

SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

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

1.1 Product identifier

DERMFACTOR NANO SILVER AEROSOL SPRAY

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

Relevant identified uses: for hygienic care and protection of the skin, product with antibacterial properties.

Uses advised against: not determined.

1.3 Details of the supplier of the safety data sheet

Supplier: **Genoscope Sp. z o.o. Sp.k.**

Address: ul. Ostrobramska 101, 04-041 Warszawa, Poland

Telephone number: +48 22 2130729

E-mail address for a competent person responsible for SDS: r.czaplejewicz@n-s.pl

1.4 Emergency telephone number

112

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Aerosol 1 H222-H229

Extremely flammable aerosol. Pressurised container: May burst if heated.

2.2 Label elements

Hazard pictograms and signal words



DANGER

Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.

P501 Dispose of contents/container to properly labeled waste containers in accordance with national legislation.

2.3 Other hazards

The components do not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. The product does not contain components with endocrine disrupting properties.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

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3.2 Mixtures

Propellant

CAS number: 106-97-8/ 75-28-5 EC number: 203-448-7/ 200-857-2 Index number: 601-004-00-0 Registration number: -	<u>butane/isobutane</u> Flam. Gas 1 H220, Press. Gas H280	100 %
CAS number: 74-98-6 EC number: 200-827-9 Index number: 601-003-00-5 Registration number: -	<u>propane</u> Flam. Gas 1 H220, Press. Gas H280	

Bulk

Bulk does not contain substances classified as hazardous and substances with occupational exposure limit values established on the European Union.

Full text of each relevant H phrase is given in section 16 of sds.

Section 4: First aid measures

4.1 Description of first aid measures

Skin contact: product intended for skin application. Consult a doctor if disturbing symptoms appear.

Eye contact: wash the contaminated eyes with plenty of water for at least 10-15 minutes. Protect the non-irritated eye, remove contact lenses. In case of frostbites with the liquefied product, put on a sterile dressing. Contact a doctor.

Ingestion: exposure by this route does not typically occur. If swallowed, rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Contact a doctor, show container or label.

Inhalation: move victims to fresh air, keep warm and calm. Consult a doctor if disturbing symptoms appear.

4.2 Most important symptoms and effects, both acute and delayed

Eye contact: possible redness, tearing, burning, irritation.

Skin contact: adverse health effects are not expected.

Inhalation: adverse health effects are not expected.

4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: fire-resistant foam, extinguishing powder, carbon dioxide, sand.

Unsuitable extinguishing media: water jet.

5.2 Special hazards arising from the substance or mixture

the substances which will be result of the thermal decomposition of the product will strongly depend on the decomposition conditions. The following substances can be expected: carbon oxides, unidentified organic and inorganic compounds. Do not inhale combustion products, they can be dangerous for human health.

5.3 Advice for firefighters

Extremely flammable aerosol. Vapours may form explosive mixtures with air. Pressurised container. May explode in case of fire or high temperature. If possible, remove endangered containers from the hazard area. In case of fire, cool endangered containers with water spray from a safe distance. Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals.

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Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. In case of large spills, isolate the exposed area. Eliminate all sources of ignition. Ensure adequate ventilation. Avoid eyes contamination.

6.2 Environmental precautions

In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Do not empty into drains (danger of explosion). Notify relevant emergency services.

6.3 Methods and material for containment and cleaning up

Damaged containers collect mechanically. Small leaks soak up with absorbent. Larger leaks soak up with incombustible liquid-binding material (e.g. sand, earth, universal binding agent) and collect in labeled container. Disposal in accordance with the local legislation. Use non-sparking tools. Clean and ventilate the contaminated place. Do not pierce or burn containers, even after use.

6.4 Reference to other sections

Appropriate conduct with waste product – see section 13. Personal protective equipment – see section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Avoid contact with eyes. Do not pierce or burn containers, even after use. Ensure adequate ventilation of area, where the product is used. Protect from sources of ignition, do not smoke. Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Keep containers in a dry, cool and well-ventilated place. Keep away from sources of ignition. Avoid temperatures above 50 °C. Avoid direct expose to sunlight. Keep away from food, beverages or feed for animals. Do not smoke, use open flame and sparking devices in a warehouse.

7.3 Specific end use(s)

No information about other uses than those mentioned in subsection 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Product does not contain any components with occupational exposure limit values at working place established in the European Union. Please check also any national occupational exposure limit values in your country. Legal Basis: Commission Directive 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Ensure adequate ventilation.

Skin protection

Not required under normal conditions of use.

Eye protection

Wear eye protection if there is a risk of eye contamination.

Respiratory protection

Under normal conditions of use is not required. In the case of high aerosol concentration or in emergency use respiratory protection (mask with AX absorber). In cases where the oxygen concentration is $\leq 19\%$ and / or maximum concentration of toxic substances in the air is $\geq 1,0\%$ by volume breathing apparatus should be used.

