

This safety data sheet was created pursuant to the requirements of:  
UK REACH Regulations (SI 2019/758 as amended)

Revision date 22-Mar-2024

Revision Number 1

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

### 1.1. Product identifier

Product Code(s) 66636  
Safety data sheet number 66636  
Product Name LOCTITE DRI 2040  
  
Pure substance/mixture Mixture

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

Recommended use Adhesive

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

#### Supplier

Univar Solutions UK Ltd  
Aquarius House  
6 Mid Point Business Park  
Bradford  
GBR

For further information, please contact

E-mail address SDS.EMEA@univarsolutions.com  
Non-Emergency Telephone Number +44 1274 267300 / +44 1274 267306

### 1.4. Emergency telephone number

Emergency Telephone SGS - +32 (0)3 575 55 55 (24h)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

|                                   |                     |
|-----------------------------------|---------------------|
| Skin corrosion/irritation         | Category 2 - (H315) |
| Serious eye damage/eye irritation | Category 2 - (H319) |
| Chronic aquatic toxicity          | Category 4 - (H413) |

### 2.2. Label elements

**Signal word**

Warning

**Hazard statements**

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H413 - May cause long lasting harmful effects to aquatic life

**Precautionary statements**

P273 - Avoid release to the environment

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

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P337 + P313 - If eye irritation persists: Get medical advice/attention

P362 + P364 - Take off contaminated clothing and wash it before reuse

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable

**3.2 Mixtures**

| Chemical name                                                                                                                                | Weight-%  | EC No (EU Index No) | UK REACH registration number | Classification according to GB CLP (SI 2020/1567 as amended) | Specific concentration limit (SCL) | M-Factor | M-Factor (long-term) |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------|------------------------------|--------------------------------------------------------------|------------------------------------|----------|----------------------|
| REACTION MASS OF<br>(1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL)<br>BISMETHACRYLATE AND 2-{ 4-[2-(4-{ 2-[2-(METHACRYLOYLOXY)ETHO | 25 - 50%  | -                   | -                            | Aquatic Chronic 4 (H413)                                     | -                                  | -        | -                    |
| Ammonium Benzoate 1863-63-4                                                                                                                  | 1 - <5%   | 217-468-9           | -                            | Eye Irrit. 2 (H319)<br>Acute Tox. 4 (H302)                   | -                                  | -        | -                    |
| SODIUM                                                                                                                                       | 0.5 - <2% | 215-185-5           | -                            | Skin Corr. 1A (H314)                                         | Eye Irrit. 2 ::                    | -        | -                    |

|                                                                                                     |              |                |   |                                                                                                                                               |                                                                                                       |    |   |
|-----------------------------------------------------------------------------------------------------|--------------|----------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|----|---|
| HYDROXIDE<br>1310-73-2                                                                              |              | (011-002-00-6) |   | Met. Corr. 1 (H290)<br>Eye Dam. 1 (H318)                                                                                                      | 0.5%≤C<2%<br>Skin Corr. 1A ::<br>C≥5%<br>Skin Corr. 1B ::<br>2%≤C<5%<br>Skin Irrit. 2 ::<br>0.5%≤C<2% |    |   |
| 3,6-BIS(ETHYLAMINO)-9-[2-(METHOXYCARBONYL)PHENYL]-2,7-DIMETHYLBENZOTRIAZOLIUM CHLORIDE<br>3068-39-1 | 0.01 - <0.1% | 221-326-1      | - | Acute Tox. 4 (H302)<br>Acute Tox. 2 (H330)<br>Skin Sens. 1B (H317)<br>Eye Dam. 1 (H318)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1 (H410) | -                                                                                                     | 10 | 1 |

**Full text of H- and EUH-phrases: see section 16**

This product does not contain candidate substances of very high concern at a concentration ≥ 0.1% (UK REACH Article 59)

