

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : Retarding agent  
Art. No. 2146  
Revision date : 27.04.2020  
Print date : 27.04.2020

Version (Revision) : 2.0.3 (2.0.2)

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

### 1.1 Product identifier

Retarding agent  
Art. No. 2146

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

#### Relevant identified uses

Product Categories [PC] Coatings and paints, fillers, putties, thinners

### 1.3 Details of the supplier of the safety data sheet

**Supplier (manufacturer/importer/only representative/downstream user/distributor)**

BIOFA Naturprodukte W.Hahn GmbH

**Street :** Dobelstr.22

**Postal code/city :** D-73087 Bad Boll

**Telephone :** +49 (0) 7164-9405-0

**Telefax :** +49 (0) 7164-9405-94

**Information contact :**

**Respondent department:** product safety department

**Contact:** Mr. Andrew Beuttenmüller

**E-mail address of the competent person responsible for the SDS:** a.beuttenmueller@biofa-de.com

### 1.4 Emergency telephone number

During office time 7:30 to 16:30: +49 (0) 7164-9405-0

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

None

### 2.2 Label elements

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

**Precautionary statements**

P102 Keep out of reach of children.

P501 Dispose of contents/container in accordance with local/national regulations

**Special rules for supplemental label elements for certain mixtures**

EUH210 Safety data sheet available on request.

### 2.3 Other hazards

None known.

Results of PBT and vPvB assessment: Not applicable.

## SECTION 3: Composition/information on ingredients

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## 3.2 Mixtures

### Hazardous ingredients

None

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

When in doubt or if symptoms are observed, get medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. If unconscious place in recovery position and seek medical advice.

#### Following inhalation

Remove casualty to fresh air and keep warm and at rest. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If breathing is irregular or stopped, administer artificial respiration.

#### In case of skin contact

Change contaminated, saturated clothing. After contact with skin, wash immediately with plenty of water and soap. Clean with detergents. Avoid solvent cleaners. In case of skin reactions, consult a physician.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. If necessary remove contact lenses and continue to flush with plenty of clean, fresh water.

#### After ingestion

Call a physician immediately. Put victim at rest, cover with a blanket and keep warm. Do NOT induce vomiting. If vomiting occurs, be sure to avoid choking. Rinse mouth thoroughly with water.

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

No information available.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

alcohol resistant foam Carbon dioxide (CO<sub>2</sub>) Water spray Extinguishing powder

#### Unsuitable extinguishing media

Full water jet

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

"Fire will produce dense black smoke. Exposure to danger decomposition products may cause a health hazard. " In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO<sub>2</sub>) Nitrogen oxides (NO<sub>x</sub>)

### 5.3 Advice for firefighters

Use suitable breathing apparatus. Use water spray jet to protect personnel and to cool endangered containers. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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### SECTION 6: Accidental release measures

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

Provide adequate ventilation. Wear breathing apparatus if exposed to vapours/dusts/aerosols. See protective measures under point 7 and 8.

#### 6.2 Environmental precautions

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

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

##### For cleaning up

Larger amounts have to be pumped out. Contain and collect small spillages with non-combustible absorbent materials, e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Preferably clean with a detergent. Avoid using solvents.

#### 6.4 Reference to other sections

See protective measures under point 7 and 8.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture. When using do not eat, drink, smoke, sniff. Wear personal protection equipment (refer to section 8). Keep container tightly closed. Never use pressure to empty container. Keep/Store only in original container. Comply with health and safety regulations.

Do not allow to enter into surface water or drains.

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

Store in accordance with local regulations.

##### Hints on joint storage

Keep away from: Alkali (lye). Acid Oxidizing agent

**Storage class :** 10

**Storage class (TRGS 510) :** 10

##### Further information on storage conditions

Observe label and technical data sheet precautions. Keep only in the original container in a cool, well-ventilated place. Protect against Heat. Frost Containers which are opened must be carefully resealed and kept upright to prevent leakage.

#### 7.3 Specific end use(s)

Trocknungsverzögerer für Steinöl wässrig und Hartöl wässrig

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

None

#### 8.2 Exposure controls

##### Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust

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ventilation or good general extraction.

## Personal protection equipment

Safety data sheet of raw material suppliers or taken by accredited Laboratories or have been determined internally

### Eye/face protection

Suitable eye protection Eye glasses with side protection

### Skin protection

After cleaning apply high-fat content skin care cream.

### Hand protection

Tested protective gloves must be worn DIN EN 374

Breakthrough times and swelling properties of the material must be taken into consideration.

