

LOXEAL®

ENGINEERING ADHESIVES

SAFETY DATA SHEET

Loxeal 59-10

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

1.1. Product identifier

Product name Loxeal 59-10

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

Identified uses Adhesive. Sealant.

1.3. Details of the supplier of the safety data sheet

Supplier Loxeal s.r.l.
Via Marconato 2
Cesano Maderno
20811 (MB)
Italia
Tel: +39 0362 529 301
Fax +39 0362 524 225
info@loxeal.com

1.4. Emergency telephone number

National emergency telephone number CHEMTREC UK: +(44)-870-8200418
CHEMTREC US: 800-424-9300
CHEMTREC Australia: +(61)-290372994
CHEMTREC New Zealand: +(64)-98010034

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Skin Sens. 1 - H317
Environmental hazards Aquatic Chronic 3 - H412

2.2. Label elements

Hazard pictograms



Signal word Warning

Hazard statements H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements P280 Wear protective clothing, gloves, eye and face protection.
P273 Avoid release to the environment.
P302+P352a IF ON SKIN: Wash with plenty of soap and water

Contains N,N-(m-PHENYLENE)DIMALEIMIDE

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Supplementary precautionary statements

P264 Wash contaminated skin thoroughly after handling.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P308+P313 IF exposed or concerned: Get medical advice/ attention.
 P333+P313 If skin irritation or rash 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.
 P501 Dispose of contents/ container in accordance with national regulations.

2.3. Other hazards

This product contains N,N-(m-phenylene)dimalaideimide which, in powder form, is classified as very toxic by inhalation. When present in solution, as in this case, such exposure can be excluded under normal working conditions and so this product is not labelled as such. However, if during use, there is a possibility that an aerosol mist may be formed then appropriate measures must be taken to exclude exposure by inhalation.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

N,N-(m-PHENYLENE)DIMALAEMIDE			5-10%
CAS number: 3006-93-7	EC number: 221-112-8	REACH registration number: 01-2120756106-57-XXXX	
Classification			
Acute Tox. 4 - H302			
Acute Tox. 2 - H330			
Skin Sens. 1A - H317			
Aquatic Chronic 2 - H411			
DODECYL METHACRYLATE			1-5%
CAS number: 142-90-5	EC number: 205-570-6	REACH registration number: 01-2119489778-11-XXXX	
Classification			
STOT SE 3 - H335			
CUMENE HYDROPEROXIDE			<1%
CAS number: 80-15-9	EC number: 201-254-7	REACH registration number: 01-2119475796-19-XXXX	
Classification			
Org. Perox. E - H242			
Acute Tox. 4 - H302			
Acute Tox. 4 - H312			
Acute Tox. 3 - H331			
Skin Corr. 1B - H314			
Eye Dam. 1 - H318			
STOT SE 3 - H335			
STOT RE 2 - H373			
Aquatic Chronic 2 - H411			

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ETHANEDIOL		<1%
CAS number: 107-21-1	EC number: 203-473-3	REACH registration number: 01-2119456816-28-XXXX
Classification		
Acute Tox. 4 - H302		
STOT RE 2 - H373		

The full text for all hazard statements is displayed in Section 16.

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

Inhalation	Move the exposed person to fresh air. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. Get medical attention.
Skin contact	Wash skin thoroughly with soap and water. If symptoms develop, obtain medical attention
Eye contact	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Skin contact	Skin irritation. Mild dermatitis, allergic skin rash.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. Treat symptomatically.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media	Foam, carbon dioxide or dry powder.
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Unsuitable extinguishing media	Water.
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5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Burning produces irritating, toxic and obnoxious fumes. Carbon monoxide, carbon dioxide, and unknown hydrocarbons.
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5.3. Advice for firefighters

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet.
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6.2. Environmental precautions

Environmental precautions	Not considered to be a significant hazard due to the small quantities used. Avoid discharge into drains.
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6.3. Methods and material for containment and cleaning up

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Methods for cleaning up Absorb spillage with sand or other inert absorbent. Transfer to suitable, labelled containers for disposal.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid contact with skin and eyes. Do not ingest or inhale. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in closed original container at temperatures between 5°C and 25°C. Never return unused material to storage receptacle.