**SECTION 4: First aid measures****4.1. Description of first aid measures**

|                                           |                                                                                                                                                                                                                                                                                     |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice</b>                     | Show this safety data sheet to the doctor in attendance.                                                                                                                                                                                                                            |
| <b>Inhalation</b>                         | Remove to fresh air. Get medical attention immediately if symptoms occur.                                                                                                                                                                                                           |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.                                                                                                                                              |
| <b>Ingestion</b>                          | Rinse mouth. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.                                                                                                                                           |
| <b>Self-protection of the first aider</b> | Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).                                                                                                                                                                                       |

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

|                 |                                                                                           |
|-----------------|-------------------------------------------------------------------------------------------|
| <b>Symptoms</b> | May cause redness and tearing of the eyes. Burning sensation.                             |
| <b>Eyes</b>     | Burning sensation. May cause redness and tearing of the eyes. Irritating. conjunctivitis. |
| <b>Dermal</b>   | Irritating. Erythema (skin redness). Prolonged contact may cause redness and irritation.  |

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

|                        |                        |
|------------------------|------------------------|
| <b>Note to doctors</b> | Treat symptomatically. |
|------------------------|------------------------|

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

|                                       |                                                                    |
|---------------------------------------|--------------------------------------------------------------------|
| <b>Suitable Extinguishing Media</b>   | Water. Carbon dioxide (CO2). Foam. powder.                         |
| <b>Large Fire</b>                     | CAUTION: Use of water spray when fighting fire may be inefficient. |
| <b>Unsuitable extinguishing media</b> | Do not scatter spilled material with high pressure water streams.  |

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

|                                                   |                                                         |
|---------------------------------------------------|---------------------------------------------------------|
| <b>Specific hazards arising from the chemical</b> | Carbon monoxide. CARBON DIOXIDE. Nitrogen oxides (NOx). |
|---------------------------------------------------|---------------------------------------------------------|

#### **5.3. Advice for firefighters**

|                                                                       |                                                                                                                                                                                 |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Special protective equipment and precautions for fire-fighters</b> | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Cool containers with flooding quantities of water until well after fire is out. |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### **SECTION 6: Accidental release measures**

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

|                                 |                                                                                                                                                                         |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b>     | Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Eliminate all ignition sources if safe to do so. |
| <b>Other information</b>        | Refer to protective measures listed in Sections 7 and 8.                                                                                                                |
| <b>For emergency responders</b> | Use personal protection recommended in Section 8.                                                                                                                       |

#### **6.2. Environmental precautions**

|                                  |                                                                                                         |
|----------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Environmental precautions</b> | Prevent further leakage or spillage if safe to do so. Do not allow runoff to sewer, waterway or ground. |
|----------------------------------|---------------------------------------------------------------------------------------------------------|

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

|                                        |                                                                                                        |
|----------------------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Methods for containment</b>         | Collect spillage in containers, seal securely and deliver for disposal according to local regulations. |
| <b>Methods for cleaning up</b>         | Take up mechanically, placing in appropriate containers for disposal.                                  |
| <b>Prevention of secondary hazards</b> | Clean contaminated objects and areas thoroughly observing environmental regulations.                   |

#### **6.4. Reference to other sections**

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| <b>Reference to other sections</b> | See section 8 for more information. See section 13 for more information. |
|------------------------------------|--------------------------------------------------------------------------|

### **SECTION 7: Handling and storage**

#### **7.1. Precautions for safe handling**

|                                       |                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Advice on safe handling</b>        | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Ensure that eyewash stations and safety showers are close to the workstation location. Use personal protection recommended in Section 8. |
| <b>General hygiene considerations</b> | Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Ensure that eyewash stations and safety showers are close to the workstation                                                                                                         |

location. Keep away from food, drink and animal feedingstuffs. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands and face before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

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

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. See section 10 for more information.

## 7.3. Specific end use(s)

### Specific use(s)

See section 1 for more information.

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

| Chemical name                 | United Kingdom            |
|-------------------------------|---------------------------|
| SODIUM HYDROXIDE<br>1310-73-2 | STEL: 2 mg/m <sup>3</sup> |

**Biological occupational exposure limits** This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### Derived No Effect Level (DNEL) - Workers

| Chemical name                 | Oral | Dermal | Inhalation                  |
|-------------------------------|------|--------|-----------------------------|
| SODIUM HYDROXIDE<br>1310-73-2 |      |        | 1 mg/m <sup>3</sup> [5] [6] |

[5] Local health effects.

