

**Safety Data Sheet**  
according to Regulation (EC) No. 1907/2006 (REACH)  
according to Regulation (EU) 2015/830



Article No.: 34100129  
Print date: 01.06.2018  
Version: 2.4

Active FORMULA S  
Revision date: 25.04.2018  
Issue date: 25.04.2018

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

**1.1. Product identifier**

Article No. (manufacturer/supplier): 34100129  
Identification of the substance or mixture: Active FORMULA S  
active Formel S (EN)  
Deichmann Art. Nr.: 2 985 308

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

**Relevant identified uses:**  
shoe deo

**1.3. Details of the supplier of the safety data sheet**

**supplier (manufacturer/importer/downstream user/distributor)**

Nanogate Textile & Care Systems GmbH  
Zum Schacht 3  
D-66287 Göttelborn

Telephone: +49 - (0)6825 / 9591 - 0  
Telefax: +49 - (0)6825 / 9591 - 852  
E-mail info@nanogate.com

**Dept. responsible for information:**

E-mail (competent person) msds@nanogate.com

**1.4. Emergency telephone number**

111 (England, Wales, Scotland)

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Aerosol 1 / H222  
Aerosol 1 / H229

Aerosol  
Aerosol

Extremely flammable aerosol.  
Pressurised container: May burst if heated.

**2.2. Label elements**

The product is classified and labelled according to EC directives or corresponding national laws.

**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

**Hazard pictograms**



**Danger**

**Hazard statements**

H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn, even after use.  
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.  
P260 Do not breathe aerosol.  
P271 Use only outdoors or in a well-ventilated area.  
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.

**contains:**

not applicable

**Supplemental Hazard information (EU)**

not applicable

**2.3. Other hazards**

**SECTION 3: Composition / information on ingredients**

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### 3.2. Mixtures

#### Hazardous ingredients

#### Classification according to Regulation (EC) No 1272/2008 [CLP]

EC No. CAS No. INDEX No.	REACH No. Chemical name classification: // Remark	Wt %
204-065-8	01-2119472128-37-xxxx	
115-10-6	dimethyl ether	35 < 50
603-019-00-8	compressed gas H280 / Flam. Gas 1 H220	

#### Additional information

Full text of classification: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness give nothing by mouth, place in recovery position and seek medical advice.

##### In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of irregular breathing or respiratory arrest provide artificial respiration.

##### Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. Do not use solvents or thinners.

##### After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

##### After ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Seek medical advice immediately. Keep victim calm. Do NOT induce vomiting.

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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media:

alcohol resistant foam, carbon dioxide, Powder, spray mist, (water)

##### Extinguishing media which must not be used for safety reasons:

strong water jet

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

Dense black smoke occurs during fire. Inhaling hazardous decomposing products can cause serious health damage.

#### 5.3. Advice for firefighters

Provide a conveniently located respiratory protective device. Do not allow water used to extinguish fire to enter drains, ground or waterways. Cool closed containers that are near the source of the fire.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition. Ventilate affected area. Do not breathe vapours.

#### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. If the product contaminates lakes, rivers or sewages, inform competent authorities in accordance with local regulations.

#### 6.3. Methods and material for containment and cleaning up

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it

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for disposal in appropriate containers in accordance with the local regulations (see section 13). Clean using cleansing agents. Do not use solvents.

#### 6.4. Reference to other sections

Observe protective provisions (see section 7 and 8).

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

##### Advices on safe handling

Avoid formation of flammable and explosive vapour concentrations in the air and exceeding the exposure limit values. Only use the material in places where open light, fire and other flammable sources can be kept away. Electrical equipment must be protected meeting the accepted standard. Product may become electrostatically charged. Provide earthing of containers, equipment, pumps and ventilation facilities. Anti-static clothing including shoes are recommended. Floors must be electrically conductive. Keep away from heat sources, sparks and open flames. Use only spark proof tools. Avoid contact with skin, eyes and clothes. Do not inhale dusts, particulates and spray mist when using this preparation. Avoid respiration of swarf. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Do not empty containers with pressure - no pressure vessel! Always keep in containers that correspond to the material of the original container. Follow the legal protection and safety regulations.

##### Precautions against fire and explosion:

Vapours are heavier than air. Vapours form explosive mixtures with air.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Requirements for storage rooms and vessels

Storage in accordance with the Ordinance on Industrial Safety and Health (BetrSiVO). Keep container tightly closed. Do not empty containers with pressure - no pressure vessel! Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks. Soils have to conform to the "Guidelines for avoidance of ignition hazards due to electrostatic charges (TRBS 2153)".

##### Hints on joint storage

Keep away from strongly acidic and alkaline materials as well as oxidizers.

##### Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between 15 °C and 30 °C. Protect from heat and direct sunlight. Keep container tightly closed. Remove all sources of ignition. Smoking is forbidden. Access only for authorised persons. Store carefully closed containers upright to prevent any leaks.

#### 7.3. Specific end use(s)

Observe technical data sheet. Observe instructions for use. Read label before use.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limit values

dimethyl ether

INDEX No. 603-019-00-8 / EC No. 204-065-8 / CAS No. 115-10-6

WEL, TWA: 766 mg/m<sup>3</sup>; 400 ppm

WEL, STEL: 958 mg/m<sup>3</sup>; 500 ppm

##### Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

#### 8.2. Exposure controls

Provide good ventilation. This can be achieved with local or room suction. If this should not be sufficient to keep aerosol and solvent vapour concentration below the exposure limit values, a suitable respiratory protection must be used.

