



FLANGE SEALANT - ANAEROBIC LP-IMP

SAFETY DATA SHEET

according to Regulation (EU) 2015/830

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VERSION: 4.0

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

1.1. Product identifier

| | |
|--------------|-----------------------------------|
| Trade name | Flange Sealant - Anaerobic LP-IMP |
| Product code | Ford Internal Ref.: 183588 |
| SDS Number | 8060 |
| Product use | Professional use |

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

| | |
|--------------------------|---------------------|
| Relevant identified uses | Adhesives, sealants |
| Uses advised against | None known |

1.3. Details of the supplier of the safety data sheet

| | |
|----------------------|------------------------------|
| Supplier | Distributor |
| Ford-Werke GmbH | Ford Motor Company Ltd. |
| Edsel-Ford-Str. 2-14 | Parts Distribution Centre |
| 50769 Cologne | Royal Oak Way South |
| Germany | NN11 8NT Daventry, Northants |
| +49 221 90-33333 | United Kingdom |
| sdseu@ford.com | +44 1327 305 198 |

1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH – 24/7)

2. SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

| | | | |
|------------------------------|--|-------|--|
| Health hazards | Skin corrosion/irritation, Category 2 | H315 | Causes skin irritation. |
| | Serious eye damage/eye irritation, Category 2 | H319 | Causes serious eye irritation. |
| | Skin sensitisation, Category 1 | H317 | May cause an allergic skin reaction. |
| | Reproductive toxicity, Category 2 | H361d | Suspected of damaging the unborn child. |
| | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation | H335 | May cause respiratory irritation. |
| Environmental hazards | Hazardous to the aquatic environment — Chronic Hazard, Category 3 | H412 | Harmful to aquatic life with long lasting effects. |

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms



Signal word

Warning

Contains 2-hydroxyethyl methacrylate; 2-phenoxyethyl acrylate; 2-phenoxyethyl methacrylate; α,α -dimethylbenzyl hydroperoxide

Hazard statements

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H361d Suspected of damaging the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P201 Obtain special instructions before use.
P261 Avoid breathing vapours, mist.
P273 Avoid release to the environment.
P280 Wear protective gloves, eye protection.

Response

P308+P313 IF exposed or concerned: Get medical advice.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

3. SECTION 3: Composition/information on ingredients

3.2. Mixtures

| Chemical name | CAS- No EC- No Index No RRN | % | Classification according to Regulation (EC) No. 1272/2008 | Notes |
|---|--|----------|---|----------|
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate | 7534-94-3 231-403-1 01-2119886505-27-XXXX | 10 – 20 | Aquatic Chronic 3, H412 | |
| 2-hydroxyethyl methacrylate | 868-77-9 212-782-2 607-124-00-X 01-2119490169-29-XXXX | 5 - < 10 | Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 | (Note D) |
| 2-phenoxyethyl acrylate | 48145-04-6 256-360-6 01-2119980532-35-XXXX | 5 - < 10 | Skin Sens. 1A, H317 Repr. 2, H361d Aquatic Chronic 2, H411 | |
| 2-phenoxyethyl methacrylate | 10595-06-9 234-201-1 01-2120752383-55-XXXX | 5 - < 10 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1A, H317 Repr. 2, H361d Aquatic Chronic 2, H411 | |

