

ORALITE® 5019-050/080 UV-Ink

Print date: 03.06.2016

Product code: 359000250...80

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

ORALITE® 5019-050/080 UV-Ink

Further trade names

ORALITE® 5019-050 UV-Ink, ORALITE® 5019-080 UV-Ink

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

Colour

1.3. Details of the supplier of the safety data sheet

| | | |
|---------------|--------------------|----------------------------|
| Company name: | ORAFOL Europe GmbH | |
| | Germany | |
| Street: | Orafolstraße 2 | |
| Place: | D Oranienburg | |
| Telephone: | + 49 3301 864 0 | Telefax: + 49 3301 864 100 |
| e-mail: | msds@orafol.de | |
| Internet: | www.orafol.com | |

1.4. Emergency telephone number:

National Poison Information Service: In case of a medical emergency following exposure to a chemical, the public should call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24 (UK only).

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

Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory or skin sensitisation: Skin Sens. 1A
Reproductive toxicity: Repr. 2
Specific target organ toxicity - repeated exposure: STOT RE 1
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Suspected of damaging fertility.
Causes damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.

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

2-Phenoxyethyl acrylate
(5-ethyl-1,3-dioxan-5-yl)methyl acrylate
N-Vinylcaprolactam
Isobornyl acrylate
Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide
phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide
2,2-bis(acryloyloxymethyl)butyl acrylate, trimethylolpropane triacrylate
Glycerol propoxy triacrylate

Signal word: Danger

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Pictograms:



Hazard statements

| | |
|-------|---|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H361f | Suspected of damaging fertility. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary statements

| | |
|-----------|--|
| P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous components

| CAS No | Chemical name | | | Quantity |
|-------------|--|--------------|------------------|--------------|
| | EC No | Index No | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | |
| 48145-04-6 | 2-Phenoxyethyl acrylate | | | 25 < 50 % |
| | 256-360-6 | | 01-2119980532-35 | |
| | Skin Sens. 1A, Aquatic Chronic 2; H317 H411 | | | |
| 66492-51-1 | (5-ethyl-1,3-dioxan-5-yl)methyl acrylate | | | 20 < 25 % |
| | 266-380-7 | | | |
| | Skin Irrit. 2, Skin Sens. 1B, Aquatic Chronic 2; H315 H317 H411 | | | |
| 2235-00-9 | N-Vinylcaprolactam | | | 10 < 20 % |
| | 218-787-6 | | 01-2119977109-27 | |
| | Acute Tox. 4, Acute Tox. 4, Eye Irrit. 2A, Skin Sens. 1B, STOT RE 1; H302 H312 H319 H317 H372 | | | |
| 5888-33-5 | Isobornyl acrylate | | | 10 < 20 % |
| | 227-561-6 | | 01-2119957862-25 | |
| | Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1B, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 2; H315 H319 H317 H335 H400 H411 | | | |
| 75980-60-8 | Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | 2,5 < 5 % |
| | 278-355-8 | 015-203-00-X | 01-2119972295-29 | |
| | Repr. 2, Aquatic Chronic 2; H361f H411 | | | |
| 162881-26-7 | phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | | | 2,5 < 5 % |
| | 423-340-5 | 015-189-00-5 | | |
| | Skin Sens. 1, Aquatic Chronic 4; H317 H413 | | | |
| 15625-89-5 | 2,2-bis(acryloyloxymethyl)butyl acrylate, trimethylolpropane triacrylate | | | 1 < 2,5 % |
| | 239-701-3 | 607-111-00-9 | 01-2119489896-11 | |
| | Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 3; H315 H319 H317 H412 | | | |
| 52408-84-1 | Glycerol propoxy triacrylate | | | 1 < 2,5 % |
| | 500-114-5 | | 01-2119487948-12 | |
| | Eye Irrit. 2, Skin Sens. 1; H319 H317 | | | |
| | Stabiliser 1 | | | 0,1 < 0,25 % |
| | Aquatic Acute 1, Aquatic Chronic 1; H400 H410 | | | |

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

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

Remove contaminated, saturated clothing immediately. When in doubt or if symptoms are observed, get medical advice.

After inhalation

Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse.

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After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting.

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

Treat symptomatically.

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

Carbon dioxide (CO₂), Dry extinguishing powder, Foam, Water spray jet.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Vapours can form explosive mixtures with air. Hazardous combustion products: Nitrogen oxides (NO_x), Carbon dioxide (CO₂), Carbon monoxide.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

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**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

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Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations.

Advice on storage compatibility

Keep away from: Oxidising agent, Strong alkali, Strong acid .

Further information on storage conditions

Protect against: UV-radiation/sunlight. storage temperature: 5 - 35 °C

7.3. Specific end use(s)

Colour

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary . When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid

Colour:

pH-Value:

not determined

Changes in the physical state

Melting point:

not determined

Initial boiling point and boiling range:

> 128 °C

Test method

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Flash point: 96 °C

Flammability

Solid: not applicable

Gas: not applicable

Lower explosion limits: not determined

Upper explosion limits: not determined

Auto-ignition temperature

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

Oxidizing properties

Not oxidizing.