##### Occupational exposure controls

##### Respiratory protection

If concentration of solvents is beyond the occupational exposure limit values, approved and suitable respiratory protection must be used. Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190). Use only respiratory protection equipment with CE-symbol including four digit test number.

Recommended Respiratory protection: Respiratory protective device with half mask filter material type A. The standards EN 136, 140 and 405 of the European Commission for Standardization (CEN) make recommendations to respirators, the standards EN 149 and EN 143 provide recommendations to respiratory filters.

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#### Hand protection

For prolonged or repeated handling the following glove material must be used: NBR (Nitrile rubber) / Butyl caoutchouc (butyl rubber)

Thickness of the glove material  $\geq$  0,7 mm

Breakthrough time (maximum wearing time) > 480 min.

Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles DIN EN 374

Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

#### Eye protection

Wear closely fitting protective glasses in case of splashes.

#### Protective clothing

Wear antistatic clothing of natural fibers (cotton) or heat resistant synthetic fibers.

#### Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

#### Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

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##### Appearance:

Physical state: **Liquid**  
Colour: **milky**

Odour: **after mild fragrance**

Odour threshold: **not determined**

pH at 20 °C:: **5 - 6 / 100,0 Wt %**  
Method: DIN 19268

Melting point/freezing point: **not determined**

Initial boiling point and boiling range: **not determined**

Flash point: **-41 °C**  
Method: DIN 51755 part 1

Evaporation rate: **not determined**

Flammability (solid, gas): **not determined**  
Burning time (s): **not determined**

##### Upper/lower flammability or explosive limits:

Lower explosion limit: **2,7 Vol-%**  
Upper explosion limit: **18,6 Vol-%**  
Source: dimethyl ether

Vapour pressure at 20 °C:: **2040,9985 mbar**

Vapour density: **not determined**

Relative density:  
Density at 20 °C:: **0,87 g/cm<sup>3</sup>**  
Method: DIN EN ISO 15212-1

##### Solubility(ies):

Water solubility (g/L) at 20 °C:: **completely miscible**

Partition coefficient: n-octanol/water: **see section 12**

Auto-ignition temperature: **235 °C**  
Source: dimethyl ether

Decomposition temperature: **not determined**

Viscosity at 20 °C:: **< 10 mPa·s**  
Method: DIN 53019

Explosive properties: **not applicable**

Oxidising properties: **not applicable**

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## 9.2. Other information \*

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

#### 10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

#### 10.3. Possibility of hazardous reactions

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions.

#### 10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures.

#### 10.5. Incompatible materials

#### 10.6. Hazardous decomposition products

Hazardous decomposition byproducts may form with exposure to high temperatures, e.g.: carbon dioxide, carbon monoxide, smoke, nitrogen oxides.

### SECTION 11: Toxicological information

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

No data on preparation itself available.

#### 11.1. Information on toxicological effects

##### Acute toxicity

Toxicological data are not available.

##### skin corrosion/irritation; Serious eye damage/eye irritation

Toxicological data are not available.

##### Respiratory or skin sensitisation

Toxicological data are not available.

##### Specific target organ toxicity

Toxicological data are not available.

##### Aspiration hazard

Toxicological data are not available.

##### Practical experience/human evidence

Other observations:

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: headache, dizziness, fatigue, amyosthenia, drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

##### Overall Assessment on CMR properties

The ingredients in this mixture do not meet the criteria for classification as CMR category 1A or 1B according to CLP.

##### Remark

There is no information available on the preparation itself .

### SECTION 12: Ecological information

#### overall evaluation

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

There is no information available on the preparation itself .

Do not allow to enter into surface water or drains.

#### 12.1. Toxicity

Toxicological data are not available.

#### 12.2. Persistence and degradability

Toxicological data are not available.

#### 12.3. Bioaccumulative potential

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Toxicological data are not available.

**12.4. Mobility in soil**

Toxicological data are not available.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

**12.6. Other adverse effects**

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

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**Appropriate disposal / Product Recommendation**

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

**List of proposed waste codes/waste designations in accordance with EWC**

160504 Gases in pressure containers (including halons) containing hazardous substances

**packaging**

**Recommendation**

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

**SECTION 14: Transport information**

**14.1. UN number**

UN 1950

**14.2. UN proper shipping name**

Land transport (ADR/RID): Aerosols, flammable  
Sea transport (IMDG): AEROSOLS  
Air transport (ICAO-TI / IATA-DGR): Aerosols, flammable

**14.3. Transport hazard class(es)**

2.1

**14.4. Packing group**

not applicable

**14.5. Environmental hazards**

Land transport (ADR/RID) not applicable  
Marine pollutant not applicable

**14.6. Special precautions for user**

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.  
Advices on safe handling: see parts 6 - 8

**Further information**

**Land transport (ADR/RID)**

tunnel restriction code D

**Sea transport (IMDG)**

EmS-No. F-D, S-U

**Air transport (ICAO-TI / IATA-DGR)**

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

not applicable

**SECTION 15: Regulatory information**

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

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**EU legislation**

**VOC Switzerland:**

weight fraction in %: 40,00

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**National regulations**

**Restrictions of occupation**

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.  
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

15.2. **Chemical Safety Assessment**

Chemical safety assessments for substances in this preparation were not carried out.

**SECTION 16: Other information**

**Full text of classification in section 3:**

compressed gas / H280      Gases under pressure

Contains gas under pressure; may explode if heated.

Flam. Gas 1 / H220      flammable gases

Extremely flammable gas.

**Further information**

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.

\* Data changed compared with the previous version