| Chemical name | CAS- No EC- No Index No RRN | % | Classification according to Regulation (EC) No. 1272/2008 | Notes |
|--|---|-----------|---|--|
| α,α -dimethylbenzyl hydroperoxide | 80-15-9 201-254-7 617-002-00-8 01-2119475796-19-XXXX | 1 - < 2,5 | Org. Perox. E, H242 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation), H331 Acute Tox. 2 (Inhalation:vapour), H330 Skin Corr. 1B, H314 STOT RE 2, H373 Aquatic Chronic 2, H411 | (0 < C < 10) STOT SE 3, H335 (1 \leq C < 3) Eye Irrit. 2, H319 (3 \leq C < 10) Skin Irrit. 2, H315 (3 \leq C < 10) Eye Dam. 1, H318 (10 \leq C < 100) Skin Corr. 1B, H314 |
| acrylic acid | 79-10-7 201-177-9 607-061-00-8 01-2119452449-31-XXXX | 0,1 - < 1 | Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:vapour), H332 Skin Corr. 1A, H314 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 | (1 \leq C < 100) STOT SE 3, H335 # (Note D) |
| [2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate | 20882-04-6 244-096-4 01-2120137902-58-XXXX | 0,1 - < 1 | Eye Dam. 1, H318 Skin Sens. 1, H317 | |
| 2-Phenylacetohydrazide | 114-83-0 204-055-3 | 0,1 - < 1 | Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 | |
| 2-hydroxypropyl methacrylate | 27813-02-1 248-666-3 01-2119490226-37-XXXX | 0,1 - < 1 | Eye Irrit. 2, H319 Skin Sens. 1, H317 | |
| methacrylic acid | 79-41-4 201-204-4 607-088-00-5 01-2119463884-26-XXXX | 0,1 - < 1 | Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 | (1 \leq C < 100) STOT SE 3, H335 (Note D) |

| Chemical name | CAS- No EC- No Index No RRN | % | Classification according to Regulation (EC) No. 1272/2008 | Notes |
|--------------------|--------------------------------------|--------------|--|-------|
| 1,4-naphthoquinone | 130-15-4 204-977-6 | 0,01 - < 0,1 | Acute Tox. 3 (Oral), H301 Acute Tox. 1 (Inhalation), H330 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10) | |

Note D : Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words 'non-stabilised'.

#: substance with a Community workplace exposure limit

Full text of H-statements: see section 16

4. SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|----------------------------|---|
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |
| Inhalation | Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell. |
| Skin contact: | Wash skin with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. |
| Eyes contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention. |
| Ingestion | Rinse mouth out with water. Drink 1 or 2 glasses of water. Do not induce vomiting. Obtain medical attention. |

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

| | |
|--|--|
| Symptoms/effects: | Suspected of damaging the unborn child. |
| Symptoms/effects after inhalation | Inhalation may cause irritation (cough, short breathing, difficulty in breathing). |
| Symptoms/effects after skin contact | May cause an allergic skin reaction. irritation (itching, redness, blistering). |
| Symptoms/effects after eye contact | Causes serious eye irritation. |
| Symptoms/effects after ingestion | On ingestion in large quantities: Abdominal pain, Diarrhea. |

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

Treat symptomatically.

5. SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|---------------------------------------|--|
| Suitable extinguishing media | Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

5.2. Special hazards arising from the substance or mixture

| | |
|--------------------------------------|--|
| Hazardous combustion products | During fire, gases hazardous to health may be formed. Carbon oxides (CO, CO ₂). Nitrogen oxides. |
|--------------------------------------|--|

5.3. Advice for firefighters

| | |
|--------------------------------|--|
| Precautionary measures fire | Do not breathe fumes. Cool containers exposed to heat with water spray and remove container, if no risk is involved. |
| Firefighting instructions | Use standard firefighting procedures and consider the hazards of other involved materials. |
| Protection during firefighting | Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
| Other information | Prevent fire fighting water from entering the environment. |

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

| | |
|----------------------|--|
| Protective equipment | Wear recommended personal protective equipment. |
| Emergency procedures | Ventilate spillage area. Avoid contact with skin and eyes. |

For emergency responders

| | |
|----------------------|---|
| Protective equipment | Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | Keep unnecessary personnel away. |

6.2. Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|---|
| Methods for cleaning up | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Following product recovery, flush area with water. Small spills: Wipe up with absorbent material (for example cloth). Clean surface thoroughly to remove residual contamination. |
|-------------------------|---|

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-------------------------------|---|
| Precautions for safe handling | Ensure good ventilation of the work station. Do not breathe vapours, mist. Avoid contact with skin and eyes. Wear personal protective equipment. |
| Hygiene measures | Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

7.2. Conditions for safe storage, including any incompatibilities

| | |
|--------------------|--|
| Storage conditions | Store tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). |
|--------------------|--|

7.3. Specific end use(s)

Adhesives, Sealants.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

EU

| Regulation | Substance | Type | Value |
|------------|------------------------|-----------|----------------------|
| COMMISSION | acrylic acid (79-10-7) | IOELV TWA | 29 mg/m ³ |

