

Safety data sheet

Page: 1/15

BASF safety data sheet. This is a translation of the country-specific safety data sheet into a language other than that required by law. This document does not replace the safety data sheet provided according to Regulation (EC) No 1907/2006.

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

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

1.1. Product identifier

MELFLUX 5581 F MB

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

Relevant identified uses: Product for construction chemicals

1.3. Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY
Regional Business Unit Dispersions Europe

Telephone: +49 621 60-0

E-mail address: ed-psr@basf.com

1.4. Emergency telephone number

International emergency number: Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

According to Regulation (EC) No 1272/2008 [CLP]

No need for classification according to GHS criteria for this product.

to Regulation (EC) No 1907/2006.

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

The product does not require a hazard warning label in accordance with GHS criteria.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. The product is under certain conditions capable of dust explosion.

The product does not contain a substance above legal limits fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

Polymer based on:polycarboxylate ether

Regulatory relevant ingredients

No particular hazards known.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

to Regulation (EC) No 1907/2006.

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

On ingestion:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting unless told to by a poison control center or doctor.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media: dry powder, foam

Unsuitable extinguishing media for safety reasons: carbon dioxide

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

5.2. Special hazards arising from the substance or mixture

Endangering substances: harmful vapours

Advice: Generation of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Use personal protective clothing.

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

6.2. Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of. For large amounts: Contain with dust binding material and dispose of. Avoid raising dust.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Implement proper technical protective measures to prevent product release during handling and processing.

Protection against fire and explosion:

Avoid dust formation. Take precautionary measures against static discharges.

Dust explosion class: Dust explosion class 1 (Kst-value >0 up to 200 bar m s-1).

7.2. Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect from direct sunlight. The substance/product may cake at higher temperatures/pressure.

Storage class according to TRGS 510 (originally VCI, Germany): (11) Combustible solids.

Protect from temperatures above:40 °C

The packed product must be protected against exceeding the indicated temperature.

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

The surveillance of the workplace by exposure measurements may be necessary, in order to prove the efficiency of safety measures, for example ventilation or the need of respiratory protection. Since this requires a specific competency, only accredited laboratories should be contracted. Regarding suitable methods to assess inhalation exposure, the European Standards EN 482, 689 and 14042 are to be considered. In addition, the TRGS 402 has to be observed in Germany.

7631-86-9: Silicon dioxide

OEL 1 mg/m3 (TRGS 900 (DE)), Inhalable fraction

Ceiling limit value/factor: 8

If the occupational exposure limit value (AGW) and the biological limit value (BGW) are complied with, there should be no risk of damage for the unborn child (see TRGS 900, Number 2.7)

Short Term Exposure Classification: (TRGS 900 (DE)), Inhalable fraction Category II: Substances with a resorptive effect

8.2. Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):
e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

light protective clothing

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

to Regulation (EC) No 1907/2006.

Date / Revised: 16.06.2025 Version: 1.3 Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter: solid Form: powder

Colour: Yellowish to brownish

Odour: characteristic

Odour threshold:

No applicable information available.

Melting temperature:

The substance / product decomposes therefore not

determined.

boiling temperature:

not applicable 30 g/m3

Lower explosion limit:

Flash point:

not applicable

Auto-ignition temperature: 360 °C (BS EN 50281-2-1 Method B) Self-ignition temperature: Temperature: 165 °C

Test type: Self-ignition at high

temperatures.

(Method: VDI 2263, sheet 1,

1.4.2 (May 1990))

Data for powdery solid. - No self ignition was observed up to the

specified temperature.

> 180 °C Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

pH value: approx. 6,5 - 8,5

(20 %(m), 20 °C)

Viscosity, dynamic:

not applicable, the product is a solid

Solubility in water: soluble

(20 °C)

Partitioning coefficient n-octanol/water (log Kow):

not applicable for mixtures

Vapour pressure:

The product has not been tested.

Density:

not applicable

Relative vapour density (air):

The product is a non-volatile solid.

Particle characteristics

Particle size distribution: < 300 µm (D50, Volumetric Distribution,

ISO 13322-2)

Date / Revised: 16.06.2025 Version: 1.3

Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: not explosive

Oxidizing properties

Fire promoting properties: not fire-propagating

Self-heating substances and mixtures

Self heating ability: It is not a substance capable of (UN Test N.4 (self heating

spontaneous heating according to substances))

UN transport regulations class 4.2.

Corrosion to metals

Corrosive effects to metal are not anticipated.

