

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended


FN1®

Creation date 15. May 2019
Revision date Version 1.0

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

- 1.1. Product identifier**
Substance / mixture FN1®
Other mixture names mixture
FN1® transparent
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use The product is used as a protective coating with an ecological air cleaning function and self-cleaning function. It is suitable for all common types of concrete bases and exterior or interior masonry and as a protection of concrete tiles and roof surfaces. A coating layer is formed by the cooperation of components contained in coated base. The coating is hardened after 24 hours. The layer activation is provoked by the daylight. The coating is fully active after the first rain or after rinsing with water. FN1® is certificated as a concrete protection. The coating's antibacterial properties are provided by combination of physical parameters of porous layer.
- Mixture uses advised against The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Manufacturer
Name or trade name Advanced Materials - JTJ s.r.o.
Address Kamenné Žehrovice 23, Kamenné Žehrovice, 27301
Czech Republic
Identification number (CRN) 26763842
Phone +420 774 735 163
E-mail info@advancedmaterials1.com
- Competent person responsible for the safety data sheet**
Name GRACILIS s.r.o.
E-mail info@gracilis.cz
- 1.4. Emergency telephone number**
National Health Service (NHS) 111
National poisoning information centre Scotland, NHS 24: 111

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is classified as dangerous.
- Eye Irrit. 2, H319
Aquatic Chronic 3, H412
- Full text of all classifications and hazard statements is given in the section 16.
- Most serious adverse effects on human health and the environment**
Causes serious eye irritation. Harmful to aquatic life with long lasting effects.
- 2.2. Label elements**
Hazard pictogram
- 
- Signal word**
Warning

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Hazard statements

H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.
P273 Avoid release to the environment.
P280 Wear eye protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P501 Dispose of contents/container to according to applicable regulations.

2.3. Other hazards

Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below. Aqueous suspension of the mixture of untreated titanium dioxide and inorganic additives.

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note.
Index: 030-006-00-9 CAS: 7446-19-7 EC: 231-793-3	Zinc sulphate (hydrous) (mono-, hexa- and hepta hydrate)	<2,4	Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

DO NOT INDUCE VOMITING! Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.

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- 4.2. Most important symptoms and effects, both acute and delayed**
If inhaled
Mucous membranes may be irritated.
If on skin
May cause mild skin irritation. Repeated exposure may cause skin dryness or cracking.
If in eyes
Causes serious eye irritation.
If swallowed
May cause irritation of mouth, pharynx, esophagus and digestive tract.
- 4.3. Indication of any immediate medical attention and special treatment needed**
Symptomatic treatment.

SECTION 5: Firefighting measures

- 5.1. Extinguishing media**
Suitable extinguishing media
Water spray jet, water mist.
Unsuitable extinguishing media
not available
- 5.2. Special hazards arising from the substance or mixture**
not available
- 5.3. Advice for firefighters**
not available

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8.
- 6.2. Environmental precautions**
Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.
- 6.3. Methods and material for containment and cleaning up**
Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies.
- 6.4. Reference to other sections**
See the Section 7, 8 and 13.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling**
Prevent contact with skin and eyes. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.
- 7.2. Conditions for safe storage, including any incompatibilities**
Store in tightly closed containers in a cool, dry place intended for this purpose. Protect against frost. Store for not more than 5 year from the date of production.
Storage temperature min 10 °C, max 25 °C
- 7.3. Specific end use(s)**
not available

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters**
none

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8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles or face shield.

Skin protection

Hand protection: Protective gloves resistant to the product. Use barrier creams for skin protection, they should, however, not be applied once exposure has occurred. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

Respiratory protection

Respirator.

Thermal hazard

No.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state liquid at 20°C

color milky, cloudy

Odour without fragrance

Odour threshold data not available

pH 6 (undiluted)

Melting point/freezing point 0 °C

Initial boiling point and boiling range 100 °C

Flash point data not available

Evaporation rate data not available

Flammability (solid, gas) non-flammable

Upper/lower flammability or explosive limits

flammability limits data not available

explosive limits data not available

Vapour pressure N/A

Vapour density N/A

Relative density data not available

Solubility(ies)

solubility in water data not available

solubility in fats data not available

Partition coefficient: n-octanol/water data not available

Auto-ignition temperature data not available

Decomposition temperature data not available

Viscosity data not available

Explosive properties data not available

Oxidising properties data not available

9.2. Other information

Density 1.1 g/cm³ at 20 °C

ignition temperature data not available

content of organic solvents (VOC) 0 %

solid content (dry matter) 6.5 % volume

Outflow time: 8-15s (4mm at 23/50).

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under normal conditions.

10.2. Chemical stability

The product is stable under normal conditions.

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10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Unknown.

10.6. Hazardous decomposition products

N/A

SECTION 11: Toxicological information

11.1. Information on toxicological effects

No toxicological data is available for the mixture.

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

Causes serious eye irritation.

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.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - 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

12.1. Toxicity

Acute toxicity

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

The mixture is biodegradable.

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Product with high viscosity.

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12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Other adverse effects

Water hazard class: WGK 2 (self-assessment).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

Waste type code

08 01 12 waste paint and varnish other than those mentioned in 08 01 11

08 01 16 aqueous sludges containing paint or varnish other than those mentioned in 08 01 15

Packaging waste type code

15 01 02 plastic packaging

15 01 04 metallic packaging

SECTION 14: Transport information

14.1. UN number

Not subject to ADR

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

14.5. Environmental hazards

not available

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not available

Additional information

Not regulated by RID, ACAO/IATA, IMDG.

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 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the 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 16th 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.

15.2. Chemical safety assessment

not available

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SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Guidelines for safe handling used in the safety data sheet

P102	Keep out of reach of children.
P273	Avoid release to the environment.
P280	Wear eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container to according to applicable regulations.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC ₅₀	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log K _{ow}	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations

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UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. First aid principles after the exposure to the chemicals (Zásady pro poskytování první pomoci při expozici chemickým látkám, doc. MUDr. Daniela Pelclová, CSc., MUDr. Alexandr Fuchs, CSc., MUDr. Miroslava Hornyčová, CSc., MUDr. Zdeňka Trávníčková, CSc., Jiřina Fridrichovská, prom. chem.). Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.