EU

| | | | |
|----------------------------|---------------------------------|------------|----------------------|
| DIRECTIVE (EU) 2017/164 | Acrylic acid; Prop-2-enoic acid | IOELV TWA | 10 ppm |
| | | IOELV STEL | 59 mg/m ³ |
| | | IOELV STEL | 20 ppm |

United Kingdom

| Regulation | Substance | Type | Value |
|---|---|----------|--|
| EH40. HSE | methacrylic acid (79-41-4) Methacrylic acid | WEL TWA | 72 mg/m ³ |
| | | WEL TWA | 20 ppm |
| | | WEL STEL | 143 mg/m ³ |
| EH40/2005 (Third edition, 2018). HSE | acrylic acid (79-10-7) Acrylic acid (Prop-2-enoic acid) | WEL STEL | 40 ppm |
| | | WEL TWA | 29 mg/m ³ |
| | | WEL TWA | 10 ppm |
| | | WEL STEL | 59 mg/m ³ STEL in relation to a 1-minute reference period |
| | | WEL STEL | 20 ppm STEL in relation to a 1-minute reference period |

Monitoring methods

Follow standard monitoring procedures

DNEL: Derived no effect level

No data available

| Components | Type | Route | Value | Form |
|---|----------|------------|---------------------------|------------------------------|
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate (7534-94-3) | Worker | Dermal | 0.35 mg/kg bw/day | Long-term - systemic effects |
| | | Inhalation | 1.22 mg/m ³ | Long-term - systemic effects |
| | Consumer | Oral | 0.21 mg/kg bw/day | Long-term - systemic effects |
| | | Inhalation | 0.36 mg/m ³ | Long-term - systemic effects |
| | | Dermal | 0.21 mg/kg bw/day | Long-term - systemic effects |
| 2-hydroxyethyl methacrylate (868-77-9) | Worker | Dermal | 1.3 mg/kg bw/day | Long-term - systemic effects |
| | | Inhalation | 4.9 mg/m ³ | Long-term - systemic effects |
| | Consumer | Oral | 0.83 mg/kg bodyweight/day | Long-term - systemic effects |
| | | Inhalation | 2.9 mg/m ³ | Long-term - systemic effects |
| | | Dermal | 0.83 mg/kg bodyweight/day | Long-term - systemic effects |
| 2-phenoxyethyl acrylate (48145-04-6) | Worker | Dermal | 3.5 mg/kg bw/day | Long-term - systemic effects |
| | | Inhalation | 12 mg/m ³ | Long-term - systemic effects |
| | | Inhalation | 77 mg/m ³ | Long-term - local effects |
| 2-phenoxyethyl methacrylate (10595-06-9) | Worker | Dermal | 3.5 mg/kg bw/day | Long-term - systemic effects |
| | | Inhalation | 12 mg/m ³ | Long-term - systemic effects |
| | | Inhalation | 84 mg/m ³ | Long-term - local effects |
| α,α -dimethylbenzyl hydroperoxide (80-15-9) | Worker | Inhalation | 6 mg/m ³ | Long-term - systemic effects |
| acrylic acid (79-10-7) | Worker | Dermal | 1 mg/cm ² | Acute - local effects |
| | | Inhalation | 30 mg/m ³ | Acute - local effects |
| | | Inhalation | 30 mg/m ³ | Long-term - local effects |
| | Consumer | Dermal | 1 mg/cm ² | Acute - local effects |
| | | Inhalation | 3.6 mg/m ³ | Acute - local effects |
| | | Inhalation | 3.6 mg/m ³ | Long-term - local effects |

| | | | | |
|---|----------|------------|--------------------------|------------------------------|
| 2-hydroxypropyl methacrylate (27813-02-1) | Worker | Dermal | 4.2 mg/kg bodyweight/day | Long-term - systemic effects |
| | | Inhalation | 14.7 mg/m ³ | Long-term - systemic effects |
| | Consumer | Oral | 2.5 mg/kg bodyweight/day | Long-term - systemic effects |
| | | Inhalation | 8.8 mg/m ³ | Long-term - systemic effects |
| methacrylic acid (79-41-4) | Worker | Dermal | 1 mg/cm ² | Acute - local effects |
| | | Inhalation | 30 mg/m ³ | Long-term - local effects |
| | Consumer | Dermal | 1 mg/cm ² | Acute - local effects |
| | | Inhalation | 3.6 mg/m ³ | Acute - local effects |
| | | Inhalation | 3.6 mg/m ³ | Long-term - local effects |