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Thermal hazards: Not applicable.

Personal protective equipment must meet requirements of Regulation (EU) 2016/425. Employer is obliged to ensure equipment adequate to activities carried out, with quality demands, cleaning and maintenance.

Environmental exposure controls

Do not empty into drains. Possible emissions from the ventilation systems and processing equipment should be controlled in order to determinate their compatibility with environmental protection regulations.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	liquid in an aerosol container
Colour:	colorless
Odour:	characteristic
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	-42 °C (propane)
Flammability:	extremely flammable aerosol
Lower and upper explosion limit:	1,9 % vol. / 9,6 % vol.
Flash point:	-95 °C (propane) to - 60 °C (butane)
Auto-ignition temperature:	470 °C (propane); 365 °C (butane)
Decomposition temperature:	not determined
pH:	not applicable
Kinematic viscosity:	not determined
Solubility:	insoluble in water
Partition coefficient n-octanol/water (log value):	not determined
Vapour pressure:	not determined
Density and/or relative density:	0,493 g/cm ³ (propane); 0,573 g/cm ³ (butane)
Relative vapour density:	> 2 (air=1)
Particle characteristics:	not applicable

9.2 Other information

Other safety characteristics

Heat of vaporization:

0 °C - 378,58 kJ/kg (propane); 383,46 kJ/kg (butane).

10 °C - 364,16 kJ/kg (propane); 373,43 kJ/kg (butane).

20 °C - 348,55 kJ/kg (propane); 361,73 kJ/kg (butane)

Section 10: Stability and reactivity

10.1 Reactivity

Product does not undergo hazardous polymerization. Vapours of the product may form explosive mixtures with air. See also subsections 10.2-10.5

10.2 Chemical stability

The product is stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

Hazardous reactions are not known.

10.4 Conditions to avoid

Avoid sources of heat and fire, high temperatures, electrostatic discharge.

10.5 Incompatible materials

Avoid contact with strong oxidizers.

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10.6 Hazardous decomposition products

Not known.

Section 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

For more information on the effects from each possible route of exposure see subsection 4.2.

Symptoms related to the physical, chemical and toxicological characteristics

No data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

No data.

11.2 Information on other hazards

Endocrine disrupting properties

Not applicable.

Other information

Not applicable.

Section 12: Ecological information

12.1 Toxicity

Product is not classified as hazardous for the aquatic environment.

12.2 Persistence and degradability

Fast oxidation in the photochemical reaction in the air

12.3 Bioaccumulative potential

Bioaccumulation is not expected.

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12.4 Mobility in soil

Product evaporates very quickly from soil and water. It disperses quickly in the air.

12.5 Results of PBT and vPvB assessment

Components of the mixture do not meet the PBT or vPvP criteria.

12.6 Endocrine disrupting properties

The product does not contain components with endocrine disrupting properties.

12.7 Other adverse effects

The product does not affect global warming and ozone layer depletion. Consider other harmful effects of individual components of the mixture on the environment (e.g. global warming potential).

Section 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the product: disposal in accordance with the local legislation. Do not remove the remains from the original packaging. Send the product to an authorized waste transfer facility. Waste code should be given in the place of waste formation.

Disposal methods for used packing: reuse/recycle/liquidate empty containers in accordance with the local legislation. Do not pierce or burn containers, even after use. Send disposable packaging to an utilization.

Legal basis: Directive 2008/98/EC as amended, 94/62/EC as amended.

Section 14: Transport information

14.1 UN number or ID number

UN 1950

14.2 UN proper shipping name

ADR/RID

AEROSOLS

IMDG

AEROSOLS

ICAO/IATA

AEROSOLS, FLAMMABLE

14.3 Transport hazard class(es)

2

Division: 2.1

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Product is not classified as hazardous for environment according to transport regulation.

14.6 Special precautions for user

Packages shall not be thrown or subjected to impact. Receptacles shall be so stowed in the vehicle or container that they cannot overturn or fall.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

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Section 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended.

Regulation (EU) No 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.

Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

Commission Directive 2019/1831/EU of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for mixtures in accordance with REACH Regulation.

Section 16: Other information

Full text of indicated H phrases mentioned in section 3

H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.

Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	very Persistent, very Bioaccumulative substance
Flam. Gas 1	Flammable gas, category 1
Press. Gas	Gases under pressure

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training. People associated with transport of hazardous materials in accordance with ADR should be adequately trained for their job responsibilities (general training, bench and safety).

Key literature references and sources of data

This SDS was prepared on the basis of sheets of the individual components, literature data, online databases (e.g. ECHA, TOXNET, COSING) as well as our knowledge and experience, taking into account current legislation.

Procedures used to classify of the mixture

Classification was based on physicochemical tests, on the content of hazardous components and was calculated with calculation method under the guidance of Regulation 1272/2008/EC (CLP) as amended.

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Other data

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The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.