By long-term hand contact Suitable material : Butyl caoutchouc (butyl rubber)

Thickness of the glove material 0,7 mm

Breakthrough time (maximum wearing time) > 480 min.

By short-term hand contact Suitable material : NBR (Nitrile rubber)

Thickness of the glove material 0,4 mm

Breakthrough time (maximum wearing time) > 120 min.

### Body protection

Personnel should wear impermeable protective work clothing.

Recommended material Natural fibres (e.g. cotton)

### Respiratory protection

Usually no personal respiratory protection necessary.

Respiratory protection necessary at: spray application

Suitable respiratory protection apparatus

Filtering device (full mask or mouthpiece) with filter: P 2

### Environmental exposure controls

See section 7. No additional measures necessary.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state : liquid

Colour : colourless

#### Odour

odourless

#### Odour threshold

Not determined

#### Safety relevant basis data

Melting point/melting range : < -20 °C

Initial boiling point and boiling range : ( 1013 hPa ) 184 °C

Decomposition temperature : No data available

Flash point : 104 °C

Ignition temperature : > 400 °C

DIN EN ISO 1523

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|                                     |           |                   |                   |           |
|-------------------------------------|-----------|-------------------|-------------------|-----------|
| Lower explosion limit :             | approx.   | 2,6               | Vol-%             |           |
| Upper explosion limit :             | approx.   | 12,5              | Vol-%             |           |
| Vapour pressure :                   | ( 50 °C ) | No data available |                   |           |
| Density :                           | ( 20 °C ) | 1,036             | g/cm <sup>3</sup> | DIN 53217 |
| Solvent separation test :           | ( 20 °C ) | not applicable    |                   |           |
| Water solubility :                  | ( 20 °C ) | 100               | Wt %              |           |
| pH :                                |           | not applicable    |                   |           |
| Flow time :                         | ( 20 °C ) | <                 | 20                | s         |
| Viscosity :                         | ( 23 °C ) | approx.           | 43                | mPa.s     |
| Solid content :                     |           |                   | 0                 | Wt %      |
| Solvent content :                   |           |                   | 100               | Wt %      |
| Maximum VOC content (EC) :          |           |                   | 100               | Wt %      |
| Maximum VOC content (Switzerland) : |           |                   | 0                 | Wt %      |

Self-ignition: Product is not self-igniting.

**danger of explosion by solvents:** Not applicable

Relative density: Not determined

Vapour density: Not determined

Evaporation rate: Not determined

N-octanol-water partition coefficient: Not determined

## 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reactivity under recommended usage, handling and storage.

### 10.2 Chemical stability

Stable under recommended usage, storage and handling conditions (see section 7).

### 10.3 Possibility of hazardous reactions

None known.

### 10.4 Conditions to avoid

Thermal decomposition can lead to the escape of irritating gases and vapours.

### 10.5 Incompatible materials

Alkali (lye). Acid Oxidizing agent.

### 10.6 Hazardous decomposition products

By combustion and thermal decomposition at high temperatures, the following chemicals can be produced: Carbon dioxide. Carbon monoxide Nitrogen oxides (NOx). carbon black.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

##### Acute oral toxicity

|                  |      |
|------------------|------|
| Parameter :      | LD50 |
| Exposure route : | Oral |
| Species :        | Rat  |

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Effective dose : > 20000 mg/kg

## Acute dermal toxicity

Parameter : LD50  
Exposure route : Dermal  
Species : Rabbit  
Effective dose : > 2000 mg/kg

## Acute inhalation toxicity

Parameter : LC50  
Exposure route : Inhalation  
Species : Rabbit  
Effective dose : 317,042 mg/l  
Exposure time : 2 h

## Irritant and corrosive effects

### Primary irritation to the skin

The product is: Not an irritant.

### Irritation to eyes

The product is: Not an irritant.

### Irritation to respiratory tract

The product is: Not an irritant.

## Sensitisation

not sensitising.

## Repeated dose toxicity (subacute, subchronic, chronic)

Toxicological data are not available.

## CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

### Carcinogenicity

Toxicological data are not available.

### Germ cell mutagenicity

Toxicological data are not available.