Vapour pressure: not determined

Density: not determined

Water solubility: insoluble

Solubility in other solvents

not determined

Partition coefficient: not determined

Vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight.

10.5. Incompatible materials

Keep away from: Peroxide, Strong alkali, Strong acid, Metal, base, Radical former .

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

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| CAS No | Chemical name | | | |
|-------------|--|-------------------|---------|----------------------|
| | Exposure route | Dose | Species | Source |
| 48145-04-6 | 2-Phenoxyethyl acrylate | | | |
| | oral | LD50 5000 mg/kg | Rat | OECD Guideline 401 |
| 66492-51-1 | (5-ethyl-1,3-dioxan-5-yl)methyl acrylate | | | |
| | oral | LD50 > 2000 mg/kg | Rat | OECD Guideline 423 |
| | dermal | LD50 > 2000 mg/kg | Rat | |
| 2235-00-9 | N-Vinylcaprolactam | | | |
| | oral | LD50 1864 mg/kg | Rat | OECD Guideline 401 |
| | dermal | LD50 > 2000 mg/kg | Rat | OECD Guideline 402 |
| 5888-33-5 | Isobornyl acrylate | | | |
| | oral | LD50 5750 mg/kg | Rat | Standard acute metho |
| | dermal | LD50 > 3000 mg/kg | Rabbit | pre-guideline |
| 75980-60-8 | Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | | | |
| | oral | LD50 > 5000 mg/kg | Rat | OECD Guideline 401 |
| | dermal | LD50 > 2000 mg/kg | Rat | OECD Guideline 402 |
| 162881-26-7 | phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | | | |
| | oral | LD50 > 2000 mg/kg | Rat | OECD Guideline 401 |
| | dermal | LD50 > 2000 mg/kg | Rat | OECD Guideline 402 |
| 15625-89-5 | 2,2-bis(acryloyloxymethyl)butyl acrylate, trimethylolpropane triacrylate | | | |
| | oral | LD50 3680 mg/kg | | ECHA |
| | dermal | LD50 > 2000 mg/kg | | ECHA |
| 52408-84-1 | Glycerol propoxy triacrylate | | | |
| | oral | LD50 > 2000 mg/kg | Rat | OECD Guideline 401 |
| | dermal | LD50 > 2000 mg/kg | Rabbit | OECD Guideline 402 |

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (2-Phenoxyethyl acrylate), ((5-ethyl-1,3-dioxan-5-yl)methyl acrylate), (N-Vinylcaprolactam), (Isobornyl acrylate), (phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide), (2,2-bis(acryloyloxymethyl)butyl acrylate, trimethylolpropane triacrylate), (Glycerol propoxy triacrylate)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of damaging fertility. (Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: 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

Causes damage to organs through prolonged or repeated exposure. (N-Vinylcaprolactam)

Aspiration hazard

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

Additional information on tests

This mixture is classified as hazardous according to regulation (EC) No. 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

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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 |
| 66492-51-1 | (5-ethyl-1,3-dioxan-5-yl)methyl acrylate | | | | |
| | Acute fish toxicity | LC50 4 mg/l | 96 h | Oncorhynchus mykiss (Rainbow trout) | |
| | Acute algae toxicity | ErC50 2.028 mg/l | 96 h | | |
| | Acute crustacea toxicity | EC50 11,577 mg/l | 48 h | Daphnia magna (Big water flea) | |

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

This material and its container must be disposed of as hazardous waste. Handle contaminated packages in the same way as the substance itself.

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.
((5-ethyl-1,3-dioxan-5-yl)methyl acrylate, 2-Phenoxyethyl acrylate, Isobornyl acrylate, N-Vinylcaprolactam)

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Classification code:

M6

according to Regulation (EC) No 1907/2006

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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. ((5-ethyl-1,3-dioxan-5-yl)methyl acrylate, 2-Phenoxyethyl acrylate, Isobornyl acrylate, N-Vinylcaprolactam)
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. ((5-ethyl-1,3-dioxan-5-yl)methyl acrylate, 2-Phenoxyethyl acrylate, Isobornyl acrylate, N-Vinylcaprolactam)
14.3. Transport hazard class(es): 9
14.4. Packing group: III
 Hazard label: 9



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

Air transport (ICAO)

14.1. UN number: UN 3082
14.2. UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((5-ethyl-1,3-dioxan-5-yl)methyl acrylate, 2-Phenoxyethyl acrylate, Isobornyl acrylate, N-Vinylcaprolactam)
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

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| | | |
|--|------|-------|
| 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 |

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No information available.

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 regulatory information

2004/42/EC (VOC): 20 %

National regulatory information

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

Water contaminating class (D): 2 - water contaminating
Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

Additional information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH:none
This mixture contains the following substances of very high concern (SVHC) which are subject to authorisation according to Annex XIV of REACH: none

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.

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|-------|---|
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H361f | Suspected of damaging fertility. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| H413 | May cause long lasting harmful effects to aquatic life. |

Further Information

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.

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