



SEALANT LGN-2

SAFETY DATA SHEET

according to Regulation (EU) 2015/830

ISSUE DATE: 21.06.2018
REVISION DATE: 17.03.2020
SUPERSEDES DATE: 15.11.2019
VERSION: 3.0

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

1.1. Product identifier

Trade name	Sealant LGN-2
Product code	Ford Int. Ref. No.: 200046
SDS Number	3838
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 1	H318	Causes serious eye damage.
	Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.
	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

Danger

Contains

acrylic acid; 2-hydroxypropyl methacrylate; 2-hydroxyethyl methacrylate; 3,3,5-

trimethylcyclohexyl methacrylate

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P261	Avoid breathing vapours, mist.
P273	Avoid release to the environment.
P280	Wear eye protection, protective gloves.

Response

P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor, a POISON CENTER.
P333+P313	If skin irritation or rash occurs: 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
Bisphenol A ethoxylate dimethacrylate	41637-38-1 609-946-4 01-2119980659-17-XXXX	25 - 50	Aquatic Chronic 4, H413	UVCB
2-hydroxyethyl methacrylate	868-77-9 212-782-2 607-124-00-X 01-2119490169-29-XXXX	10 - 20	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317	(Note D)
3,3,5-trimethylcyclohexyl methacrylate	7779-31-9 231-927-0 01-2120748527-45-XXXX	10 - 20	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	(10 ≤ C ≤ 100) STOT SE 3, H335

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008	Notes
acrylic acid	79-10-7 201-177-9 607-061-00-8 01-2119452449-31-XXXX	1 -< 5	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 ≤C < 100) STOT SE 3, H335 # (Note D)
2-hydroxypropyl methacrylate	27813-02-1 248-666-3 - 01-2119490226-37-XXXX	1 -< 5	Eye Irrit. 2, H319 Skin Sens. 1, H317	
Maleic acid	110-16-7 607-095-00-3 01-2119488705-25-XXXX	0,1 < 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT SE 3, H335	
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	
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 ≤C ≤ 100) STOT SE 3, H335 (Note D)
2,2'-ethylenedioxydiethyl dimethacrylate	109-16-0 203-652-6 01-2119969287-21-XXXX	0,1 < 1	Skin Sens. 1B, H317	

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	0,1 -< 1	Org. Perox. E, H242 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 STOT RE 2, H373 Aquatic Chronic 2, H411	(1 \leq C \leq 3) Eye Irrit. 2, H319 (1 \leq C \leq 10) STOT SE 3, H335 (3 \leq C \leq 10) Skin Irrit. 2, H315 (3 \leq C \leq 10) Eye Dam. 1, H318 (10 \leq C \leq 100) Skin Corr. 1B, H314

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

UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials

Full text of H-statements: see section 16

4. SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Call a poison center or a doctor if you feel unwell. Never give anything by mouth to an unconscious person. If unconscious, place in the recovery position and seek medical advice.

Inhalation

Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

Skin contact:

Gently wash with plenty of soap and water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

Eyes contact

Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

Rinse mouth out with water. Call a poison center or a doctor if you feel unwell. Drink plenty of water. Do not induce vomiting.

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

Symptoms/effects after inhalation

Inhalation may cause irritation (cough, short breathing, difficulty in breathing).

Symptoms/effects after skin contact

Skin rash/inflammation. irritation (itching, redness, blistering). May cause an allergic skin reaction.

Symptoms/effects after eye contact

Permanent eye damage.

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

Provide general supportive measures and 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 a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Toxic fumes may be released. Carbon oxides (CO, CO₂). nitrogen oxides (NO_x) and sulphur oxides.

5.3. Advice for firefighters

Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	Cool containers exposed to heat with water spray and remove container, if no risk is involved.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment	Ensure adequate ventilation, especially in confined areas. For personal protection, see section 8 of the SDS.
Emergency procedures	Eliminate all ignition sources if safe to do so. Avoid contact with skin and eyes. Avoid breathing mist or vapor.

