

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 22320000
Print date 04.03.2019
Version 2.5

LUKAS FIXATIV 1 A
Revision date 22.01.2018
Issue date 23.12.2014

EN
Page 1 / 7

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

1.1. product identifiers

Article No. (manufacturer/supplier): 22320000
Identification of the substance or mixture LUKAS FIXATIV 1 A
Fixative 1a

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

Relevant identified uses:

Paints for Arts, Hobby & Craft
Artists supply and hobby preparations
Coatings and paints, thinners, paint removers

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/downstream user/distributor):

Daler-Rowney Ltd
Peacock Lane Telephone: +44 (0) 1344 461083
Bracknell, RG12 8SS Telefax: +44 (0) 1344 486511
ENGLAND

Dept. responsible for information:

E-mail Philip.Gray@daler-rowney.com

1.4. Emergency telephone number

Emergency telephone: +44 (0) 1344 461000

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].

Flam. Liq. 2 / H225	Flammable liquids	Highly flammable liquid and vapour.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.

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

H225 Highly flammable liquid and vapour.
H318 Causes serious eye damage.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280 Wear protective gloves/protective clothing/eye protection/face 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.
P310 Immediately call a POISON CENTER or doctor/ physician.
P102 Keep out of the reach of children.

contains:

butan-1-ol

Supplemental Hazard information (EU)

not applicable

2.3. Other hazards

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 22320000
Print date 04.03.2019
Version 2.5

LUKAS FIXATIV 1 A
Revision date 22.01.2018
Issue date 23.12.2014

EN
Page 2 / 7

Description Varnish

Hazardous ingredients

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

EC No.	REACH No.	Wt %
CAS No.	Chemical name	Remark
INDEX No.	classification:	
200-751-6	01-2119484630-38	
71-36-3	butan-1-ol	2,5 - 5
603-004-00-6	Flam. Liq. 3 H226 / Acute Tox. 4 H302 / STOT SE 3 H335 / Skin Irrit. 2 H315 / Eye Dam. 1 H318 / STOT SE 3 H336	

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. Vapours can form explosive mixtures with air.

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. Vapours can form explosive mixtures with air.

6.3. Methods and material for containment and cleaning up

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 22320000
Print date 04.03.2019
Version 2.5

LUKAS FIXATIV 1 A
Revision date 22.01.2018
Issue date 23.12.2014

EN
Page 3 / 7

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it 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 (BGR 132)".

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.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit values:

butan-1-ol

INDEX No. 603-004-00-6 / EC No. 200-751-6 / CAS No. 71-36-3

STEL: 154 mg/m³; 50 ppm

Additional information

TWA : long-term occupational exposure limit value

STEL : short-term occupational exposure limit value

Ceiling : peak limitation

DNEL:

butan-1-ol

INDEX No. 603-004-00-6 / EC No. 200-751-6 / CAS No. 71-36-3

DNEL long-term oral (repeated), Workers: 3.125 mg/kg bw/day

DNEL long-term inhalative (local), Workers: 310 mg/m³

DNEL long-term inhalative (local), Consumer: 55 mg/kg bw/day

PNEC:

butan-1-ol

INDEX No. 603-004-00-6 / EC No. 200-751-6 / CAS No. 71-36-3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 22320000
Print date 04.03.2019
Version 2.5

LUKAS FIXATIV 1 A
Revision date 22.01.2018
Issue date 23.12.2014

EN
Page 4 / 7

PNEC aquatic, freshwater: 0.082 mg/l
PNEC aquatic, marine water: 0.0082 mg/l
PNEC aquatic, intermittent release: 2.25 mg/l
PNEC sediment, freshwater: 0.178 mg/kg
PNEC sediment, marine water: 0.0178 mg/kg
PNEC, soil: 0.015 mg/kg
PNEC sewage treatment plant (STP): 2476 mg/l

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.

