bangalore, Bangalore South, Karnataka - 560102, India.

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Specific target organ toxicity – single exposure STOT SE 3

Hazardous to the aquatic environment: aquatic Acute 1(M-Factor(self Classification)=1)

Hazard Statements:

Causes skin irritation.

Causes serious eye damage

May cause respiratory irritation

Very toxic to aquatic life.

2.2 Label elements

Signal word: Danger

Pictograms:



Hazard statements

- H315 Causes skin irritation.
H318 Causes serious eye damage.
H410 Harmful to aquatic life with long lasting effects.

Precautionary statements

- P261 Avoid breathing dust.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention

Disposal:

- P501 Dispose of contents/container to an approved waste disposal plant.

2.3 Other Hazards

No additional hazards are known except those derived from the labelling.

SECTION 3: Composition/information on ingredients

Substance / Mixture : Substance

Substance name : Piroctone Olamine

Components

Chemical Name	CAS No.	Concentration (% w/w)
Piroctone Olamine (1-Hydroxy-4-methyl-6-(2,4,4-trimethylpentyl)pyridine-2(1H)-one, compound with 2-aminoethanol (1:1)	68890-66-4	>=90 -<= 100

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General Information

Remove contaminated soaked clothing immediately.

After inhalation

Take affected person into fresh air. Oxygen or artificial respiration, if needed. Consult a physician.

After contact with skin

In case of contact with skin wash off immediately with plenty of water. Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for atleast 15 minutes. Seek medical treatment by eye specialist.

After ingestion

Do not induce vomiting.

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

Induce vomiting only upon the advice of a physician.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation of dust may cause irritations of mucous membranes, cough and shortness of breath. Risk of serious damage to eyes. Irritating to skin.

4.3 Indication of any immediate medical attention and special treatment needed.

Treat symptoms.

SECTION 5: Fire Fighting Measures

5.1 Extinguishing media suitable extinguishing media

Foam, carbon dioxide (CO₂), dry chemical, water spray.

5.2 Special hazards arising from the substance or mixture

Fire may produce

Carbon monoxide (CO), Carbon dioxide (CO₂) and nitrogen oxides (NO_x).

5.3 Advice for firefighters

Use breathing apparatus with independent air supply. Protective suit.

Additional information

Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing

Fire residues and contaminated fire fighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe dust.
Use personal protective clothing.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/ground water. Do not discharge into the subsoil/soil.

6.3 Method and material for containment and cleaning up

Pick up mechanically, avoiding dust, and provide disposal in suitable recipients.

6.4 Reference to other sections

Observe protective instructions (see Sections 7 & 8). Information for disposal see Section 13.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Advice on safe handling

Keep container tightly closed.

Avoid contact with skin, eyes and clothing.

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Do not breathe dust.

Advice on protection against fire and explosion

Avoid the formation and deposition of dust.

Keep away from sources of ignition – No smoking. Take measures against electrostatically charging.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

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

Advice on storage compatibility

Incompatible with acids.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3 Specific end use(s)

Antidandruff agent, Preservatives.

SECTION 8: Exposure controls/Personal protection

8.1 Control parameters Additional advice on limit values

Obey TLV for common dust, if applicable.

8.2 Exposure Controls

Appropriate engineering controls

Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.

Protective and hygiene measures

Do not breathe dust.

When using do not eat, drink or smoke.

Remove and wash contaminated clothing before re-use.

Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing.

Eye/face protection

Tightly fitting goggles (EN166).

Eye wash bottle with pure water (EN 15154)

Hand protection

Impermeable gloves.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (EN368). Light protective clothing.