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".
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6.2. Environmental precautions

Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Small spills: Take up liquid spill into absorbent material. Clean surface thoroughly to remove residual contamination. Never return spills in original containers for re-use. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
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Other information	Dispose of materials or solid residues at an authorized site.
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6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13: "Disposal considerations".

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Avoid contact with skin, eyes and clothing. Avoid breathing mist or vapor. Do not pierce or burn, even after use.
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Hygiene measures	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.
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7.2. Conditions for safe storage, including any incompatibilities

Technical measures	Ensure adequate ventilation, especially in confined areas.
Storage conditions	Keep cool. Protect from sunlight. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
Special rules on packaging	Keep only in original container. Keep container tightly closed and dry.

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 DIRECTIVE (EU) 2017/164	acrylic acid (79-10-7) Acrylic acid; Prop-2-enoic acid	IOELV TWA	29 mg/m ³
		IOELV TWA	10 ppm
		IOELV STEL	59 mg/m ³
		IOELV STEL	20 ppm

United Kingdom

Regulation	Substance	Type	Value
EH40/2005 (Fourth edition, 2020). HSE	methacrylic acid (79-41-4) Methacrylic acid	WEL TWA	72 mg/m ³
		WEL TWA	20 ppm
		WEL STEL	143 mg/m ³
		WEL STEL	40 ppm
EH40/2005 (Third edition, 2018). HSE	acrylic acid (79-10-7) Acrylic acid (Prop-2-enoic acid)	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

DNEL: Derived no effect level

No data available

Components	Type	Route	Value	Form
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
		Dermal	2.5 mg/kg bodyweight/day	Long-term - systemic effects
Maleic acid (110-16-7)	Worker	Inhalation	3 mg/m ³	Acute - systemic effects
		Inhalation	3 mg/m ³	Acute - local effects
		Inhalation	3 mg/m ³	Long-term - systemic effects
		Inhalation	3 mg/m ³	Long-term - local effects
2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	Worker	Dermal	13.9 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	48.5 mg/m ³	Long-term - systemic effects
	Consumer	Oral	8.33 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	14.5 mg/m ³	Long-term - systemic effects
		Dermal	8.33 mg/kg bodyweight/day	Long-term - systemic effects
methacrylic acid (79-41-4)	Worker	Dermal	1 mg/cm ²	Acute - local effects
		Dermal	4.25 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	29.6 mg/m ³	Long-term - systemic effects
	Consumer	Inhalation	3.6 mg/m ³	Acute - local effects
		Dermal	2.55 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	6.55 mg/m ³	Long-term - local effects

2-hydroxyethyl methacrylate (868-77-9)	Worker	Dermal	1.3 mg/kg bodyweight/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
Bisphenol A ethoxylate dimethacrylate (41637-38-1)	Worker	Dermal	2 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	3.52 mg/m ³	Long-term - systemic effects
	Consumer	Oral	0.5 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	0.87 mg/m ³	Long-term - systemic effects
		Dermal	1 mg/kg bodyweight/day	Long-term - systemic effects
3,3,5-trimethylcyclohexyl methacrylate (7779-31-9)	Worker	Dermal	46.7 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	16.45 mg/m ³	Long-term - systemic effects
	Consumer	Oral	1.67 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	2.9 mg/m ³	Long-term - systemic effects
		Dermal	16.7 mg/kg bodyweight/day	Long-term - systemic effects
α,α -dimethylbenzyl hydroperoxide (80-15-9)	Worker	Inhalation	6 mg/m ³	Long-term - systemic effects

