



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
GB/T 16483-2008, GB/T 17519-2013

Product Name FAM-VDVAD-FMK FLUORESCEIN DERIVATIVE OF BENZYLOXYCARBONYL
VALYLSPARTYLVALYLALANYLASPARTIC ACID FLUOROMETHYL KETONE - #20281

Revision date 17-Nov-2021

Revision Number 2

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

Product identifier

Product Name FAM-VDVAD-FMK FLUORESCEIN DERIVATIVE OF BENZYLOXYCARBONYL
VALYLSPARTYLVALYLALANYLASPARTIC ACID FLUOROMETHYL KETONE - #20281

English chemical name Non-hazardous ingredient

Other means of identification

Safety data sheet number 20281

Pure substance/mixture Mixture

Details of the supplier of the safety data sheet

Corporate Headquarters

Bio-Rad Laboratories Inc.
1000 Alfred Nobel Drive
Hercules, CA 94547
USA

Manufacturer

Bio-Rad
Endeavour House
Langford Business Park
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OX5 1GE
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m

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Pathumwan, Bangkok 10330
Thailand

Technical Service +66 2 652 8313
ctsthailand@bio-rad.com

Emergency telephone number

24 Hour Emergency Phone Number CHEMTREC Hong Kong: 800-968-793

Recommended use of the chemical and restrictions on use

Recommended use For research use only

SECTION 2: Hazards identification

Emergency Overview

No significant adverse health effects

Appearance Solid, (white to off-white)
powder or cake, lyophilised

Physical state Solid

Odour No information available

Revision date 17-Nov-2021

| | | | |
|----------------------|--|----------------------|------------|
| Product Name | FAM-VDVAD-FMK FLUORESCCEIN DERIVATIVE OF BENZYLOXYCARBONYL VALYLASPARTYLVALYLALANYLASPARTIC ACID FLUOROMETHYL KETONE - #20281 | (M)SDS Number | OXAC-20281 |
| Revision date | 17-Nov-2021 | | |

Classification of the substance or mixture

Not classified

Label elements

Hazard statements

Not classified

Physical and chemical hazards

Not applicable.

Health hazards

Immediate Health Effects: Not applicable.

Chronic effects: Not applicable.

Environmental hazards

Not applicable

Other hazards which do not result in classification

Not applicable

SECTION 3: Composition/information on ingredients

Substance

Not classified.

| Chemical name | Weight-% | CAS No |
|---------------|----------|--------|
| Trade secret | 50 - 100 | - |

SECTION 4: First aid measures

Description of necessary first aid measures

| | |
|---|--|
| General advice | No hazards which require special first aid measures. |
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| Skin contact | Wash skin with soap and water. |
| Ingestion | Rinse mouth thoroughly with water. |
| <u>Most important symptoms and effects, both acute and delayed</u> | No information available. |

Revision date 17-Nov-2021

| | | | |
|----------------------|--|----------------------|------------|
| Product Name | FAM-VDVAD-FMK FLUORESCCEIN DERIVATIVE OF BENZYLOXYCARBONYL VALYLASPARTYLVALYLALANYLASPARTIC ACID FLUOROMETHYL KETONE - #20281 | (M)SDS Number | OXAC-20281 |
| Revision date | 17-Nov-2021 | | |

For emergency responders No information available.

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical No information available.

Special protective actions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions See section 8 for more information.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

SECTION 7: Handling and storage

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice. See Section 8 for information on appropriate personal protective equipment.

Conditions for safe storage, including any incompatibilities Store according to product and label instructions.

Incompatible materials None known based on information supplied.

SECTION 8: Exposure controls/personal protection

Occupational exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region

Revision date 17-Nov-2021

| | | | |
|----------------------|--|----------------------|------------|
| Product Name | FAM-VDVAD-FMK FLUORESCIN DERIVATIVE OF BENZYLOXYCARBONYL VALYLASPARTYLVALYLALANYLASPARTIC ACID FLUOROMETHYL KETONE - #20281 | (M)SDS Number | OXAC-20281 |
| Revision date | 17-Nov-2021 | | |

specific regulatory bodies.

