

Material safety data sheet

according to 1907/2006/EG, Article 31



GENAXXON

b i o s c i e n c e

Product number : S5450

Product name :

DAF-FM DA

1. Identification of the substance/preparation and of the company

Product identifier

Product Name: DAF-FM DA

Catalogue Number: S5450

CAS Number: 254109-22-3

EC Number:

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

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

No further relevant information available.

Application of the substance/the preparation

Laboratory chemical

Chemical analytics

Biochemistry

Details of the supplier of the safety data sheet

Manufacturer /Supplier:

Genaxxon bioscience GmbH, Söflinger Str. 70, 89077 Ulm/Germany.

Tel.: +49 (0)731 3608 123, info@genaxxon.com

Further information available from: General Management

Emergency telephone number:

Poison Information Centre Mainz, Germany, Tel.: +49 (0)6131 19240 / 24 h

NOTE: If this product is a kit or supplied with more than one material, please refer to the MSDS for each component for hazard information.

Product Use:

This products are for laboratory research use only and are not intended for human or animal diagnostics, therapeutics or other clinical uses.

2. Hazardous identification

Classification of the substance/preparation/mixture

Classification according to Regulation (EC) No 1272/2008

Acute Tox. 4 H302 Harmful if swallowed.

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

Xn; Harmful

R22: Harmful if swallowed.

Information concerning particular hazards for human and environment:

The product does not have to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:

The classification is according the latest editions of the EU-lists, and extended by company and literature data.

Label elements

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

Hazard pictogram(s)



GHS07

Signal word: Warning

Hazard-determining components of labelling:

guanidinium thiocyanate

Hazard statements

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H302 Harmful if swallowed.

Precautionary statements

None.

Additional information:

EUH032 Contact with acids liberates very toxic gas..

Other hazards

Result of PBT and vPvB assessment

PBT: not applicable

vPvB: not applicable

3. Composition/information on ingredients

Chemical Characterisation: Substance

Description:

Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component | Classification | Concentration |
|----------------------|----------------|---------------------|
| CAS-No.: 254109-22-3 | DAF-FM DA | Acute Tox. 4, H302; |
| EINECS: - | | <100% |

Additional information: For the wording of the listed risk phrases refer to section 16.

4. First-aid measures

Description of first aid measures

General information: -

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediately remove any clothing soiled by the product.

Seek medical treatment.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Rinse out mouth. Make victim drink water (maximum of 2 drinking glasses).

Seek medical treatment.

Information for doctor:

Most important symptoms and effects, both acute and delayed: No further relevant information available.

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

Water Spray. Carbon Dioxide. Dry chemical powder, or appropriate foam. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture:

Formation of toxic gases is possible during heating or in case of fire.

In case of a fire, the following can be released:

Carbon oxides (CO, CO₂)

Nitrogen oxides (NO_x)

Advice for fire fighters:

Protective equipment:

Wear self-contained respiratory protective device.

Additional information:

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Contain escaping vapours with water.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Do not inhale dust.

Avoid substance contact.

Ensure adequate ventilation.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions: Do not allow product to enter sewage system, surface or ground water.

Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up:

Pick up mechanically.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Clean up affected area.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Additional information: None

7. Handling and storage

Handling

Precautions for safe handling:

Open and handle receptacle with care.

Ensure good ventilation/exhaustion at the workplace.

Information about fire – and explosion protection:

Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Do not store together with acids.

Further information about storage conditions:

Keep container tightly sealed.

Open receptacle only under localized extractor facilities.

Store under lock and key and with access restricted to technical experts or their assistants only.

Recommended storage temperature: +2°C – +8°C

Storage class: 10-13

Specific end use(s): No further relevant information available.

8. Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

Store protective clothing separately.

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

Immediately remove all soiled and contaminated clothing.

Respiratory protection:

Required when dusts are generated.

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Filter P1 (EN 143).



Protection of hands:



Protective gloves (EN 374)

The glove material has to be impermeable and resist ant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for permeation: Level: >480 min.

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for the permeation: Level ≥ 480 min.

Eye/face protection: Safety glasses



Safety glasses (EN 166)

Body protection:

Use protective suit.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9. Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance

| | |
|---------|-------------------|
| Form: | Powder |
| Colour: | off-white |
| Odour: | No data available |

pH value at 20°C: Undetermined

Change in conditions

| | |
|------------------------------|--------------|
| Melting point/Melting range: | Undetermined |
| Boiling point/Boiling range: | Undetermined |

Flash point: Not applicable

Flammability (solid, gaseous): Product is not flammable

Decomposition temperature: Not determined

Self-ignition: Product is not self-igniting

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Danger of explosion: Product does not present an explosion hazard

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapour pressure: Not applicable

Density (20°C): Not determined

Bulk density at 20°C: Not determined

Solubility in / Miscibility with (water, 20°C): Not determined

Partition coefficient (n-octanol/water): Not determined

Viscosity:

Dynamic: Not applicable

Kinematic: Not applicable

Solvent content:

Organic solvents: 0.0%

Other information: No further relevant information available.

10. Stability and reactivity

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided:

strong heating.

Possibility of hazardous reactions: No further relevant information available.

Conditions to avoid: No further relevant information available.

Incompatible materials: strong oxidizing agents.

Hazardous decomposition products:

In the event of fire: See chapter 5 of this data sheet.

11. Toxicological information

Information on toxicological effects

Acute toxicity:

Primary irritant effect

on the skin: No irritant effect known.

on the eye: No irritating effect known.

After inhalation: No irritant effect known.

Sensitization: No sensitizing effects known.

Other information (about experimental toxicology):

Additional toxicological information:

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

The product should be treated with usual precautions while handling chemicals.

12. Ecological Information

Toxicity

Acquatic toxicity: No further relevant information available

Persistence and degradability: No further relevant information available

Behaviour in environmental systems

Bioaccumulative potential: No further relevant information available

Mobility in soil: No further relevant information available

Additional ecological information

General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

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Danger to drinking water if even small quantities leak into the ground.

Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

Other adverse effects: No further relevant information available.

13. Disposal considerations

Waste treatment methods

Recommendation:

Chemicals must be disposed of in compliance with the respective national regulations. Must not be disposed together with household garbage. Do not allow product to reach sewage system. Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Recommended cleaning agents: Water, if necessary together with cleansing agents.

14. Transport information

UN-Number

ADR, ADN, IMDG, IATA Void

UN proper shipping name

ADR; ADN, IMDG, IATA: Void

Transport hazard class(es):

ADR, ADN, IMDG, IATA class: Void

Packing group:

ADR, IMDG, IATA Void

Environmental hazards / Marine pollutant: No

Special precautions for user: Not applicable

Transport in bulk according to Annex II of

MARPOL 73/78 and the IBC-Code Not applicable

Transport/Additional information: Not dangerous according to the above specifications

UN „Model Regulation“: - - -

15. Regulatory information

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

No further relevant information available.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Genaxxon bioscience GmbH, shall not be held liable for any damage resulting from handling or from contact with the above product.

Relevant phrases

Acute Tox. 4 H302 Harmful if swallowed.

Disclaimer

This product is for R&D use only. Not for drug, household or other uses.

Abbreviations and Acronyms:

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ACAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS: Chemical Abstracts Service (division of the American Chemical Society)

EINECS: European Inventory of Existing Commercial Chemical Substances

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)

GHS: Globally Harmonized System of Classification and labeling of Chemicals

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

IMDG: International Maritime code for Dangerous Goods

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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