### Reproductive toxicity

Toxicological data are not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

##### Acute (short-term) fish toxicity

Parameter : LC50  
Species : Oncorhynchus mykiss (Rainbow trout)  
Evaluation parameter : Chronic (long-term) fish toxicity  
Effective dose : 40613 mg/l  
Exposure time : 96 h  
Parameter : LC50  
Species : Oncorhynchus mykiss (Rainbow trout)  
Evaluation parameter : Chronic (long-term) fish toxicity  
Effective dose : 40613 mg/l  
Exposure time : 96 h

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### Acute (short-term) algae toxicity

Parameter : ErC50  
Species : Pseudokirchneriella subcapitata  
Evaluation parameter : Inhibition of growth rate  
Effective dose : 19000 mg/l  
Exposure time : 96 h  
Parameter : ErC50  
Species : Skeletonema costatum  
Evaluation parameter : Inhibition of growth rate  
Effective dose : 19100 mg/l  
Exposure time : 96 h

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

### 12.6 Other adverse effects

No data available

### 12.7 Additional ecotoxicological information

Do not allow to enter into surface water or drains.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Do not allow to enter into surface water or drains.

#### Product/Packaging disposal

Wastes and empty containers must be classified in accordance with the Waste Catalogue Ordinance.

#### Waste codes/waste designations according to EWC/AVV

##### Waste code product

08 01 12

##### Waste name

Waste paint and varnish other than those mentioned in 08 01 11\*.

#### Waste treatment options

##### Appropriate disposal / Package

Packing which cannot be properly cleaned must be disposed of.  
Non-contaminated packages may be recycled.

## SECTION 14: Transport information

### 14.1 UN number

No dangerous good in sense of these transport regulations.

### 14.2 UN proper shipping name

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No dangerous good in sense of these transport regulations.

### 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

### 14.4 Packing group

No dangerous good in sense of these transport regulations.

### 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

### 14.6 Special precautions for user

None

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

Not applicable

### 14.8 Additional information

No dangerous good in sense of these transport regulations.

## SECTION 15: Regulatory information

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

EU legislation

Regulation (EC) No. 2037/2000 concerning materials, which cause damage to the ozone layer. Not applicable

Directive 96/82/EC for danger control following severe accidents with dangerous substances Not subject to 96/82/EC

#### National regulations

Restrictions of occupation

None, if handled according to order.

#### Störfallverordnung

Not subject to StörfallVO.

#### Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to AwSV

#### Other regulations, restrictions and prohibition regulations

##### VOC-Regulation (31. BImSchV)

VOC product category : Not applicable

VOC subcategory of the product : Not applicable

VOC limit value step II (g/L), ready-to-use condition : Not applicable

Maximum VOC content (g/L) of the product in a ready to use condition : Not applicable

