

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

1.1. Product identifier

UV Tintentank Leica

Further trade names

14060143506

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

Use of the substance/mixture

Printing ink

1.3. Details of the supplier of the safety data sheet

Company name: Leica Biosystems Nussloch GmbH

Street: Heidelberger Str. 17-19

Place: D Nussloch

Telephone: +49 (0)6224/143-0

Responsible Department:

Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard categories:

Flammable liquid: Flam. Liq. 3

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Flammable liquid and vapour.

May cause an allergic skin reaction.

Causes serious eye damage.

May cause drowsiness or dizziness.

Toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard components for labelling

1-methoxy-2-propanol; monopropylene glycol methyl ether

2-[[3-[(1-oxoallyl)oxy]-2,2-bis[[1-(1-oxoallyl)oxy]methyl]propoxy]methyl]-2-

[[1-(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate

hexamethylene diacrylate, hexane-1,6-diol diacrylate

Ethoxylated Trimethylolpropane triacrylate esters

Signal word:

Danger

Pictograms:

GHS02-GHS05-GHS07-GHS09



Hazard statements

| | |
|------|--|
| H226 | Flammable liquid and vapour. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H336 | May cause drowsiness or dizziness. |
| H411 | Toxic to aquatic life with long lasting effects. |

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.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P402+P404 Store in a dry place. Store in a closed container.
- P410+P403 Protect from sunlight. Store in a well-ventilated place.
- P411+P235 Store at temperatures not exceeding 40 °C/104 °F. Keep cool.

Additional advice on labelling

< 25 percent of the mixture consists of ingredient(s) of unknown toxicity

2.3. Other hazards

Not known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| EC No | Chemical name | Quantity |
|------------------|--|----------|
| CAS No | | |
| Index No | Classification according to Regulation (EC) No. 1272/2008 [CLP] | |
| REACH No | | |
| 203-539-1 | 1-methoxy-2-propanol; monopropylene glycol methyl ether | <70 % |
| 107-98-2 | | |
| 603-064-00-3 | Flam. Liq. 3, STOT SE 3; H226 H336 | |
| 01-2119457435-35 | | |
| 249-698-0 | 2-[[3-[(1-oxoallyl)oxy]-2,2-bis[[[(1-oxoallyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate | <30 % |
| 29570-58-9 | | |
| | Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 2; H302 H318 H317 H411 | |
| | Multifunctional Acrylate 1 | <15 % |
| | | |
| | Eye Irrit. 2; H319 | |
| | Multifunctional Acrylate 2 | <15 % |
| | | |
| | Eye Dam. 1; H318 | |
| 254-843-6 | (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triy)tri-2,1-ethanediyl ester | <10 % |
| 40220-08-4 | | |
| | Eye Irrit. 2; H319 | |
| 235-921-9 | hexamethylene diacrylate, hexane-1,6-diol diacrylate | <5 % |
| 13048-33-4 | | |
| 607-109-00-8 | Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1; H319 H315 H317 | |
| 500-066-5 | Ethoxylated Trimethylolpropane triacrylate esters | <5 % |
| 28961-43-5 | | |
| | Eye Irrit. 2, Skin Sens. 1; H319 H317 | |
| 01-2119489900-30 | | |
| | Photoinitiator | <5 % |
| | | |
| | STOT RE 2, Aquatic Chronic 1; H373 H410 | |
| 278-355-8 | Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | 1-3 % |
| 75980-60-8 | | |
| 015-203-00-X | Repr. 2; H361f | |

Full text of R, H and EUH phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.

After inhalation

Take affected person into fresh air.

Keep warm and calm injured person.

Consult a physician.

After contact with skin

Wash off with soap and plenty of water.

Do not use solvents or thinners.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Seek medical treatment by eye specialist.

After ingestion

If swallowed, seek medical advice immediately and show this container or label.

Rinse out mouth thoroughly with water.

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

Can cause allergic reactions.