[6] Long term.

#### Derived No Effect Level (DNEL) - General Public

| Chemical name                 | Oral | Dermal | Inhalation                  |
|-------------------------------|------|--------|-----------------------------|
| SODIUM HYDROXIDE<br>1310-73-2 |      |        | 1 mg/m <sup>3</sup> [5] [6] |

[5] Local health effects.

[6] Long term.

#### Predicted No Effect Concentration (PNEC)

| Chemical name                                                                                                                                                       | Freshwater sediment | Marine sediment | Sewage treatment | Soil | Food chain |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------|------------------|------|------------|
| REACTION MASS OF<br>(1-METHYLETHYLIDENE)<br>BIS(4,1-PHENYLENEOXY<br>-2,1-ETHANEDIYL)<br>BISMETHACRYLATE AND<br>2-{ 4-[2-(4-{<br>2-[2-(METHACRYLOYLOX<br>Y)ETHO<br>- |                     |                 | 1 mg/l           |      |            |

## 8.2. Exposure controls

### Engineering controls

Ensure adequate ventilation. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protective equipment

#### Eyeface protection

If splashes are likely to occur, wear safety glasses with side-shields. Use eye protection according to EN 166.

#### Hand protection

Wear suitable gloves. Impervious gloves. Gloves must conform to standard EN 374.

| Gloves               |                      |                 |                    |
|----------------------|----------------------|-----------------|--------------------|
| Duration of contact  | PPE - Glove material | Glove thickness | Break through time |
| Short term           | Nitrile rubber       | >=0.4 mm        | >30 minutes        |
| Long term (repeated) | Nitrile rubber       | >=0.4 mm        | >480 minutes       |

#### Skin and body protection

Wear suitable protective clothing. Long sleeved clothing.

#### Respiratory protection

Type A.

In case of inadequate ventilation wear respiratory protection.

#### General hygiene considerations

Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Ensure that eyewash stations and safety showers are close to the workstation location. Keep away from food, drink and animal feedingstuffs. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands and face before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|                 |                          |
|-----------------|--------------------------|
| Physical state  | Liquid                   |
| Colour          | pink                     |
| Odour           | Acrylic.                 |
| Odour threshold | No information available |

| Property                                | Values |
|-----------------------------------------|--------|
| Melting point / freezing point          | 0 °C   |
| Initial boiling point and boiling range | 100 °C |
| Flammability                            |        |
| Flammability Limit in Air               |        |

| Remarks • Method          |
|---------------------------|
| No information available. |
| No information available. |
| No information available. |
| No information available. |

|                                        |                          |                           |
|----------------------------------------|--------------------------|---------------------------|
| Upper flammability or explosive limits |                          |                           |
| Lower flammability or explosive limits |                          |                           |
| Flash point                            | > 93 °C                  | No information available. |
| Autoignition temperature               |                          | No information available. |
| Decomposition temperature              |                          | No information available. |
| pH                                     | 6 - 8                    | No information available. |
| pH (as aqueous solution)               |                          | No information available. |
| Kinematic viscosity                    | >20.5 mm <sup>2</sup> /s | No information available. |
| Dynamic viscosity                      |                          | No information available. |
| Water solubility                       | Miscible in water        | No information available. |
| Solubility(ies)                        | ACETONE Miscible         | No information available. |
| Partition coefficient                  |                          | No information available. |
| Vapour pressure                        | 6.66 mbar @ 20 °C        | No information available. |
| Relative density                       |                          | No information available. |
| Bulk density                           |                          | No information available. |
| Liquid Density                         | 1,1 g/cm <sup>3</sup>    | No information available. |
| Relative vapour density                | <1                       | No information available. |
| Particle characteristics               |                          | No information available. |
| Particle Size                          | No information available |                           |
| Particle Size Distribution             | No information available |                           |
| Explosive properties                   | No information available |                           |
| Oxidising properties                   | No information available |                           |

## 9.2. Other information

# SECTION 10: Stability and reactivity

## 10.1. Reactivity

Reactivity Strong oxidising agents. Acids. Reducing agent. Strong bases.