#### Additional information

Giscode : Not applicable

### 15.2 Chemical safety assessment

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

## SECTION 16: Other information

### 16.1 Indication of changes

None

### 16.2 Abbreviations and acronyms

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|                 |                                                                                                                                                                                                                                                                  |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute Tox.      | Akute Toxizität                                                                                                                                                                                                                                                  |
| ADR             | Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road – Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße) |
| Aquatic Acute   | Akute aquatische Toxizität                                                                                                                                                                                                                                       |
| Aquatic Chronic | Chronische aquatische Toxizität                                                                                                                                                                                                                                  |
| Asp. Tox.       | Aspirationsgefahr                                                                                                                                                                                                                                                |
| AVV             | Abfallverzeichnis-Verordnung                                                                                                                                                                                                                                     |
| AwSV            | Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen                                                                                                                                                                                                |
| BImSchV         | Verordnung zur Durchführung des Bundesimmissionsschutzgesetzes                                                                                                                                                                                                   |
| CAS             | Chemical Abstracts Service – Gesellschaft für die Vergabe von CAS-Nummern                                                                                                                                                                                        |
| CLP             | Classification, Labelling and Packaging (Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen)                                                                                                              |
| CMR             | carcinogen, mutagen, reproduktionstoxisch (krebserzeugend, erbgutverändernd, fortpflanzungsgefährdend)                                                                                                                                                           |
| DIN             | Deutsches Institut für Normung                                                                                                                                                                                                                                   |
| EAK             | Europäischer Abfallkatalog                                                                                                                                                                                                                                       |
| EC50            | Mittlere effektive Konzentration                                                                                                                                                                                                                                 |
| EN              | Europäische Norm                                                                                                                                                                                                                                                 |
| EU              | Europäische Union                                                                                                                                                                                                                                                |
| EUH             | Europäische Gefahrenhinweise                                                                                                                                                                                                                                     |
| Eye Dam.        | Schwere Augenschädigung                                                                                                                                                                                                                                          |
| Eye Irrit.      | Augenreizend                                                                                                                                                                                                                                                     |
| Flam. Liq.      | Entzündbare Flüssigkeit                                                                                                                                                                                                                                          |
| GHS             | Globally Harmonised System of Classification and Labelling of Chemicals (Global Harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien)                                                                                                          |
| hPa             | Hectopascal                                                                                                                                                                                                                                                      |
| IATA-DGR        | International Air Transport Association –Dangerous Goods Regulations (Gefahrgutvorschriften der Internationalen Flug-Transport-Vereinigung)                                                                                                                      |
| ICAO-TI         | International Civil Aviation Organization-Technical Instructions (Technische Anleitungen für den sicheren Transport von Gefahrgütern in der Luft der zivilen Luftfahrtgesellschaft)                                                                              |
| IC50            | Halbmaximale Hemmstoffkonzentration                                                                                                                                                                                                                              |
| IMDG            | International Maritime Code for Dangerous Goods (Internationaler Code für Gefahrgüter auf See)                                                                                                                                                                   |
| ISO             | International Standards Organization (Internationale Organisation für Normung)                                                                                                                                                                                   |
| LC50            | Lethal concentration, 50 percent (Lethale Konzentration für 50% einer Versuchspopulation)                                                                                                                                                                        |
| LD50            | Lethal dose, 50 percent (Lethale Dosis für 50% einer Versuchspopulation)                                                                                                                                                                                         |
| LQ              | Limited Quantities (begrenzte Mengen)                                                                                                                                                                                                                            |
| MAK             | Maximale Arbeitsplatzkonzentrationswerte gesundheitsgefährdender Stoffe                                                                                                                                                                                          |
| Met. Corr.      | Korrosiv gegenüber Metallen                                                                                                                                                                                                                                      |
| NOEC            | No Observed Effect Concentration (Tierexperimentell festgelegte höchste Konzentration, bei der keine Wirkung – schädigender Effekt – mehr nachweisbar ist)                                                                                                       |
| PBT             | Persistent, Bioaccumulative and Toxic (persistent, bioakkumulierbar und toxisch)                                                                                                                                                                                 |
| RCP             | Reciprocal Calculation-based Procedure (Methode zur Berechnung von Arbeitsplatzgrenzwerten von Kohlenwasserstoffgemischen)                                                                                                                                       |
| REACH           | Registration, Evaluation, Authorisation and Restriction of Chemicals (Verordnung (EG) Nr. 1907/2006 zur Registrierung, Bewertung, Zulassung und Beschränkung chemischer Stoffe)                                                                                  |
| RID             | Règlement concernant le transport International ferroviaire de marchandises Dangereuses (Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr)                                                                                         |
| Skin Corr.      | Hautätzende Wirkung                                                                                                                                                                                                                                              |
| Skin Irrit.     | Hautreizende Wirkung                                                                                                                                                                                                                                             |
| Skin Sens.      | Sensibilisierung durch Hautkontakt                                                                                                                                                                                                                               |
| STOT RE         | Spezifische Zielorgan-Toxizität – wiederholte Exposition                                                                                                                                                                                                         |
| STOT SE         | Spezifische Zielorgan-Toxizität – bei einmaliger Exposition                                                                                                                                                                                                      |
| TRGS            | Technische Regeln für Gefahrstoffe                                                                                                                                                                                                                               |

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|      |                                                                                      |
|------|--------------------------------------------------------------------------------------|
| UN   | United Nations (Vereinte Nationen)                                                   |
| VbF  | Verordnung über brennbare Flüssigkeiten (Österreichische Verordnung)                 |
| VOC  | Volatile Organic Compounds (flüchtige organische Verbindungen)                       |
| vPvB | very Persistent and very Bioaccumulative (sehr persistent und sehr bioakkumulierbar) |
| WGK  | Wassergefährdungsklasse (German Water Hazard Class)                                  |

Siehe auch Übersichtstabellen unter [www.euphrac.com](http://www.euphrac.com) oder <http://abk.esdscom.eu>

### 16.3 Key literature references and sources for data

Regulation (EC) No. 1907/2006 (REACH), 1272/2008 (CLP) in the current version.  
Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP] Transport regulations according ADR, RID, IMDG, IATA in the current version.  
Safety data sheet taken from raw material suppliers or taken by accredited Laboratories or have been determined internally

### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The classification and evaluation was carried out by the calculation method.

### 16.5 Relevant H- and EUH-phrases (Number and full text)

None

### 16.6 Training advice

None

### 16.7 Additional information

None

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The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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