7.3. Specific end use(s)

Specific end use(s) This product is not recommended for use in joints which will be in contact with either pure oxygen or steam.

Usage description Adhesive. Sealant.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

ETHANEDIOL

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate
Sk

Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m³ vapour

Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m³ vapour

Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through the skin.

N,N-(m-PHENYLENE)DIMALEIMIDE (CAS: 3006-93-7)

DNEL Workers - Inhalation; Long term systemic effects: 0.176 mg/m³
Workers - Dermal; Long term systemic effects: 0.05 mg/kg/day

PNEC Fresh water; 0.01 mg/l
marine water; 0.001 mg/l
STP; 0.051 mg/l
Sediment (Freshwater); 0.035 mg/kg
Sediment (Marinewater); 0.035 mg/kg
Soil; 0.063 mg/kg

CUMENE HYDROPEROXIDE (CAS: 80-15-9)

DNEL Workers - Inhalation; Long term systemic effects: 6 mg/m³

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PNEC	Workers - Fresh water; 0.0031 mg/l
	Workers - marine water; 0.00031 mg/l
	Workers - Intermittent release; 0.031 mg/l
	Workers, Industry - Soil; 1.2 mg/kg
	Workers - STP; 0.35 mg/l
	Workers - Sediment (Freshwater); 0.023 mg/kg
	Workers - Sediment (Marinewater); 0.0023 mg/kg
	Workers - Soil; 0.0029 mg/kg

ETHANEDIOL (CAS: 107-21-1)

DNEL	Workers - Inhalation; Long term local effects: 35 mg/m ³
	Workers - Dermal; Long term systemic effects: 106 mg/kg/day

PNEC	Fresh water; 10 mg/l
	marine water; 1 mg/l
	STP; 199.5 mg/l
	Sediment (Freshwater); 37 mg/kg
	Sediment (Marinewater); 3.7 mg/kg
	Soil; 1.53 mg/kg

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

DNEL	Workers - Inhalation; Long term systemic effects: 160 mg/m ³
	Workers - Dermal; Long term local effects: 220 mg/kg/day

PNEC	Technically not feasible.
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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

The following protection should be worn: Chemical splash goggles or face shield. Personal eye protection should conform to EN 166

Hand protection

It is recommended that chemical-resistant, impervious gloves are worn. Gloves should conform to EN 374. For exposure up to 4 hours, wear gloves made of the following material: Nitrile rubber. Thickness: ≥ 0.4 mm The selected gloves should have a breakthrough time of at least 0.5 hours. For exposure up to 8 hours, wear gloves made of the following material: Nitrile rubber. Thickness: ≥ 0.4 mm The selected gloves should have a breakthrough time of at least 8 hours. The breakthrough time for any glove material may be different for different glove manufacturers. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected.

Other skin and body protection

Employee must wear appropriate protective clothing and equipment to prevent any possibility of skin contact with this substance.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Use of good industrial hygiene practices is required.

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Respiratory protection Ensure adequate ventilation of the working area. Respiratory protection may be required if excessive airborne contamination occurs. Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Organic vapour filter. Type A. (EN14387)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Coloured paste.
Colour	Red.
Odour	Acrylic
Odour threshold	Not available.
pH	Not relevant.
Melting point	Not available.
Initial boiling point and range	Not applicable.
Flash point	>100°C
Evaporation rate	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	1.1
Solubility(ies)	Slightly soluble in water. Miscible with the following materials: Organic solvents.
Partition coefficient	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature	Not available.
Viscosity	≈200000 mPa s @ 25°C Thixotropic
Oxidising properties	Not available.
9.2. Other information	
Other information	Not relevant.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react with the product: Strong oxidising agents.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions There are no known reactivity hazards associated with this product.

10.4. Conditions to avoid

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Conditions to avoid Avoid the absence of air, and metal contamination.

10.5. Incompatible materials

Materials to avoid Metals and their salts. Free radical initiators.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition could produce carbon monoxide, carbon dioxide, and unidentified organic compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Aspiration hazard

Aspiration hazard None under normal conditions.

Inhalation

May cause respiratory system irritation.

Ingestion

No harmful effects expected from quantities likely to be ingested by accident.