PNEC: Predicted no effect concentration

No data available

| Components | Type | Route | Value | Form |
|---|----------------|------------|-----------------|----------------------|
| Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate (7534-94-3) | Not applicable | Freshwater | 2.33 µg/L | |
| | | Seawater | 0.233 µg/L | |
| | | sediment | 1.2 mg/kg dwt | Freshwater |
| | | sediment | 0.12 mg/kg dwt | Seawater |
| | | Soil | 0.239 mg/kg dwt | |
| | | STP | 2.45 mg/l | |
| 2-hydroxyethyl methacrylate (868-77-9) | Not applicable | Freshwater | 0.482 mg/l | |
| | | Seawater | 0.482 mg/l | |
| | | sediment | 3.79 mg/kg dwt | Freshwater |
| | | sediment | 3.79 mg/kg dwt | Seawater |
| | | Soil | 0.476 mg/kg dwt | |
| | | STP | 10 mg/l | |
| 2-phenoxyethyl acrylate (48145-04-6) | Not applicable | Freshwater | 2 µg/L | |
| | | Seawater | 0.2 µg/L | |
| | | sediment | 0.02 mg/kg dwt | Freshwater |
| | | sediment | 0.002 mg/kg dwt | Seawater |
| | | Soil | 0.006 mg/kg dwt | |
| | | STP | 1.77 mg/l | |
| 2-phenoxyethyl methacrylate (10595-06-9) | Not applicable | Freshwater | 14.2 µg/L | |
| | | Seawater | 1.42 µg/L | |
| | | sediment | 0.665 mg/kg dwt | Freshwater |
| | | sediment | 0.067 mg/kg dwt | Seawater |
| | | Soil | 0.125 mg/kg dwt | |
| | | STP | 1.77 mg/l | |
| α,α-dimethylbenzyl hydroperoxide (80-15-9) | Not applicable | Freshwater | 0.003 mg/l | |
| | | Seawater | 0 mg/l | |
| | | sediment | 0.23 mg/kg dwt | Freshwater |
| | | sediment | 0.002 mg/kg dwt | Seawater |
| | | Soil | 0.003 mg/kg dwt | |
| | | STP | 0.35 mg/l | |
| acrylic acid (79-10-7) | Not applicable | Freshwater | 0.003 mg/l | |
| | | Seawater | 0 mg/l | |
| | | Freshwater | 0.001 mg/l | Intermittent release |

| | | | | |
|---|----------------|------------|-----------------|----------------------|
| | | sediment | 0.024 mg/kg dwt | Freshwater |
| | | sediment | 0.002 mg/kg dwt | Seawater |
| | | Soil | 1 mg/kg dwt | |
| | | Oral | 0.03 g/kg food | Secondary Poisoning |
| | | STP | 0.9 mg/l | |
| 2-hydroxypropyl methacrylate (27813-02-1) | Not applicable | Freshwater | 0.904 mg/l | |
| | | Seawater | 0.904 mg/l | |
| | | Freshwater | 0.972 mg/l | Intermittent release |
| | | Seawater | 0.972 mg/l | Intermittent release |
| | | sediment | 6.28 mg/kg dwt | Freshwater |
| | | sediment | 6.28 mg/kg dwt | Seawater |
| | | Soil | 0.727 mg/kg dwt | |
| | | STP | 10 mg/l | |
| methacrylic acid (79-41-4) | Not applicable | Freshwater | 0.003 mg/l | |
| | | Seawater | 0 mg/l | |
| | | Freshwater | 0.001 mg/l | Intermittent release |
| | | sediment | 0.024 mg/kg dwt | Freshwater |
| | | sediment | 0.002 mg/kg dwt | Seawater |
| | | Soil | 1 mg/kg dwt | |
| | | Oral | 0.03 g/kg food | Secondary Poisoning |
| | | STP | 0.9 mg/l | |

8.2. Exposure controls

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level

Materials for protective clothing

Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment

Individual protection measures, such as personal protective equipment (PPE)

Eye protection

Safety glasses. EN 166.