PNEC: Predicted no effect concentration

No data available

Components	Type	Route	Value	Form
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	
Maleic acid (110-16-7)	Not applicable	Freshwater	0.1 mg/l	
		Seawater	0.01 mg/l	
		Freshwater	0.428 mg/l	Intermittent release
		sediment	0.334 mg/kg dwt	Freshwater
		sediment	0.033 mg/kg dwt	Seawater
		Soil	0.042 mg/kg dwt	
		STP	44.6 mg/l	
2,2'-ethylenedioxydiethyl dimethacrylate (109-16-0)	Not applicable	Freshwater	0.016 mg/l	
		Seawater	0.002 mg/l	
		Freshwater	0.016 mg/l	Intermittent release

		sediment	0.185 mg/kg dwt	Freshwater
		sediment	0.018 mg/kg dwt	Seawater
		Soil	0.027 mg/kg dwt	
		STP	1.7 mg/l	
methacrylic acid (79-41-4)	Not applicable	Freshwater	0.82 mg/l	
		Seawater	0 mg/l	
		Freshwater	0.82 mg/l	Intermittent release
		sediment	0.024 mg/kg dwt	Freshwater
		sediment	0.002 mg/kg dwt	Seawater
		Soil	1.2 mg/kg dwt	
		STP	10 mg/l	
2-hydroxyethyl methacrylate (868-77-9)	Not applicable	Freshwater	0.482 mg/l	
		Seawater	0.482 mg/l	
		Freshwater	1 mg/l	Intermittent release
		Seawater	1 mg/l	Intermittent release
		sediment	3.79 mg/kg dwt	Freshwater
		sediment	3.79 mg/kg dwt	Seawater
		Soil	0.476 mg/kg dwt	
STP	10 mg/l			
3,3,5-trimethylcyclohexyl methacrylate (7779-31-9)	Not applicable	Freshwater	0.59 µg/L	
		Seawater	0.059 µg/L	
		Freshwater	5.9 µg/L	Intermittent release
		sediment	0.044 mg/kg dwt	Freshwater
		sediment	0.004 mg/kg dwt	Seawater
		Soil	0.008 mg/kg dwt	
		STP	100 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	

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

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

Eye protection

Safety glasses. EN 166. Safety glasses with side shields

Skin protection

Hand protection

Protective gloves. EN 374. 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
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Butyl rubber	6 (> 480 minutes)	0,7	Glove recommendation: Butoject® 898 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.
In case of splash contact: Butyl rubber	6 (> 480 minutes)	0,7	Glove recommendation: Butoject® 898 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.
Other protective measures	No additional information available.		
Respiratory protection	EN 14387. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Type A - High-boiling (>65 °C) organic compounds		
Skin and body protection	EN ISO 13982, Wear suitable protective clothing, Long sleeved protective clothing		
Thermal hazard protection	Wear appropriate thermal protective clothing, when necessary.		
Environmental exposure controls	Avoid release to the environment.		

9. SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	Green.
Odour	Characteristic.
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	93.3 °C
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	Not applicable
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.1 g/cm ³
Solubility	insoluble in water. Miscible with : acetone.
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)	0 %
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10. SECTION 10: Stability and reactivity

10.1. Reactivity The product is 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** Avoid heat, sparks, open flames and other ignition sources. Direct sunlight. For further information see section 7.
- 10.5. Incompatible materials** Strong acids. Strong oxidizing agents.
- 10.6. Hazardous decomposition products** During fire, gases hazardous to health may be formed. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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
Sealant LGN-2	(calculated value)	ATE	oral	> 2000	mg/kg		
	(calculated value)	ATE	Dermal	> 2000	mg/kg		
	(calculated value)	ATE	Inhalation	> 20	mg/l/4h		

Substance

Name	Method	Type	Exposure route	Value	Unit	Species	Remarks
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	
Maleic acid (110-16-7)		ATE	Dermal	1100	mg/kg		
	Not specified	LD50	oral	708	mg/kg	rat	
2-Phenylacetohydrazide (114-83-0)	Not specified	LD50	Dermal	1560	mg/kg	rabbit	
	(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	
α,α -dimethylbenzyl hydroperoxide (80-15-9)		LD50	oral	800	mg/kg		
		ATE	Dermal	1100	mg/kg		
		ATE	Inhalation	3	mg/l/4h		vapours

Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye damage.
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	Based on available data, the classification criteria are not met
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
Potential adverse human health effects and symptoms	Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea. However, ingestion is not likely to be a primary route of occupational exposure.