Irritant

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce:

Hydrocarbons.

Nitrogen oxides (NO_x).

Phosphorus oxides (P_xO_x).

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

Additional information

Collect contaminated firefighting water separately, must not be discharged into the drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Keep away from sources of ignition - No smoking.

Ensure adequate ventilation, especially in confined areas.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

Inform competent authority about release into the sewage, ground or into waters.

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).

Shovel into suitable container for disposal.

6.4. Reference to other sections

Information for personal protective equipment look up chapter 8.

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not inhale gases/vapours/aerosols. Keep away from open flames, hot surfaces and sources of ignition. Care for thoroughly room ventilation, if necessary suck off at workplace. Do not empty container under pressure. No pressure tank! Unauthorized persons are prohibited to enter. Use personal protective clothing. At work do not eat, drink, smoke or take drugs. Keep container tightly closed.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking.

Keep away from open flames, hot surfaces and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Ensure adequate ventilation, especially in confined areas. Keep container tightly closed.

Advice on storage compatibility

Keep away from food, drink and animal feeding stuffs.

Further information on storage conditions

Keep only in original container.

Keep containers tightly closed in a cool, well-ventilated place.

Protect from heat and direct solar radiation.

Recommended storage temperature: < 40°C

7.3. Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|----------|----------------------|-----|-------------------|-----------|---------------|--------|
| 107-98-2 | 1-Methoxypropan-2-ol | 100 | 375 | | TWA (8 h) | WEL |
| | | 150 | 560 | | STEL (15 min) | WEL |

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Eye/face protection

eyeprotection

Hand protection

Protective gloves resistant to chemicals made off nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 240 minutes, i.e. protective glove <Camatril Velours 730> made by www.kcl.de.

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.

Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Light protective clothing

Respiratory protection

Use suitable breathing apparatus if there is inadequate ventilation. (A-P2)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: Black
Odour: characteristic

pH-Value: No data available.

Changes in the physical state

Melting point: No data available.
Initial boiling point and boiling range: 118-125 °C
Flash point: 30 °C
Evaporation rate: 0,75
Lower explosion limits: approx. 1,7
Upper explosion limits: approx. 11,5
Vapour pressure: 11,7 hPa
(at 25 °C)

| | |
|------------------------------------|-----------------------|
| Density (at 20 °C): | 0,9 g/cm ³ |
| Water solubility: | insoluble |
| Ignition temperature: | No data available. |
| Decomposition temperature: | No data available. |
| Viscosity / dynamic: (at 25 °C) | <10 mPa·s |

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with strong oxidizing agents.

Reactions with strong acids and alkalies.

10.4. Conditions to avoid

Information for safe handling look up chapter 7.

10.5. Incompatible materials

oxidizing agents

10.6. Hazardous decomposition products

No decomposition if used as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

1-methoxy-2-propanol; monopropylene glycol methyl ether

CAS-No. 107-98-2

LD50/dermal/rat: 13500 mg/kg

LD50/oral/rat: 5000 mg/kg

LC50/inhalation/rat: 6 mg/l

2-[[3-[(1-oxoallyl)oxy]-2,2-bis[[[(1-oxoallyl)oxy]methyl]propoxy]methyl]-2-

[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate

CAS-No. 29570-58-9

LD50/dermal/rat: > 2000 mg/kg

LD50/oral/rat: 1350 mg/kg

Multifunctional Acrylate 1

LD50/dermal/rat: > 2000 mg/kg

LD50/oral/rat: 1350 mg/kg

(2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-triy)tri-2,1-ethanediyl ester