Skin protection

Hand protection

Protective gloves. The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove

| Material | Permeation | Thickness (mm) | Comments |
|---|-------------------|----------------|---|
| Nitrile rubber (NBR) | 6 (> 480 minutes) | 0,4 | EN ISO 374 Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product. |
| In case of splash contact: Nitrile rubber (NBR) | 6 (> 480 minutes) | 0,4 | EN ISO 374 Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product. |

Other protective measures

Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Type A - High-boiling (>65 °C) organic compounds

| | |
|--|---|
| Skin and body protection | Wear suitable protective clothing |
| Thermal hazard protection | Wear appropriate thermal protective clothing, when necessary. |
| Environmental exposure controls | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. |
| Consumer exposure controls | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. |

9. SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--------------------------------------|
| Physical state | Liquid |
| Appearance | Viscous. |
| Colour | Red. |
| Odour | mild. |
| Odour threshold | No data available |
| pH | No data available |
| Relative evaporation rate (butylacetate=1) | No data available |
| Melting point | No data available |
| Freezing point | No data available |
| Boiling point | No data available |
| Flash point | > 110 °C (closed cup) |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| Flammability (solid, gas) | No data available |
| Vapour pressure | No data available |
| Relative vapour density at 20 °C | No data available |
| Relative density | No data available |
| Solubility | Water: Insoluble Acetone: Soluble |
| Log Pow | No data available |
| Viscosity, kinematic | No data available |
| Viscosity, dynamic | No data available |
| Explosive properties | No data available |
| Oxidising properties | No data available |
| Explosive limits | No data available |

9.2. Other information

| | |
|-----------------|-------|
| VOC (EU) | < 3 % |
|-----------------|-------|

10. SECTION 10: Stability and reactivity

| | |
|---|---|
| 10.1. Reactivity | The product is stable and non reactive under normal conditions of use, storage and transport. |
| 10.2. Chemical stability | Stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | No dangerous reactions known under normal conditions of use. |
| 10.4. Conditions to avoid | Contact with incompatible materials. |
| 10.5. Incompatible materials | Strong oxidizing agents. |

10.6. Hazardous decomposition products During fire, gases hazardous to health may be formed.

11. SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

Mixture

| Name | Method | Type | Exposure route | Value | Unit | Species | Remarks |
|-----------------------------------|--------------------|------|----------------|--------|---------|---------|---------|
| Flange Sealant - Anaerobic LP-IMP | (calculated value) | ATE | oral | > 5000 | mg/kg | | |
| | (calculated value) | ATE | Dermal | > 5000 | mg/kg | | |
| | (calculated value) | ATE | Inhalation | > 20 | mg/l/4h | | vapours |

Substance

| Name | Method | Type | Exposure route | Value | Unit | Species | Remarks |
|--|-------------------|------|----------------|------------|----------|---------|---------|
| α,α-dimethylbenzyl hydroperoxide (80-15-9) | | LD50 | oral | 800 | mg/kg | | |
| | | ATE | Dermal | 1100 | mg/kg | | |
| | | ATE | Inhalation | 3 | mg/l/4h | | vapours |
| acrylic acid (79-10-7) | | LD50 | oral | 1500 | mg/kg | rat | |
| | | ATE | Inhalation | 11 | mg/l/4h | | vapours |
| | (OECD 402 method) | LD50 | Dermal | > 2000 | mg/kg | rabbit | |
| 2-Phenylacetohydrazide (114-83-0) | | ATE | Dermal | 1100 | mg/kg | | |
| | (acc. CLP 3.1.2) | ATE | oral | 50 - < 300 | mg/kg | | |
| methacrylic acid (79-41-4) | (OECD 401 method) | LD50 | oral | 1320 | mg/kg bw | rat | |
| | (OECD 403 method) | LC50 | Inhalation | 7,1 | mg/l/4h | rat | aerosol |
| | | LD50 | Dermal | 500-1000 | mg/kg bw | rabbit | |

| | |
|--|--|
| Skin corrosion/irritation | Causes skin irritation. |
| Serious eye damage/irritation | Causes serious eye irritation. |
| Respiratory or skin sensitisation | May cause an allergic skin reaction. |
| Germ cell mutagenicity | Based on available data, the classification criteria are not met |
| Carcinogenicity | Based on available data, the classification criteria are not met |
| Reproductive toxicity | Suspected of damaging the unborn child. |
| STOT-single exposure | May cause respiratory irritation. |
| STOT-repeated exposure | Based on available data, the classification criteria are not met |
| Aspiration hazard | Based on available data, the classification criteria are not met |

12. SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Harmful to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term (acute)

| Substance / Product | Trophic level | Species | Type | Value | Duration | Remarks |
|--|---------------|-------------------------------|------|----------|----------|------------------|
| α,α-dimethylbenzyl hydroperoxide (80-15-9) | crustacea | | EC50 | 7 mg/l | 24 h | |
| | Fish | | LC50 | 3,9 mg/l | 96 h | |
| acrylic acid (79-10-7) | Fish | Oncorhynchus mykiss (Rainbow) | LC50 | 27 mg/l | 96h | EPA OTS 797.1400 |

| | | | | | | |
|--|-------|--|------|-----------|------|--|
| | algae | trout) Desmodes mus subspicatus (previous name: Scenedes mus subspicatus) | EC50 | 0,13 mg/l | 72 h | |
|--|-------|--|------|-----------|------|--|

Hazardous to the aquatic environment, long-term (chronic)

| Substance / Product | Trophic level | Species | Type | Value | Duration | Remarks |
|------------------------|-----------------------|--|------|-----------|----------|---------|
| acrylic acid (79-10-7) | algae | Desmodes mus subspicatus (previous name: Scenedes mus subspicatus) | EC50 | 0,04 mg/l | 72 h | |
| | aquatic invertebrates | Daphnia magna | NOEC | 3,8 mg/l | 21 d | |

12.2. Persistence and degradability

Flange Sealant - Anaerobic LP-IMP

| | |
|--------------------------------------|--------------------|
| Persistence and degradability | Not biodegradable. |
|--------------------------------------|--------------------|

12.3. Bioaccumulative potential

Flange Sealant - Anaerobic LP-IMP

| | |
|----------------------------------|--------------------------------------|
| Bioaccumulative potential | No additional information available. |
|----------------------------------|--------------------------------------|

α,α -dimethylbenzyl hydroperoxide (80-15-9)

| | |
|----------------|-----|
| Log Pow | 1.6 |
|----------------|-----|

12.4. Mobility in soil

Flange Sealant - Anaerobic LP-IMP

| | |
|-----------------------|----------------------------------|
| Ecology - soil | Hardened adhesives are immobile. |
|-----------------------|----------------------------------|

12.5. Results of PBT and vPvB assessment

Flange Sealant - Anaerobic LP-IMP

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

12.6. Other adverse effects

| | |
|------------------------------|---|
| Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product. |
|------------------------------|---|

13. SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-------------------------------------|--|
| Regional legislation (waste) | Dispose of in accordance with local regulations. |
| Waste treatment methods | Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Collect and reclaim or dispose in closed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose of contents/container in accordance with licensed collector's sorting instructions. |

| | |
|---|--|
| Sewage disposal recommendations | Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. |
| Product/Packaging disposal recommendations | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |
| European List of Waste (LoW) code | The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| 08 04 09* | waste adhesives and sealants containing organic solvents or other dangerous substances |
| 15 01 10* | packaging containing residues of or contaminated by dangerous substances |

14. SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

Not regulated for transport

15. SECTION 15: Regulatory information

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

EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006

| | |
|--|--|
| α,α -dimethylbenzyl hydroperoxide ; acrylic acid | 3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F |
| Flange Sealant - Anaerobic LP-IMP ; 2-hydroxyethyl methacrylate ; 2-phenoxyethyl acrylate ; 2-phenoxyethyl methacrylate ; α,α -dimethylbenzyl hydroperoxide ; acrylic acid ; [2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate ; 2-Phenylacetohydrazide ; 2-hydroxypropyl methacrylate ; methacrylic acid | 3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10 |
| Flange Sealant - Anaerobic LP-IMP ; Exo-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl methacrylate ; 2-phenoxyethyl acrylate ; 2-phenoxyethyl methacrylate ; α,α -dimethylbenzyl hydroperoxide ; acrylic acid | 3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1 |
| acrylic acid | 40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. |
| Contains no substance on the REACH candidate list | |
| Contains no REACH Annex XIV substances | |
| VOC (EU) | < 3 % |
| Other information, restriction and prohibition regulations | Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended. Directive 94/33/EC on the protection of young people at work, as amended. Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. For details, refer to section 3 and 8. |

National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

16. SECTION 16: Other information

Indication of changes

Section 1 - Section 16.