Respiratory protection

Dust mask must be worn if exposed to dust.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Powder
Colour	White to yellowish
Odour	Characteristic
pH-Value (at 20°C)	8 – 10 [10 g/l]
Changes in the physical state	
Melting point	130 – 135°C
Flash point	Not applicable

Lower explosion limits	Not applicable
Upper explosion limits	Not applicable
Ignition Temperature	ND
Auto-ignition temperature	ND
Oxidizing properties	Self non-oxidizing
Vapour Pressure	ND
Density	ND
Water solubility (at 20°C)	0.4 g/l [OECD 105]
Partition coefficient	(n-octano/water) Log Pow: -0.78

9.2 Other Information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Reactions with strong acids.

10.4 Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5 Incompatible materials

Strong acids and oxidizing agents

10.6 Hazardous decomposition products

Fire may produce:

Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50/oral/rat: 8100 mg/kg

LD50/dermal/rat: >2011 mg/kg

LC50/inhalation/rat: > 4.9 mg/l/4 h

Irritation and corrosivity

Skin irritation (rabbit): Irritant

Eyes irritation (rabbit): Severe irritant – Risk of serious damage to eyes.

Sensitising effects

Skin sensitization: Non-sensitizing (Rabbit).

STOT-single exposure

May cause irritation of respiratory tract.

Severe effects after repeated or prolonged exposure

No data available.

Carcinogenic/mutagenic/toxic effects for reproduction

Carcinogenicity: No data available

Mutagenicity: In-vivo studies indicated no genotoxic activity.

Reproductive toxicity: No data available.

Aspiration hazard

No data available

SECTION 12: Ecological information

12.1 Toxicity

LC50/Golden orfe/96 h = 0,1 – 1,0 mg/l EC 50 Daphnia magna/48 h = 1,8 mg/l

EC50/microorganisms: 583 mg/l [OECD 209] Very toxic to aquatic organisms.

12.2 Persistence and degradability

Biodegradable (OECD): 14% (28 d) [OECD 301D]; 96% [OECD 303A].

12.3 Bioaccumulative potential

Product has a low bioaccumulating potential ($\log Pow < 1$)

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

Hazardous water pollutant.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Advice on disposal

Can be incinerated, when in compliance with local regulations.

Where possible recycling is preferred to disposal

Waste disposal number of waste from residues/unused products

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES: wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Packaging that cannot be cleaned should be disposed of like the product

SECTION 14: Transport Information

Road Transport India

Emergency Dial

Not restricted

+91 7997083527, 9052288345

IATA

IMDG

Not restricted

Not restricted

SECTION 15: Regulatory Information

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

The factories act, 1948

The Motor Vehicles Acts, 1988

This product is classified and labelled in accordance with Indian regulations.

SECTION 16: Other information

Further Information

Other information : Observe nation and local legal requirements

Full text of other abbreviations

AICS – Australian inventory of chemical substances; ANTT – National Agency for Transport by Land of Brazil; ASTM – American society for the Testing of Materials; bw – Body weight, CMR – Carcinogen, Mutagen or Reproductive Toxicant; DSL – Domestic Substances list (Canada); ERG – Emergency Response Guide; GHS – Globally Harmonized System, GLP – Good Laboratory Practice; IARC – International Agency for Research on Cancer; IATA – International Air Transport Association; IBC – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 – Half maximal inhibitory concentration; ICAO – International Civil Aviation Organization; IECSC – Inventory of Existing Chemical Substances in China; IMDG – International Maritime Dangerous Goods; IMO – International Maritime Organization; ISHL – Industrial Safety and Health Law (Japan); ISO – International Organisation for Standardization; LC50 – Lethal Concentration to 50% of a test population; LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL – International Convention for the Prevention of Pollution from Ships; n.o.s. – Not Otherwise Specified; REACH – Registration, Evaluation, Authorization and Restriction of Chemicals; CAS – Chemicals Abstract Service; EN – European norm; DIN – Deutsche Industrie Norm; PBT – Persistent Bioaccumulative and Toxic; EC- Effect concentration; vPvB – Very Persistent and very Bio-accumulative.

Relevant H-EUH-phrases (Number and full text)

H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are container in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(NA – Not Applicable, ND – Not Determined).