

# SAFETY DATA SHEET



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

## FN3®

Creation date 20. May 2019  
Revision date Version 1.0

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

- 1.1. Product identifier** FN3®  
Substance / mixture mixture
- 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. FN3® is suitable for all common types of concrete bases and exterior and interior masonry. The coating is fully hardened after 24 h. The layer activation is provoked by the daylight. The product is certificated for concrete and all common types of construction surfaces. The main use is for ceilings, where it acts as an air cleaner and antibacterial coating. 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 not classified as dangerous according to Regulation (EC) No 1272/2008.  
Full text of all classifications and hazard statements is given in the section 16.
- 2.2. Label elements**  
**Precautionary statements**  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read label before use.  
P233 Keep container tightly closed.  
P501 Dispose of contents/container to in accordance with local regulations by handing over to a person authorized to dispose of waste or a site designated by the town.
- 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.

# SAFETY DATA SHEET



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

**FN3®**

Creation date 20. May 2019

Revision date Version 1.0

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Aqueous suspension of untreated photoactive titanium dioxide and aggregation agents.

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

none

## 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 and soap. Do not use solvents or thinners. Use suitable hand cream in case the skin dryness occurs.

#### 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 irritation persists.

#### If swallowed

Rinse out the mouth with water and provide 2-5 dL of water.

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

#### If inhaled

not available

#### If on skin

Repeated or prolonged exposure may cause skin dryness, cracking and irritation.

#### If in eyes

not available

#### If swallowed

not available

### 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

The product is not flammable.

#### Unsuitable extinguishing media

N/A

### 5.2. Special hazards arising from the substance or mixture

No.

### 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.

# SAFETY DATA SHEET



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

**FN3®**

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## 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. After removal of the product, wash the contaminated site with plenty of water.

## 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 years from the date of production.

Storage temperature min 10 °C, max 30 °C

### 7.3. Specific end use(s)

Protective coating.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

none

### 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. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Use suitable barrier creams for skin protection. 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

N/A

pH

7-8 (undiluted)

Melting point/freezing point

1850 °C

Initial boiling point and boiling range

>100 °C

Flash point

data not available

Evaporation rate

as for water

Flammability (solid, gas)

The product is non-flammable.

Upper/lower flammability or explosive limits

flammability limits

data not available

explosive limits

data not available

# SAFETY DATA SHEET



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

## FN3®

Creation date	20. May 2019	Version	1.0
Revision date			

Vapour pressure	data not available
Vapour density	data not available
Relative density	data not available
Solubility(ies)	
solubility in water	insoluble
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	high
Explosive properties	The product does not have explosive properties.
Oxidising properties	The product has no oxidizing properties.

### 9.2. Other information

Density	1-1.2 g/cm <sup>3</sup> at 20 °C
ignition temperature	data not available
content of organic solvents (VOC)	0 %
solid content (dry matter)	10 % volume

Outflow time: 8-15s (4mm at 23/50). High water penetration (Sd[m]=0.06). High surface adhesion (3.0MPa). Chemical resistance (1542:2000;EN 13529:2004). Frost resistance and salt resistance (3.2MPa after 25 freezing cycles (ISO 4628-1,2)).

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under recommended storage conditions.

### 10.2. Chemical stability

The product is stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Unknown.

### 10.4. Conditions to avoid

Protect from temperatures exceeding 40°C and below 5°C.

### 10.5. Incompatible materials

Unknown.

### 10.6. Hazardous decomposition products

Unknown.

## 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.

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Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD <sub>50</sub>	>10000 mg/kg		Rat	
Dermal	LD <sub>50</sub>	>10000 mg/kg		Rabbit	

#### 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.

# SAFETY DATA SHEET



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

**FN3®**

Creation date 20. May 2019  
Revision date Version 1.0

## 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

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Parameter	Value	Time of exposure	Species	Environment
LC <sub>50</sub>	>1000 mg/l	96 hour	Other aquatic organisms	
EC <sub>50</sub>	>1000 mg/l	48 hour	Invertebrates	

### 12.2. Persistence and degradability

The mixture is not biodegradable.

### 12.3. Bioaccumulative potential

Not available.

### 12.4. Mobility in soil

The product has reduced mobility in soil.

### 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

Not available.

## 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.

# SAFETY DATA SHEET



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

**FN3®**

Creation date 20. May 2019  
Revision date Version 1.0

## 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

## SECTION 16: Other information

### Guidelines for safe handling used in the safety data sheet

- P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read label before use.  
P233 Keep container tightly closed.  
P501 Dispose of contents/container to in accordance with local regulations by handing over to a person authorized to dispose of waste or a site designated by the town.

### 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

# SAFETY DATA SHEET



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

**FN3®**

Creation date	20. May 2019	Version	1.0
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EC	Identification code for each substance listed in EINECS
EC <sub>50</sub>	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 <sub>50</sub>	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 <sub>50</sub>	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD <sub>50</sub>	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 <sub>ow</sub>	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
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

## 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.