Abbreviations and acronyms

| | |
|-------------|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| AGW | Occupational exposure limit value |
| ATE | Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP) |
| BAM | Federal Institute for Materials Research and Testing, Germany |
| BAT | Maximum permissible concentration of biological working substances. |
| BCF | Bio-concentration factor. |
| BLV | Biological limit values |
| BLV | Biological limit values (BGW, Austria) |
| BMGV | Biological Monitoring Guidance Value (EH40,UK). |
| BOD5 | Biochemical oxygen demand within 5 days |
| BOD | Biochemical oxygen demand |
| bw | Body weight. |
| calcd. | Calculated |
| CAS | Chemical Abstract Service. |
| CEN | European Committee for Standardization |
| CESIO | European Committee on Organic Surfactants and their Intermediates. |
| COD | Chemical oxygen demand |
| CLP | Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures. |
| CMR | Carcinogenic, Mutagenic or Reproduction Toxic Substances |
| CSA | Chemical safety assessment |
| CSR | Chemical Safety Report. |
| DMEL | Derived Minimum Effect Level. |
| DNEL | Derived no effect level |
| EAC | European waste catalogue |
| EC | European community |
| EC50 | Effective concentration |
| EINECS | European Inventory of Existing Commercial Chemical Substances. |
| ELINCS | European List of Notified Chemical Substances. |
| EN | European norm. |
| ERC | ERC (Environmental Release category) |
| EU | European Union |
| GLP | Good Laboratory Practice. |
| GHS | Globally Harmonized System of Classification and Labeling of Chemicals. |
| GW/VL | Occupational exposure limit value. |
| GW-kw/VL-cd | Occupational exposure limit value - short term. |
| GW-M/VL-M | Occupational exposure limit value – "Ceiling". |
| IATA | International Air Transport Association |
| IBC code | International Bulk Chemical (Code) (International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk). |

| | |
|--------------------------------|--|
| ICAO | International Civil Aviation Organization |
| IC50 | Inhibition Concentration 50%. |
| IECSC | Inventory of Existing Chemical Substances in China. |
| IMDG | International Maritime Dangerous Goods |
| ISO | International Standards Organization. |
| IUPAC | International Union of Pure and Applied Chemistry |
| LC50 | Lethal Concentration 50%. |
| LCLo | Lowest published lethal concentration. |
| LD50 | Lethal Dose 50%. |
| LOAEL | Lowest Observed Adverse Effect Level |
| LOEC | Lowest observable effect concentration. |
| LOEL | Lowest observable effect level. |
| LQ | Limited quantities |
| TRK-Kzw | Threshold limit value - Short-term exposure limit / Technical reference concentration - short-time value, Austria. |
| MAK-Mow | Maximum allowable workplace concentration – instantaneous value, Austria. |
| MAK-Tmw, TRK-Tmw | Maximum allowable workplace concentration – daily mean value / Technical standard concentration – daily mean value, Austria. |
| MAK | Threshold limit values Germany. |
| MARPOL | International Convention for the Prevention of Pollution from Ships. |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| NOEL | no-observed-effect level |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limits |
| PBT | Persistent Bioaccumulative Toxic |
| PC (Chemical product category) | PC (Chemical product category) |
| PNEC | Predicted No-Effect Concentration |
| POCP | Photochemical ozone creation potential. |
| POP | Persistent Organic Pollutants |
| PPE | Personal protective equipment |
| Process category | Process category |
| REACH | Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals). |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SCL | Specific concentration limit. |
| STEL | Short-term Exposure Limit |
| STP | Sewage treatment plant |
| SU (Sector of use) | SU (Sector of use) |
| SVHC | Substance of Very High Concern. |
| TLV | Threshold Limit Value |
| TRGS | Technical Rules for Hazardous Substances (German Standard). |
| TWA | Time Weighted Average |
| UVCB | Substances of Unknown or Variable composition, Complex reaction products or Biological materials |