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
acrylic acid (79-10-7)	Fish	Oncorhynchus mykiss (Rainbow trout)	LC50	27 mg/l	96h	EPA OTS 797.1400
	algae	Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)	EC50	0,13 mg/l	72 h	
Maleic acid (110-16-7)	Fish	Leuciscus idus (golden orfe)	LC50	106 mg/l	48 h	DIN 38412-15
	aquatic invertebrates	Daphnia magna	EC50	42,81 mg/l	48 h	(OECD 202 method)
	algae	Pseudokirchnerella subcapitata	EC50	74,35 mg/l	72 h	(OECD 201 method)
Bisphenol A ethoxylate dimethacrylate (41637-38-1)	aquatic invertebrates	Daphnia magna	EL50	> 100 mg/L	48 h	(OECD 202 method)
3,3,5-trimethylcyclohexyl methacrylate (7779-31-9)	Fish	Danio rerio	LC50	1,9 mg/L	96 h	(OECD 203 method)
α,α-dimethylbenzyl hydroperoxide (80-15-9)	crustacea		EC50	7 mg/l	24 h	
	Fish		LC50	3,9 mg/l	96 h	

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

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

12.2. Persistence and degradability

Sealant LGN-2

Persistence and degradability

The product is not biodegradable.

Maleic acid (110-16-7)

Persistence and degradability

Readily biodegradable, according to appropriate OECD test. (OECD 301B method).

Biodegradation

97.08 % 28 days

12.3. Bioaccumulative potential

Maleic acid (110-16-7)

Log Pow	-1.3 (OECD 107 method)
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Bisphenol A ethoxylate dimethacrylate (41637-38-1)

Log Pow	3.43 @ pH 6.44
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α,α-dimethylbenzyl hydroperoxide (80-15-9)

Log Pow	1.6
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12.4. Mobility in soil

Sealant LGN-2

Ecology - soil	Hardened adhesives are immobile.
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12.5. Results of PBT and vPvB assessment

Sealant LGN-2

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

Additional information

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)

Disposal must be done according to official regulations.

Waste treatment methods

Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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

acrylic acid ; methacrylic acid

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008

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
Sealant LGN-2 ; acrylic acid ; 2-hydroxypropyl methacrylate ; 2-Phenylacetohydrazide ; methacrylic acid ; 2,2'-ethylenedioxydiethyl dimethacrylate	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
Sealant LGN-2 ; 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)	0 %
Other information, restriction and prohibition regulations	Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. 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. 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 2. Section 3.

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..

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

Skin Irrit. 2	H315
Eye Dam. 1	H318
Skin Sens. 1	H317
STOT SE 3	H335
Aquatic Chronic 3	H412

Full text of H- and EUH-statements

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 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2.
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3.
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4.
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.
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. 1B	Skin sensitisation, category 1B.
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..
H331	Toxic if inhaled..
H332	Harmful if inhaled..
H335	May cause respiratory irritation..
H351	Suspected of causing cancer..
H373	May cause damage to organs through prolonged or repeated exposure..
H400	Very toxic to aquatic life..
H411	Toxic to aquatic life with long lasting effects..
H412	Harmful to aquatic life with long lasting effects..
H413	May cause long lasting harmful effects to aquatic life..

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

Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	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: Sealant LGN-2

Ford Int. Ref. No.: 200046

REVISION DATE: 17.03.2020

Involved Products:

	Finiscode	Part number	Container Size:
.	1 2 311 115	9U7J M2G349 BA	10 ml