

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.05.2011

Revision: 06.05.2011

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

- **Product identifier**
- **Trade name:** Minoxidil
- **CAS Number:**
38304-91-5
- **EINECS Number:**
253-874-2
- **Relevant identified uses of the substance or mixture and uses advised against** d.n.d.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
TRIFARMA S.p.A.
Stabilimento di Ceriano Laghetto
Via delle Industrie n. 6
I - 20816 CERIANO LAGHETTO (MB)
Tel.: +39 02 9690018
Fax: +39 02 9690643
e-mail: chymars@trifarma.it
- **Informing department:** Product safety department.
- **Emergency telephone number:**
Dott. Paolo Volante
E-mail: chymars@trifarma.it

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R22: Harmful if swallowed.

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- **Label elements**
 - **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
 - **Hazard pictograms**



GHS07

- **Signal word** Warning
- **Hazard statements**
H302 Harmful if swallowed.
- **Precautionary statements**
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Additional information:** Classification is updated to the community laws in force.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.

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3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Designation:**
38304-91-5 Minoxidil
- **Identification number(s):**
- **EINECS Number:** 253-874-2

4 First aid measures

- **Description of first aid measures**
- **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Do not leave affected persons unsupervised.
- **After inhalation**
Supply fresh air; consult doctor in case of symptoms.
In case of unconsciousness bring patient into stable side position for transport.
- **After skin contact** Instantly wash with water and soap and rinse thoroughly.
- **After eye contact**
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing**
Instantly call for doctor.
Rinse out mouth.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed**
Nausea
Emesis
Blood pressure decrease

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Advice for firefighters**
- **Protective equipment:**
Put on breathing apparatus.
Wear full protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **Environmental precautions:**
Do not allow to enter the ground/soil.
Do not allow to enter drainage system, surface or ground water.
- **Methods and material for containment and cleaning up:**
Collect mechanically.
Ensure adequate ventilation.
Dispose of the material collected according to regulations.

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- **Reference to other sections**
See Section 8 for information on personal protection equipment.

7 Handling and storage

- **Handling**
- **Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**
Keep breathing equipment ready.
Have fire extinguishing equipment ready in case of nearby fire.
- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Store at room temperature.
- **Information about storage in one common storage facility:**
Do not store together with incompatible materials (see Section 10)
- **Further information about storage conditions:**
Keep container tightly sealed.
Store at room temperature.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Wash hands during breaks and at the end of the work.
Take off immediately all contaminated clothing
Do not inhale dust / smoke / mist.
Avoid contact with the eyes and skin.
Do not eat or drink while working.
Ensure that washing facilities are available in the work place.
- **Breathing equipment:**
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.
- **Protection of hands:**



Protective gloves.

- **Eye protection:**



Safety glasses

- **Body protection:** Protective work clothing.

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9 Physical and chemical properties

- Information on basic physical and chemical properties

- Appearance:

Form: Crystalline powder
Colour: White

- Odour: Characteristic

- Molecular Weight 209.29

- Change in condition

Melting point/Melting range: 226-249°C

Boiling point/Boiling range: Not determined

- Flash point: Not applicable

- Inflammability (solid, gaseous) Product is not inflammable.

- Danger of explosion: Product is not explosive.

- Density Not determined

- Solubility in / Miscibility with

Water at 25°C: 2.2 g/l

10 Stability and reactivity

- Reactivity

- Chemical stability

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- Possibility of hazardous reactions No dangerous reactions known

- Incompatible materials: Oxidizing agents.

- Hazardous decomposition products:

Poisonous gases/vapours

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

11 Toxicological information

- Information on toxicological effects

- Acute toxicity:

- LD/LC50 values that are relevant for classification:

Oral	LD50	1321 mg/kg (rat)
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- Primary irritant effect:

- on the skin: No irritant effect.

- on the eye: No irritant effect.

- Sensitization: No sensitizing effect known.

- Subacute to chronic toxicity:

May cause reproductive effects (specific developmental abnormalities of musculoskeletal system).

- Additional toxicological information: Product is suspected to cause birth defects.

12 Ecological information

- Toxicity

- Aquatic toxicity: No further relevant information available.

- Additional ecological information:

- General notes: Not known to be hazardous to water.

- Results of PBT and vPvB assessment

- PBT: Not applicable.

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13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- **Special precautions for user** Not applicable.
- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
The substance is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



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- **Signal word** Warning
- **Hazard statements**
H302 Harmful if swallowed.
- **Precautionary statements**
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
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P330 Rinse mouth.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- National regulations**- Technical instructions (air):**

Class	Share in %
I	100.0

- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**16 Other information**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** TRIFARMA SPA Stabilimento di Ceriano Laghetto
- **Contact:**
Dott. Paolo Volante
E-mail: chymars@trifarma.it

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- Abbreviations and acronyms:*GHS: Globally Harmonized System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent***- Bibliographic sources:***- Data Bank "ChemGes EB" - DR software Gmbh**- Merck Index, 12th Ed.**- Sax's dangerous properties of industrial materials, 8th Ed.**- CEFIC**- ADR***- * Data compared to the previous version altered.***Classification is updated to the last EC Directives.*

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