## 10.2. Chemical stability

Stability Stable under normal conditions.

## Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

## 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Polymerises easily with evolution of heat.

## 10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

## 10.5. Incompatible materials

Incompatible materials Strong bases. Strong oxidising agents. Acids. Reducing agent.

## 10.6. Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Hydrocarbons. Nitrogen oxides (NO<sub>x</sub>).

# SECTION 11: Toxicological information

**11.1. Information on toxicological effects****Information on likely routes of exposure****Product Information**

|                     |                                                                                                                                                               |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.                                                  |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain. |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).                                              |
| <b>Ingestion</b>    | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.            |

**Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Redness. May cause redness and tearing of the eyes.

**Acute toxicity****Numerical measures of toxicity**

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 10,312.50 mg/kg

**Component Information**

| Chemical name                                                                                                                           | Oral LD50             | Dermal LD50          | Inhalation LC50             |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------|----------------------|-----------------------------|
| REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{2-[2-(METHACRYLOYLOXY)ETHO]HO | > 35000 mg/kg ( Rat ) | > 2000 mg/kg ( Rat ) | -                           |
| Ammonium Benzoate                                                                                                                       | = 825 mg/kg ( Rat )   | -                    | -                           |
| SODIUM HYDROXIDE                                                                                                                        | > 2000 mg/kg ( Rat )  | -                    | -                           |
| 3,6-BIS(ETHYLAMINO)-9-[2-(METHOXYCARBONYL)PHENYL]-2,7-DIMETHYLXANTHYLIUM CHLORIDE                                                       | = 449 mg/kg ( Rat )   | = 2500 mg/kg ( Rat ) | 0.05 - 0.5 mg/L ( Rat ) 4 h |

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes skin irritation.

REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{2-[2-(METHACRYLOYLOXY)ETHO] (-)

| Method | Species | Exposure route | Effective dose | Exposure time | Results      |
|--------|---------|----------------|----------------|---------------|--------------|
|        | Rabbit  |                |                | 24 hours      | non-irritant |

Ammonium Benzoate (1863-63-4)

| Method | Species | Exposure route | Effective dose | Exposure time | Results |
|--------|---------|----------------|----------------|---------------|---------|
|--------|---------|----------------|----------------|---------------|---------|

|          |                |          |  |  |              |
|----------|----------------|----------|--|--|--------------|
| OECD 439 | Human evidence | in vitro |  |  | non-irritant |
|----------|----------------|----------|--|--|--------------|

## SODIUM HYDROXIDE (1310-73-2)

| Method                                                                      | Species  | Exposure route | Effective dose | Exposure time | Results   |
|-----------------------------------------------------------------------------|----------|----------------|----------------|---------------|-----------|
| OECD Test No. 435: In Vitro Membrane Barrier Test Method for Skin Corrosion | in vitro |                |                |               | Corrosive |

## 3,6-BIS(ETHYLAMINO)-9-[2-(METHOXYCARBONYL)PHENYL]-2,7-DIMETHYLXANTHYLIUM CHLORIDE (3068-39-1)

| Method                                               | Species | Exposure route | Effective dose | Exposure time | Results      |
|------------------------------------------------------|---------|----------------|----------------|---------------|--------------|
| OECD Test No. 404: Acute Dermal Irritation/Corrosion | Rabbit  |                |                | 4 hours       | non-irritant |

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

## REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{2-[2-(METHACRYLOYLOXY)ETHO (-)

| Method | Species | Exposure route | Effective dose | Exposure time | Results      |
|--------|---------|----------------|----------------|---------------|--------------|
|        | Rabbit  |                |                |               | non-irritant |

## Ammonium Benzoate (1863-63-4)

| Method   | Species        | Exposure route | Effective dose | Exposure time | Results      |
|----------|----------------|----------------|----------------|---------------|--------------|
| OECD 492 | Human evidence |                |                |               | Irritant     |
| OECD 437 | in vitro       |                |                |               | non-irritant |