Other safety characteristics

Minimum ignition energy: 30 - 100 mJ

Inductivity: 1 mH

Grain size distribution: < 63 µm

Bulk density: approx. 300 - 550 kg/m3

Miscibility with water:

not applicable

Hygroscopy: The product has not been tested.

Other Information: If necessary, information on other physical and chemical parameters is

indicated in this section.

SAPT-Temperature:

Product does not fulfil criteria for polymerizing substances according to

transport regulations.

Evaporation rate:

The product is a non-volatile solid.

SECTION 10: Stability and Reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effects to metal are not anticipated.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

Dust explosion hazard.

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

10.4. Conditions to avoid

See SDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:

strong acids, strong bases, strong oxidizing agents, strong reducing agents

10.6. Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological Information

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

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. Based on available data, the classification criteria are not met.

Experimental/calculated data:

LD50 rat (oral): > 5.000 mg/kg

The product has not been tested. The statement has been derived from the properties of the individual components.

LC50 rat (by inhalation): 4 h

not determined LD50 rat (dermal): not determined

Irritation

Assessment of irritating effects:

No irritation is expected under intended use and appropriate handling. Based on available data, the classification criteria are not met.

Experimental/calculated data:

Skin corrosion/irritation

rabbit: non-irritant

The product has not been tested. The statement has been derived from the properties of the individual components.

Serious eye damage/irritation

rabbit: non-irritant

Date / Revised: 16.06.2025 Version: 1.3 Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

The product has not been tested. The statement has been derived from the properties of the individual components.

Respiratory/Skin sensitization

Assessment of sensitization:

Based on the ingredients, there is no suspicion of a skin-sensitizing potential. Based on available data, the classification criteria are not met.

Experimental/calculated data:

guinea pig: Non-sensitizing.

Germ cell mutagenicity

Assessment of mutagenicity:

Based on the ingredients, there is no suspicion of a mutagenic effect.

Carcinogenicity

Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:

Based on the ingredients, there is no suspicion of a toxic effect on reproduction.

Developmental toxicity

Assessment of teratogenicity:

Based on the ingredients, there is no suspicion of a teratogenic effect.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

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

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The information available on the product provides no indication of toxicity on target organs after repeated exposure.

Aspiration hazard

not applicable

Interactive effects

No data available.

11.2. Information on other hazards

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:

Based on available data, the classification criteria are not met. There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish: LC50 (96 h), Fish (other) not determined

Aquatic invertebrates: LC50 (48 h), daphnia (other) not determined

Aquatic plants: EC50 (72 h), algae (other) not determined

Microorganisms/Effect on activated sludge: EC50 (0,5 h), bacteria (other) not determined

Chronic toxicity to fish: No data available.

Chronic toxicity to aquatic invertebrates: No data available.

Assessment of terrestrial toxicity: No data available concerning terrestrial toxicity.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O): Not readily biodegradable (by OECD criteria).

to Regulation (EC) No 1907/2006.

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

12.3. Bioaccumulative potential

Assessment bioaccumulation potential: No data available.

12.4. Mobility in soil

Assessment transport between environmental compartments: Volatility: No data available.

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

12.6. Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

The product does not contain substances that are listed in Regulation (EU) 2024/590 on substances that deplete the ozone layer.

Additional information

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Observe national and local legal requirements.

Residues should be disposed of in the same manner as the substance/product.

to Regulation (EC) No 1907/2006.

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

Contaminated packaging:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

SECTION 14: Transport Information

Land transport

ADR

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

RID

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:

Not applicable
Not applicable
Not applicable

user

None known

Inland waterway transport

Special precautions for

ADN

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user:

Transport in inland waterway vessel

Not evaluated

to Regulation (EC) No 1907/2006.

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

UN number or ID number:
UN proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

14.1. UN number or ID number

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Product: MELFLUX 5581 F MB

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

SECTION 15: Regulatory Information

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

Hazardous Incident Ordinance (Germany):

Listed in above regulation: no

Classification applies for standard conditions of temperature and pressure.

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU): Listed in above regulation: no

Classification applies for standard conditions of temperature and pressure.

Water hazard class (§8/§10 AwSV (Self-classification of the mixture according to calculation method)): (1) Weakly water polluting.

15.2. Chemical Safety Assessment

Chemical Safety Assessment not required

SECTION 16: Other Information

Assessment of the hazard classes according to UN GHS criteria (most recent version)

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The

Date / Revised: 16.06.2025 Version: 1.3
Date / Previous version: 27.06.2023 Previous version: 1.2

Date / Previous version: 27.06.2023 Product: **MELFLUX 5581 F MB**

(ID no. 30857638/SDS_GEN_DE/EN)

Date of print 14.10.2025

European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.