

according to Regulation (EC) No 1907/2006

UV activator LF

Revision date: 07.06.2017

Product code: BO5209367

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

UV activator LF

Further trade names

BO 5209365, 9 ml

BO 5209367, 50 ml

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

Binder

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|---------------------|------------------------------|
| Company name: | BOHLE AG | |
| Street: | Dieselstr. 10 | |
| Place: | D-42781 Haan | |
| Telephone: | +49 2129 5568-0 | Telefax: +49 2129 5568-282 |
| e-mail: | info@bohle.de | |
| Contact person: | Klaus Nehren | Telephone: +49 2129 5568-276 |
| e-mail: | MSDS@bohle.de | |
| Internet: | www.bohle-group.com | |
| Responsible Department: | Chemie | |

1.4. Emergency telephone number: Emergency CONTACT (24-Hour-Number):GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

The classification corresponds to the current EC listing, but is enhanced by specialised literature data and the Company's own information.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

Butanal, reaction products with anilin

Signal word: Warning**Pictograms:****Hazard statements**

| | |
|------|--|
| H317 | May cause an allergic skin reaction. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |

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Precautionary statements

| | |
|-----------|--|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |

SECTION 3: Composition/information on ingredients
3.2. Mixtures
Hazardous components

| CAS No | Chemical name | Quantity |
|------------|---|----------|
| | EC No | |
| | Index No | |
| | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | |
| 68411-20-1 | Butanal, reaction products with anilin | < 69% |
| | 270-109-8 | |
| | Skin Sens. 1, STOT RE 2, Aquatic Chronic 2; H317 H373 H411 | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures
4.1. Description of first aid measures
General information

First aider: Pay attention to self-protection!
Get medical advice/attention if you feel unwell.

After inhalation

Remove casualty to fresh air and keep warm and at rest. If symptoms persist, call a physician.

After contact with skin

Take off contaminated clothing and wash it before reuse. After contact with skin, wash immediately with plenty of water and soap. When in doubt or if symptoms are observed, get medical advice.

After contact with eyes

In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

After ingestion

Do not induce vomiting. Immediately give large quantities of water to drink. Call a physician immediately.

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

Skin contact : May cause an allergic skin reaction.

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

Treat symptomatically.

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media

Water spray jet, Extinguishing powder, Foam, Carbon dioxide (CO₂)

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

Burning produces irritant fumes. Carbon monoxide, Carbon dioxide, Hydrocarbons, Nitrogen oxides (NO_x)

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5.3. Advice for firefighters

Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

In the event of fire, wear self-contained breathing apparatus.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment (refer to section 8).

Provide adequate ventilation.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal. Ensure adequate ventilation.

6.4. Reference to other sections

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Avoid contact with skin and eyes.

Do not eat, drink or smoke when using this product.

Ensure adequate ventilation.

Advice on protection against fire and explosion

No special technical protective measures required.

Further information on handling

Avoid: UV-radiation/sunlight

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep only in the original container in a cool, well-ventilated place.

Keep container tightly closed. Keep locked up.

Recommended storage temperature 5 - 25°C. Keep away from direct sunlight.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****8.2. Exposure controls****Appropriate engineering controls**

Provide sufficient air exchange and/or exhaust in work rooms.

Do not breathe vapour. To follow: Occupational exposure limit values

Protective and hygiene measures

Wash hands before breaks and after work. When using do not eat, drink or smoke.

Take off immediately all contaminated clothing and wash it before reuse. Draw up and observe skin protection programme.

Eye/face protection

safety glasses with side-shields conforming to EN166

Hand protection

The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard

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EN 374 derived from it.

Recommended material: NBR (Nitrile rubber), VITON

Unsuitable material: Natural fibres (e.g. cotton)

Skin protection

Wear suitable protective clothing.

Respiratory protection

Usually no personal respirative protection necessary. When using do not eat, drink or smoke.

In case of inadequate ventilation wear respiratory protection. Full-/half-/quarter-face masks (DIN EN 136/140)

Respirator with filter for organic vapour. Recommended Filter type: A (P2)

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|-----------------|----------------|
| Physical state: | liquid |
| Colour: | yellow - amber |
| Odour: | characteristic |

Test method**Changes in the physical state**

| | |
|------------------------------------|-----------------------|
| Flash point: | 108 °C |
| Water solubility: | practically insoluble |
| Viscosity / dynamic: (at 23 °C) | 20 mPa·s |

SECTION 10: Stability and reactivity**10.1. Reactivity**Light / UV-radiation/sunlight
Oxidising agent, strong**10.2. Chemical stability**

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoidKeep cool. Protect from sunlight. Heat, flames and sparks.
In case of light influence: Polymerisation**10.5. Incompatible materials**Reducing agent, strong. Oxidising agent, strong
strong acids and strong bases**10.6. Hazardous decomposition products**No decomposition if stored and applied as directed.
Thermal decomposition can lead to the escape of irritating gases and vapours. Carbon monoxide (CO),
Carbon dioxide (CO₂), Hydrocarbons**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Harmful by inhalation, in contact with skin and if swallowed.

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| CAS No | Chemical name | | | | |
|------------|--|---------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 68411-20-1 | Butanal, reaction products with anilin | | | | |
| | oral | LD50 mg/kg | 4592 | Rat | |

Irritation and corrosivity

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

Sensitising effects

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

May cause an allergic skin reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

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

STOT-repeated exposure

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

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

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

SECTION 12: Ecological information
12.1. Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| CAS No | Chemical name | | | | | |
|------------|--|------|-----------|---------|----------------------------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 68411-20-1 | Butanal, reaction products with anilin | | | | | |
| | Acute crustacea toxicity | EC50 | 3,8 mg/l | 48 h | Daphnia pulex (water flea) | |

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Advice on disposal

Should not be released into the environment.

Consult the appropriate local waste disposal expert about waste disposal.

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances
Classified as hazardous waste.

Waste disposal number of used product

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other hazardous substances
Classified as hazardous waste.

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Waste disposal number of contaminated packaging


150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances
Classified as hazardous waste.

Contaminated packaging


Empty containers can be landfilled, when in accordance with the local regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. @6841.20.1Dy5
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9

 Classification code: M6
 Special Provisions: 274 335 375 601
 Limited quantity: 5 L
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 90
 Tunnel restriction code: E

Inland waterways transport (ADN)

14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. @6841.20.1Dy5
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9

 Classification code: M6
 Special Provisions: 274 335 375 601
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. Butanal, reaction products with anilin
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9

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Special Provisions: 274, 335, 969
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-F

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
 Butanal, reaction products with anilin
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



Special Provisions: A97 A158 A197
 Limited quantity Passenger: 30 kg G
 Passenger LQ: Y964
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 964
 IATA-max. quantity - Passenger: 450 L
 IATA-packing instructions - Cargo: 964
 IATA-max. quantity - Cargo: 450 L

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).
 Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H317 May cause an allergic skin reaction.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H411 Toxic to aquatic life with long lasting effects.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.
 The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)