## SODIUM HYDROXIDE (1310-73-2)

| Method                                            | Species | Exposure route | Effective dose | Exposure time | Results   |
|---------------------------------------------------|---------|----------------|----------------|---------------|-----------|
| OECD Test No. 405: Acute Eye Irritation/Corrosion | Rabbit  |                |                |               | Corrosive |

## 3,6-BIS(ETHYLAMINO)-9-[2-(METHOXYCARBONYL)PHENYL]-2,7-DIMETHYLXANTHYLIUM CHLORIDE (3068-39-1)

| Method                                            | Species | Exposure route | Effective dose | Exposure time | Results   |
|---------------------------------------------------|---------|----------------|----------------|---------------|-----------|
| OECD Test No. 405: Acute Eye Irritation/Corrosion | Rabbit  |                |                |               | Corrosive |

**Respiratory or skin sensitisation** No information available.

## REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{2-[2-(METHACRYLOYLOXY)ETHO (-)

| Method                                                        | Species | Exposure route | Results                                  |
|---------------------------------------------------------------|---------|----------------|------------------------------------------|
| OECD Test No. 429: Skin Sensitisation: Local Lymph Node Assay | Mouse   |                | No sensitisation responses were observed |

## SODIUM HYDROXIDE (1310-73-2)

| Method | Species        | Exposure route | Results                                  |
|--------|----------------|----------------|------------------------------------------|
|        | Human evidence |                | No sensitisation responses were observed |

## 3,6-BIS(ETHYLAMINO)-9-[2-(METHOXYCARBONYL)PHENYL]-2,7-DIMETHYLXANTHYLIUM CHLORIDE (3068-39-1)

| Method                                                        | Species | Exposure route | Results     |
|---------------------------------------------------------------|---------|----------------|-------------|
| OECD Test No. 429: Skin Sensitisation: Local Lymph Node Assay | Mouse   |                | Sensitising |

**Germ cell mutagenicity** No information available.

## Component Information

REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{ 2-[2-(METHACRYLOYLOXY)ETHO (-)

| Method                                                        | Species   | Results  |
|---------------------------------------------------------------|-----------|----------|
| OECD Test No. 476: In vitro Mammalian Cell Gene Mutation Test | in vitro  | Negative |
| OECD Test No. 471: Bacterial Reverse Mutation Test            | Ames Test | Negative |
| OECD 487                                                      | in vitro  | Negative |

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{ 2-[2-(METHACRYLOYLOXY)ETHO (-)

| Method                                                                                                               | Species | Results             |
|----------------------------------------------------------------------------------------------------------------------|---------|---------------------|
| OECD Test No. 422: Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test | Rat     | NOAEL P 1.000 mg/kg |

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{ 2-[2-(METHACRYLOYLOXY)ETHO (-)

| Method   | Species | Exposure route | Effective dose | Exposure time | Results |
|----------|---------|----------------|----------------|---------------|---------|
| OECD 408 | Rat     | Oral gavage    | 1000 mg/kg     | 13 weeks      | NOAEL   |

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity** May cause long lasting harmful effects to aquatic life.

REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{ 2-[2-(METHACRYLOYLOXY)ETHO (-)

| Method                                                  | Species           | Endpoint type | Effective dose              | Exposure time | Results |
|---------------------------------------------------------|-------------------|---------------|-----------------------------|---------------|---------|
| OECD Test No. 203: Fish, Acute Toxicity Test            | Brachydanio rerio | LL50          | Toxicity > Water solubility | 96 hours      |         |
| OECD Test No. 210: Fish, Early-Life Stage Toxicity Test | Brachydanio rerio | NOEC          | Toxicity > Water solubility | 34 days       |         |

|                                                                                                  |                                 |      |                             |          |  |
|--------------------------------------------------------------------------------------------------|---------------------------------|------|-----------------------------|----------|--|
| OECD Test No. 202: Daphnia sp., Acute Immobilisation Test                                        | Daphnia magna                   | EL50 | Toxicity > Water solubility | 48 hours |  |
| OECD Test No. 211: Daphnia magna Reproduction Test                                               | Daphnia magna                   | EC10 | Toxicity > Water solubility | 21 days  |  |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test                    | Pseudokirchneriella subcapitata | EL50 | Toxicity > Water solubility | 72 hours |  |
| OECD Test No. 209: Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation) | activated sludge                | EC50 | Toxicity > Water solubility | 3 hours  |  |