Skin contact

May cause sensitisation by skin contact.

Toxicological information on ingredients.

N,N-(m-PHENYLENE)DIMALLEIMIDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 500.0

Species Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 0.089

Species Rat

Skin corrosion/irritation

Human skin model test Cell Viability 3.3 60 minutes Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Skin sensitisation

Skin sensitisation Local Lymph Node Assay (LLNA) - Mouse: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative.

Carcinogenicity

Carcinogenicity No information available.

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Reproductive toxicity

Reproductive toxicity - fertility Screening - NOAEL 240 mg/kg/day, Oral, Rat P

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

DODECYL METHACRYLATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

Skin corrosion/irritation

Animal data Slightly irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Skin sensitisation

Skin sensitisation Not sensitising.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility Screening - NOEL >= 1000 mg/kg/day, Oral, Rat F1

CUMENE HYDROPEROXIDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 328.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,200.0

Species Rat

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 1.37

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Species	Rat
<u>Skin corrosion/irritation</u>	
Animal data	Highly irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Irritating to eyes.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Positive.
Genotoxicity - in vivo	This substance has no evidence of mutagenic properties.
<u>Carcinogenicity</u>	
Carcinogenicity	CMR: No
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No specific test data are available.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: ≥ 100 mg/kg/day, Oral, Rat
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No specific test data are available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Toxic: danger of serious damage to health by prolonged exposure through inhalation.
<u>Aspiration hazard</u>	
Aspiration hazard	No specific test data are available.

ETHANEDIOL

<u>Acute toxicity - dermal</u>	
Acute toxicity dermal (LD₅₀ mg/kg)	3,500.0
Species	Mouse
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	No information available.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	

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Skin sensitisation	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Gene mutation: Negative.
Genotoxicity - in vivo	Chromosome aberration: Negative.
<u>Carcinogenicity</u>	
Carcinogenicity	No evidence of carcinogenicity in animal studies.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Three-generation study - NOAEL >1000 mg/kg/day, Oral, Rat F1
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 150 mg/m ³ , Inhalation, Rat
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No information available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	No information available.
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.

SECTION 12: Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Ecological information on ingredients.

N,N-(m-PHENYLENE)DIMALEIMIDE

Acute aquatic toxicity

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 31.6 mg/l, Daphnia magna

DODECYL METHACRYLATE

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: >10000 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 2 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: > 0.09 mg/l, Freshwater algae

Acute toxicity - microorganisms EC₅₀, 180 minutes: > 10 g/L, Activated sludge

Loxeal 59-10**CUMENE HYDROPEROXIDE****Acute aquatic toxicity**

Acute toxicity - fish LC₅₀, 96 hour: 3.9 mg/l, Oncorhynchus mykiss (Rainbow trout)

ETHANEDIOL**Acute aquatic toxicity**

Acute toxicity - fish LC₅₀, 96 hours: 72860 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: > 100 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: 6500 - 13000 mg/l, Selenastrum capricornutum

Acute toxicity - microorganisms EC₂₀, 0.5 hour: 1.995 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 7 days: 15380 mg/l, Pimephales promelas (Fat-head Minnow)

Chronic toxicity - aquatic invertebrates NOEC, 7 days: 8590 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability No data available.

Ecological information on ingredients.**CUMENE HYDROPEROXIDE**

Biodegradation The substance is readily biodegradable.

ETHANEDIOL

Biodegradation Water - Degradation 90 - 100%: 10 days

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

12.4. Mobility in soil

Mobility No data available.

Ecological information on ingredients.**DODECYL METHACRYLATE**

Mobility No data available.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Waste disposal should be in accordance with existing Community, National and local regulations Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.
Disposal methods	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
Waste class	08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances.

SECTION 14: Transport information

General The product is not classified as dangerous for carriage.

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	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 (as amended). COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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Guidance

Workplace Exposure Limits EH40.
CHIP for everyone HSG228.
Approved Classification and Labelling Guide (Sixth edition) L131.
Safety Data Sheets for Substances and Preparations.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date	31/08/2021
Revision	8
Supersedes date	09/11/2020
Hazard statements in full	H242 Heating may cause a fire. H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H330 Fatal if inhaled. H331 Toxic if inhaled. H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.