CAS-No. 40220-08-4

LD50/dermal/rat: > 2000 mg/kg

LD50/oral/rat: > 2000mg/kg

hexamethylene diacrylate, hexane-1,6-diol diacrylate

CAS-No. 13048-33-4

LD50/dermal/rat: 3650 mg/kg

LD50/oral/rat: > 5000 mg/kg

Ethoxylated Trimethylolpropane triacrylate esters

CAS-No. 28961-43-5

LD50/dermal/rat: > 2000 mg/kg

LD50/oral/rat: > 2000mg/kg

Photoinitiator

LD50/dermal/rat: > 2000 mg/kg

LD50/oral/rat: > 2000mg/kg

Irritation and corrosivity

Causes serious eye damage.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (2-[[3-

[(1-oxoallyl)oxy]-2,2-bis[[[(1-oxoallyl)oxy]methyl]propoxy]methyl]-2-

[[[(1-oxoallyl)oxy]methyl]-1,3-propanediyl diacrylate); (hexamethylene diacrylate, hexane-1,6-diol

diacrylate); (Ethoxylated Trimethylolpropane triacrylate esters)

STOT-single exposure

May cause drowsiness or dizziness. (1-methoxy-2-propanol; monopropylene glycol methyl ether)

Severe effects after repeated or prolonged exposure

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

1-methoxy-2-propanol; monopropylene glycol methyl ether

CAS-No. 107-98-2

LC50 (96h)/Leuciscus idus: > 4000 mg/l

EC50 (48h)/Daphnia magna: 23300 mg/l

hexamethylene diacrylate, hexane-1,6-diol diacrylate

CAS-No. 13048-33-4

LC50 (96h)/Fish: 4,6 - 10 mg/l

EC50 (72h)/Algae: 1,5 mg/l

Ethoxylated Trimethylolpropane triacrylate esters

CAS-No. 28961-43-5

LC50 (96h)/Fish: 1,95 mg/l

EC50 (48h)/Daphnia magna: 70,7 mg/l

EC50 (72h)/Scenedesmus subspicatus: 2,2 mg/l

Photoinitiator

LC50 (96h)/Brachidanio rerio : 3,5 mg/l

EC50 (48h)/Daphnia magna: > 0,56 mg/l

EC50 (72h)/Scenedesmus subspicatus:> 100 mg/l

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects

No data available.

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Disposal in accordance with local regulations.

It is not possible to give this product a waste code number according to the European waste catalogue because only the intended use of the user consents the assignment of a specific code number.

The waste code number must be agreed with the disposer / manufacturer / competent authority.

Contaminated packaging

Packaging that cannot be cleaned should be disposed of like the product.

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|---|------------------------|
| <u>14.1. UN number:</u> | UN 1210 |
| <u>14.2. UN proper shipping name:</u> | PRINTING INK flammable |
| <u>14.3. Transport hazard class(es):</u> | 3 |
| <u>14.4. Packing group:</u> | III |
| Hazard label: | 3 |



| | |
|--------------------------|-----|
| Classification code: | F1 |
| Limited quantity: | 5 L |
| Transport category: | 3 |
| Hazard No: | 30 |
| Tunnel restriction code: | D/E |

Inland waterways transport (ADN)

14.1. UN number: UN 1210
14.2. UN proper shipping name: PRINTING INK flammable
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Limited quantity: 5 L

Marine transport (IMDG)

14.1. UN number: UN 1210
14.2. UN proper shipping name: PRINTING INK flammable (Dipentaerythritol, penta/hexyl acrylate, Photoinitiator)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Limited quantity: 5 L
EmS: F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1210
14.2. UN proper shipping name: PRINTING INK flammable
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Limited quantity Passenger: 10 L
IATA-packing instructions - Passenger: 355
IATA-max. quantity - Passenger: 60 L
IATA-packing instructions - Cargo: 366
IATA-max. quantity - Cargo: 220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



14.6. Special precautions for user

No specific precautions required.

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

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): < 70%

National regulatory information

Water contaminating class (D): 3 - highly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

Changes in chapter: 1

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

DOT = Department of Transportation

TDG = Transport of Dangerous Goods

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361f Suspected of damaging fertility.

H373 May cause damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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