## Ammonium Benzoate (1863-63-4)

| Method                                                                        | Species                 | Endpoint type | Effective dose | Exposure time | Results |
|-------------------------------------------------------------------------------|-------------------------|---------------|----------------|---------------|---------|
| OECD Test No. 202: Daphnia sp., Acute Immobilisation Test                     | Daphnia magna           | EC50          | >100 mg/L      | 48 hours      |         |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test | Desmodesmus subspicatus | EC50          | >13.1 mg/L     | 72 hours      |         |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test | Desmodesmus subspicatus | EC10          | 13.67 mg/L     | 72 hours      |         |

## SODIUM HYDROXIDE (1310-73-2)

| Method                                                    | Species                             | Endpoint type | Effective dose | Exposure time | Results |
|-----------------------------------------------------------|-------------------------------------|---------------|----------------|---------------|---------|
| OECD Test No. 203: Fish, Acute Toxicity Test              | Oncorhynchus mykiss (rainbow trout) | LC50          | 45.4 mg/L      | 96 hours      |         |
| OECD Test No. 202: Daphnia sp., Acute Immobilisation Test | aquatic invertebrates               | EC50          | 40.4 mg/L      | 48 hours      |         |
|                                                           | Pseudomonas putida                  | EC0           | >100 mg/L      | 30 minutes    |         |

## 3,6-BIS(ETHYLAMINO)-9-[2-(METHOXYCARBONYL)PHENYL]-2,7-DIMETHYLXANTHYLIUM CHLORIDE (3068-39-1)

| Method                                                                                | Species                         | Endpoint type | Effective dose | Exposure time | Results |
|---------------------------------------------------------------------------------------|---------------------------------|---------------|----------------|---------------|---------|
|                                                                                       | Leuciscus idus                  | LC50          | 6.85 mg/L      | 96 hours      |         |
| OECD Test No. 202: Daphnia sp., Acute Immobilisation Test                             | Daphnia magna                   | EC50          | 1 mg/L         | 48 hours      |         |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test         | Pseudokirchneriella subcapitata | EC50          | 0.023 mg/L     | 72 hours      |         |
| OECD Test No. 201: Freshwater Algae and Cyanobacteria, Growth Inhibition Test         | Pseudokirchneriella subcapitata | NOEC          | 0.014 mg/L     | 72 hours      |         |
| OECD Test No. 209: Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium | activated sludge                | EC50          | 33 mg/L        | 3 hours       |         |

|            |  |  |  |  |  |
|------------|--|--|--|--|--|
| Oxidation) |  |  |  |  |  |
|------------|--|--|--|--|--|

**12.2. Persistence and degradability**

**Persistence and degradability** No information available.

REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{2-[2-(METHACRYLOYLOXY)ETHO (-)

| Method                                                                              | Exposure time | Value                     | Results                   |
|-------------------------------------------------------------------------------------|---------------|---------------------------|---------------------------|
| OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F) | 28 days       | 19.9-41.3% Biodegradation | Not readily biodegradable |
| OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F) | 60 days       | 52.2-65.5% Biodegradation | Inherently Biodegradable  |

Ammonium Benzoate (1863-63-4)

| Method                                                                    | Exposure time | Value              | Results               |
|---------------------------------------------------------------------------|---------------|--------------------|-----------------------|
| OECD Test No. 301B: Ready Biodegradability: CO2 Evolution Test (TG 301 B) | 28 days       | 92% Biodegradation | Readily biodegradable |

3,6-BIS(ETHYLAMINO)-9-[2-(METHOXYCARBONYL)PHENYL]-2,7-DIMETHYLBENZOTRIUM CHLORIDE (3068-39-1)

| Method                                                                    | Exposure time | Value               | Results                   |
|---------------------------------------------------------------------------|---------------|---------------------|---------------------------|
| OECD Test No. 301B: Ready Biodegradability: CO2 Evolution Test (TG 301 B) | 28 days       | 2-5% Biodegradation | Not readily biodegradable |