Note See section 16 for terms and abbreviations

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Monitoring and observation processes

No applicable information was found.

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|--|
| Eye/face protection | Wear safety glasses with side shields (or goggles). |
| Skin and body protection | Wear suitable protective clothing. |
| Hand protection | Wear suitable gloves. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | |
|------------------------|---|
| Appearance | Solid, (white to off-white) powder or cake, lyophilised |
| Colour | Varies |
| Physical state | Solid |
| Odour | No information available |
| Odour threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|----------------------|--------------------------------|
| pH | | None known |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapour pressure | No data available | None known |
| Vapour density | No data available | None known |
| Relative density | No data available | None known |
| Water solubility | Insoluble in water | |
| Solubility(ies) | No data available | None known |

Revision date 17-Nov-2021

| | | | |
|----------------------|---|----------------------|------------|
| Product Name | FAM-VDVAD-FMK FLUORESCINE DERIVATIVE OF BENZYLOXYCARBONYL VALYLASPARTYLVALYLALANYLASPARTIC ACID FLUOROMETHYL KETONE - #20281 | (M)SDS Number | OXAC-20281 |
| Revision date | 17-Nov-2021 | | |

| | | |
|----------------------------------|-------------------|------------|
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | No data available | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |

Additional information

| | |
|-----------------------------|----------------|
| Explosive properties | Not applicable |
| Oxidising properties | Not applicable |

SECTION 10: Stability and reactivity

Stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

| | |
|---|-------|
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |

Conditions to avoid None known based on information supplied.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

Acute toxicity

Numerical measures of toxicity
No information available

| | |
|------------------------|--------------------------|
| Oral LD50 | No information available |
| Dermal LD50 | No information available |
| Inhalation LC50 | No information available |
| Inhalation LC50 | No information available |

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/eye 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.

Specific target organ toxicity — single exposure Based on available data, the classification criteria are not met.

Revision date 17-Nov-2021

| | | | |
|----------------------|--|----------------------|------------|
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| Revision date | 17-Nov-2021 | | |

Specific target organ toxicity — repeated exposure Based on available data, the classification criteria are not met.

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

SECTION 12: Ecological information

Ecotoxicity The environmental impact of this product has not been fully investigated.

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Mobility in soil No information available.

SECTION 13: Disposal considerations

Waste chemicals Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

IMDG Not regulated
Transport in bulk according to Annex II of MARPOL and the IBC Code No information available

IATA Not regulated

China Not regulated

Special precautions for user
Please refer to the applicable dangerous goods regulations for additional information

SECTION 15: Regulatory information

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

National regulations

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

| | |
|---|-----------------|
| Catalogue of occupational hazard factors: | Not applicable. |
| Catalogue of occupational diseases: | Not applicable. |

Regulations on the Control over Safety of Hazardous Chemicals

Revision date 17-Nov-2021

| | | | |
|----------------------|--|----------------------|------------|
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| Revision date | 17-Nov-2021 | | |

Inventory of hazardous chemicals Not applicable.

GB 18218-2009 Identification of major hazard installations for dangerous chemicals Not applicable

List of hazardous chemicals under priority management Not applicable

Regulations on Labour Protection in Workplaces Where Toxic Substances Are Used
Inventory of highly toxic goods Not applicable

Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

List of toxic chemicals severely restricted for import and export in China Not applicable

Measures for the Environmental Management of New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances Contact supplier for inventory compliance status.

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

SECTION 16: Other information

Prepared By Bio-Rad Laboratories, Environmental Health and Safety

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Revision Note Significant changes throughout SDS. Review all sections.

Abbreviations and acronyms

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |
| C | Carcinogen | | |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AELG(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)

Revision date 17-Nov-2021

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|----------------------|--|----------------------|------------|
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| Revision date | 17-Nov-2021 | | |

New Zealand's Chemical Classification and Information Database (CCID)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Disclaimer

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End of Safety Data Sheet

Revision date 17-Nov-2021