Hand protection

For prolonged or repeated handling the following glove material must be used:

Thickness of the glove material > 0,4 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 EN ISO 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

Appearance: Liquid
Physical state Liquid
Colour clear
Odour characteristic

Safety relevant basis data	Unit	Method	Remark
Flash point:	12 °C	DIN 53213	
Ignition temperature in °C:	355 °C		
Lower explosion limit	1,3 Vol-%		
Upper explosion limit	15 Vol-%		
Vapour pressure at 20 °C::	49,99		
Density at 20 °C::	0,82 g/cm ³		
Water solubility (g/L)	completely miscible		
pH at 20 °C::	-		
Viscosity at 20 °C:	> 40 s 3 mm	EN ISO 2431	
Solvent separation test (%)	< 3 %		
boiling point in °C at 101,3 kPa	78 °C		

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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 22320000
Print date 04.03.2019
Version 2.5

LUKAS FIXATIV 1 A
Revision date 22.01.2018
Issue date 23.12.2014

EN
Page 5 / 7

Keep away from strong acids, strong bases and strong oxidizing agents to avoid exothermic reactions. Alkali metals Alkaline earth metal chromium (VI) trioxide, potassium permanganate, sulphuric acid, Nitric acid, Hydrogen peroxide

10.4. Conditions to avoid

Hazardous decomposition byproducts may form with exposure to high temperatures. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

Rubber articles

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

butan-1-ol

oral, LD50, Rat: 2292 mg/kg

dermal, LD50, Rabbit: 3430 mg/kg

inhalative (vapours), LC50, Rat: > 17.76 mg/l (4 h)

skin corrosion/irritation; Serious eye damage/eye irritation

Causes serious eye damage.

butan-1-ol

Skin (4 h)

Irritating to skin.

eyes

strongly irritant.; Risk of serious damage to eyes.

Respiratory or skin sensitisation

Toxicological data are not available.

Specific target organ toxicity

butan-1-ol

Specific target organ toxicity (single exposure)

Vapours may cause drowsiness and dizziness.

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

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 22320000
Print date 04.03.2019
Version 2.5

LUKAS FIXATIV 1 A
Revision date 22.01.2018
Issue date 23.12.2014

EN
Page 6 / 7

butan-1-ol

Fish toxicity, LC50, Pimephales promelas (fathead minnow): 1376 mg/l (96 h)

Daphnia toxicity, EC50, Daphnia magna (Big water flea): 1328 mg/l (48 h)

Algae toxicity, ErC50, Pseudokirchneriella subcapitata: 225 mg/l (96 h)

12.2. Persistence and degradability

Toxicological data are not available.

12.3. Bioaccumulative potential

Toxicological data are not available.

12.4. Mobility in soil

Toxicological data are not available.

12.5. Results of PBT 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

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

080111* waste paint and varnish containing organic solvents or other dangerous substances

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste. Send to a collecting point for used paints.

SECTION 14: Transport information

14.1. UN number

UN 1170

14.2. UN proper shipping name

Land transport (ADR/RID):

Ethanol
solution

Sea transport (IMDG):

ETHANOL (ETHYL ALCOHOL)
SOLUTION

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

Ethanol
solution

14.3. Transport hazard class(es)

3

14.4. Packing group

II

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/E

Sea transport (IMDG)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) No 453/2010

Article No.: 22320000
Print date 04.03.2019
Version 2.5

LUKAS FIXATIV 1 A
Revision date 22.01.2018
Issue date 23.12.2014

EN
Page 7 / 7

EmS-No. F-E, S-E

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**

EU legislation

Information according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).

VOC-value (in g/L) ISO 11890-2: 725

VOC-value (in g/L) ASTM D 2369: 725

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).

Other regulations, restrictions and prohibition regulations

15.2. **Chemical Safety Assessment**

For the following substances of this preparation a chemical safety assessment has been carried out:

EC No. CAS No.	Chemical name	REACH No.
200-751-6 71-36-3	butan-1-ol	01-2119484630-38

16. **Other information**

Full text of classification in section 3:

Flam. Liq. 3 / H226	Flammable liquids	Flammable liquid and vapour.
Acute Tox. 4 / H302	Acute toxicity (oral)	Harmful if swallowed.
STOT SE 3 / H335	Specific target organ toxicity (single exposure)	May cause respiratory irritation.
Skin Irrit. 2 / H315	skin corrosion/irritation	Causes skin irritation.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
STOT SE 3 / H336	Specific target organ toxicity (single exposure)	May cause drowsiness or dizziness.

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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.