**12.3. Bioaccumulative potential**

**Bioaccumulation**

**Component Information**

| Chemical name                                                                                                                        | Partition coefficient |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| REACTION MASS OF (1-METHYLETHYLIDENE)BIS(4,1-PHENYLENEOXY-2,1-ETHANEDIYL) BISMETHACRYLATE AND 2-{4-[2-(4-{2-[2-(METHACRYLOYLOXY)ETHO | >6.2                  |
| Ammonium Benzoate                                                                                                                    | <0.3                  |
| 3,6-BIS(ETHYLAMINO)-9-[2-(METHOXYCARBONYL)PHENYL]-2,7-DIMETHYLBENZOTRIUM CHLORIDE                                                    | 1.7                   |

**12.4. Mobility in soil**

**Mobility in soil** No information available.

**12.5. Results of PBT and vPvB assessment**

**PBT and vPvB assessment** The product does not contain any substance(s) classified as PBT or vPvB.

| Chemical name                                                                     | PBT and vPvB assessment         |
|-----------------------------------------------------------------------------------|---------------------------------|
| SODIUM HYDROXIDE                                                                  | The substance is not PBT / vPvB |
| 3,6-BIS(ETHYLAMINO)-9-[2-(METHOXYCARBONYL)PHENYL]-2,7-DIMETHYLBENZOTRIUM CHLORIDE | The substance is not PBT / vPvB |

**12.6. Other adverse effects**

No information available.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

|                                            |                                                                                                                                         |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Waste from residues/unused products</b> | Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. |
| <b>Contaminated packaging</b>              | Do not reuse empty containers.                                                                                                          |
| <b>Other information</b>                   | Waste codes should be assigned by the user based on the application for which the product was used.                                     |

**SECTION 14: Transport information****IATA**

|                                          |                |
|------------------------------------------|----------------|
| <b>14.1 UN number or ID number</b>       | Not regulated  |
| <b>14.2</b>                              |                |
| <b>14.3 Transport hazard class(es)</b>   | Not regulated  |
| <b>14.4 Packing group</b>                | Not regulated  |
| <b>14.5 Environmental hazards</b>        | Not applicable |
| <b>14.6 Special precautions for user</b> |                |
| <b>Special Provisions</b>                | None           |

**IMDG**

|                                                                     |                          |
|---------------------------------------------------------------------|--------------------------|
| <b>14.1 UN number or ID number</b>                                  | Not regulated            |
| <b>14.3 Transport hazard class(es)</b>                              | Not regulated            |
| <b>14.4 Packing group</b>                                           | Not regulated            |
| <b>14.5 Environmental hazards</b>                                   | Not applicable           |
| <b>14.6 Special precautions for user</b>                            |                          |
| <b>Special Provisions</b>                                           | None                     |
| <b>14.7 Maritime transport in bulk according to IMO instruments</b> | No information available |

**RID**

|                                          |                |
|------------------------------------------|----------------|
| <b>14.1 UN number or ID number</b>       | Not regulated  |
| <b>14.2 UN proper shipping name</b>      | Not regulated  |
| <b>14.3 Transport hazard class(es)</b>   | Not regulated  |
| <b>14.4 Packing group</b>                | Not regulated  |
| <b>14.5 Environmental hazards</b>        | Not applicable |
| <b>14.6 Special precautions for user</b> |                |
| <b>Special Provisions</b>                | None           |

**ADR**

|                                          |                |
|------------------------------------------|----------------|
| <b>14.1 UN number or ID number</b>       | Not regulated  |
| <b>14.2 UN proper shipping name</b>      | Not regulated  |
| <b>14.3 Transport hazard class(es)</b>   | Not regulated  |
| <b>14.4 Packing group</b>                | Not regulated  |
| <b>14.5 Environmental hazards</b>        | Not applicable |
| <b>14.6 Special precautions for user</b> |                |
| <b>Special Provisions</b>                | None           |

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

**Authorisations and/or restrictions on use:**

This product contains one or more substances subject to restriction (UK REACH - Annex XVII).