| | |
|------------------------|--|
| VbF | Ordinance on Flammable Liquids, Austria |
| VOC | Volatile organic compounds |
| vPvB | Very Persistent and Very Bioaccumulative |
| WEL-TWA | Workplace Exposure Limit-Long term exposure limit (8-hour TWA(=time weighted average)reference period). |
| WEL-STEL | Workplace Exposure Limit-Short term exposure limit (15-minute reference period). |
| Data sources | REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.. |
| Training advice | Normal use of this product shall imply use in accordance with the instructions on the packaging |

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

| | |
|-------------------|-------|
| Skin Irrit. 2 | H315 |
| Eye Irrit. 2 | H319 |
| Skin Sens. 1 | H317 |
| Repr. 2 | H361d |
| STOT SE 3 | H335 |
| Aquatic Chronic 3 | H412 |

Full text of H- and EUH-statements

| | |
|----------------------------------|--|
| Acute Tox. 1 (Inhalation) | Acute toxicity (inhal.), Category 1. |
| Acute Tox. 2 (Inhalation:vapour) | Acute toxicity (inhalation:vapour) Category 2. |
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal), Category 3. |
| Acute Tox. 3 (Inhalation) | Acute toxicity (inhal.), Category 3. |
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3. |
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4. |
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4. |
| Acute Tox. 4 (Inhalation:vapour) | Acute toxicity (inhalation:vapour) Category 4. |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4. |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1. |
| Aquatic Chronic 1 | Hazardous to the aquatic environment — Chronic Hazard, Category 1. |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2. |
| Aquatic Chronic 3 | Hazardous to the aquatic environment — Chronic Hazard, Category 3. |
| Carc. 2 | Carcinogenicity, Category 2. |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1. |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2. |
| Flam. Liq. 3 | Flammable liquids, Category 3. |
| Org. Perox. E | Organic Peroxides, Type E. |
| Repr. 2 | Reproductive toxicity, Category 2. |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1A. |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1B. |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2. |
| Skin Sens. 1 | Skin sensitisation, Category 1. |
| Skin Sens. 1A | Skin sensitisation, category 1A. |

| | |
|-----------|---|
| STOT RE 2 | Specific target organ toxicity — Repeated exposure, Category 2. |
| STOT SE 3 | Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation. |
| H226 | Flammable liquid and vapour.. |
| H242 | Heating may cause a fire.. |
| H301 | Toxic if swallowed.. |
| H302 | Harmful if swallowed.. |
| H311 | Toxic in contact with skin.. |
| H312 | Harmful in contact with skin.. |
| H314 | Causes severe skin burns and eye damage.. |
| H315 | Causes skin irritation.. |
| H317 | May cause an allergic skin reaction.. |
| H318 | Causes serious eye damage.. |
| H319 | Causes serious eye irritation.. |
| H330 | Fatal if inhaled.. |
| H331 | Toxic if inhaled.. |
| H332 | Harmful if inhaled.. |
| H335 | May cause respiratory irritation.. |
| H351 | Suspected of causing cancer.. |
| H361d | Suspected of damaging the unborn child.. |
| H373 | May cause 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.. |

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

| | | |
|-------------------|-------|--------------------|
| Skin Irrit. 2 | H315 | Calculation method |
| Eye Irrit. 2 | H319 | Calculation method |
| Skin Sens. 1 | H317 | Calculation method |
| Repr. 2 | H361d | Calculation method |
| STOT SE 3 | H335 | Calculation method |
| Aquatic Chronic 3 | H412 | Calculation method |

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.

Attachment to the Safety Data Sheet



Product Name: Flange Sealant - Anaerobic LP-IMP

Ford Int. Ref. No.: 183588

REVISION DATE: 22.01.2020

Involved Products:

| | Finiscode | Part number | Container Size: |
|---|------------------|--------------------|------------------------|
| . | 1 1 761 780 | BU7J M2G348 AA | 50 ml |