This product does not contain substances subject to authorisation (UK REACH - Annex XIV).

**Product restricted per REACH Annex XVII: 3**

**Persistent Organic Pollutants**

Not applicable

**Export Notification requirements**

Not applicable

**Named dangerous substances per COMAH Regulations 2015 (as amended)**

Not applicable

**The Ozone-Depleting Substances Regulations 2015**

Not applicable

**The Biocidal Products Regulations 2001 (as amended)**

Not applicable

**The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (as amended)**

Not applicable

**Poisons Act 1972 (Explosive Precursors) Regulations (as Amended)**

| Chemical name    | Poisons and Explosive Precursors                    |
|------------------|-----------------------------------------------------|
| SODIUM HYDROXIDE | Poison, Reportable 12 % of total caustic alkalinity |

**International Inventories**

|                      |                                                  |
|----------------------|--------------------------------------------------|
| <b>TSCA</b>          | Contact supplier for inventory compliance status |
| <b>DSL/NDL</b>       | Contact supplier for inventory compliance status |
| <b>EINECS/ELINCS</b> | Contact supplier for inventory compliance status |
| <b>ENCS</b>          | Contact supplier for inventory compliance status |
| <b>IECSC</b>         | Contact supplier for inventory compliance status |
| <b>KECL</b>          | Contact supplier for inventory compliance status |
| <b>PICCS</b>         | Contact supplier for inventory compliance status |
| <b>AIIC</b>          | Contact supplier for inventory compliance status |
| <b>NZIoC</b>         | Contact supplier for inventory compliance status |

**Legend:**

|                      |                                                                                                    |
|----------------------|----------------------------------------------------------------------------------------------------|
| <b>TSCA</b>          | - United States Toxic Substances Control Act Section 8(b) Inventory                                |
| <b>DSL/NDL</b>       | - Canadian Domestic Substances List/Non-Domestic Substances List                                   |
| <b>EINECS/ELINCS</b> | - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances |
| <b>ENCS</b>          | - Japan Existing and New Chemical Substances                                                       |
| <b>IECSC</b>         | - China Inventory of Existing Chemical Substances                                                  |
| <b>KECL</b>          | - Korean Existing and Evaluated Chemical Substances                                                |
| <b>PICCS</b>         | - Philippines Inventory of Chemicals and Chemical Substances                                       |
| <b>AIIC</b>          | - Australian Inventory of Industrial Chemicals                                                     |
| <b>NZIoC</b>         | - New Zealand Inventory of Chemicals                                                               |

**15.2. Chemical safety assessment**

|                               |                          |
|-------------------------------|--------------------------|
| <b>Chemical Safety Report</b> | No information available |
|-------------------------------|--------------------------|

## SECTION 16: Other information

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### Full text of H-Statements referred to under section 3

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H413 - May cause long lasting harmful effects to aquatic life

#### Legend

SVHC: Substances of Very High Concern for Authorisation:

#### Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average)

Ceiling Maximum limit value

+ Sensitisers

STEL

\*

STEL (Short Term Exposure Limit)

Skin designation

Revision Note \*\*\*Indicates updated data since last publication

#### Classification procedure

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

Acute oral toxicity

Acute dermal toxicity

Acute inhalation toxicity - gas

Acute inhalation toxicity - vapour

Acute inhalation toxicity - dust/mist

Skin corrosion/irritation

Serious eye damage/eye irritation

Respiratory sensitisation

Skin sensitisation

Mutagenicity

Carcinogenicity

Reproductive toxicity

STOT - single exposure

STOT - repeated exposure

Acute aquatic toxicity

Chronic aquatic toxicity

Aspiration hazard

Ozone

Method Used

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

Calculation method

#### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA\_RAC)

European Chemicals Agency (ECHA) (ECHA\_API)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

National Institute of Technology and Evaluation (NITE)

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

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**This material safety data sheet complies with the requirements of UK REACH Regulations (SI 2019/758 as amended)  
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**