

Safety Data Sheet





ADESILEX G19/ADESILEX G20/KERALASTIC comp. B

Safety Data Sheet dated 3/2/2014, version 1

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

- 1.1. Product identifier
Trade name: ADESILEX G19/ADESILEX G20/KERALASTIC comp. B
- 1.2. Relevant identified uses of the substance or mixture.
Recommended use:
Hardener for epoxy-polyurethane based adhesives or sealants
Hardener for epoxy-polyurethane based adhesives or sealants
Uses advised against:
==
- 1.3. Details of the supplier of the safety data sheet
Supplier:
Mapei New Zealand Ltd
30 Fisher Crescent
Mt Wellington
Auckland
New Zealand
- Competent person responsible for the safety data sheet:
sicurezza@mapei.it
- 1.4. Emergency telephone number
New Zealand
Ph: +64 9 921 1994
Fax: +64 9 921 1993
New Zealand Poisons Centre:
Ph: 0800 764 766

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
Directive criteria, 67/548/CE, 1999/45/EC and following amendments thereof:
Properties / Symbols:
 Xn Harmful
 Xi Irritant
 C Corrosive
- R Phrases:
R21/22 Harmful in contact with skin and if swallowed.
R34 Causes burns.
R43 May cause sensitization by skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Adverse physicochemical, human health and environmental effects:
No other hazards
- 2.2. Label elements

C
Symbols:

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 C Corrosive

R Phrases:

- R21/22 Harmful in contact with skin and if swallowed.
- R34 Causes burns.
- R43 May cause sensitization by skin contact.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S Phrases:

- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S28 After contact with skin, wash immediately with plenty of water and soap.
- S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S60 This material and its container must be disposed of as hazardous waste.

Contents:

- 3-aminomethyl-3,5,5-trimethylcyclohexylamine
- 2,4,6-tris(dimethylaminomethyl)phenol
- Phenol, styrenated

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and corresponding classification:

50% - 75% 3-aminomethyl-3,5,5-trimethylcyclohexylamine

REACH No.: 01-2119514687-32-XXXX, Index number: 612-067-00-9, CAS: 2855-13-2, EC: 220-666-8

Xn,Xi,C; R21/22-34-43-52/53

⚠ 3.2/1B Skin Corr. 1B H314

⚠ 3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317

4.1/C3 Aquatic Chronic 3 H412

⚠ 3.1/4/Oral Acute Tox. 4 H302

⚠ 3.1/4/Dermal Acute Tox. 4 H312

20% - 25% 2,4,6-tris(dimethylaminomethyl)phenol

REACH No.: 01-2119560597-27-xxxx, CAS: 90-72-2, EC: 202-013-9

C; R34-52/53

⚠ 3.2/1B Skin Corr. 1B H314

⚠ 3.4.2/1A Skin Sens. 1A H317

4.1/C3 Aquatic Chronic 3 H412

5% - 10% benzyl alcohol

REACH No.: 01-2119492630-38-XXXX, Index number: 603-057-00-5, CAS: 100-51-6, EC: 202-859-9

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Xn; R20/22

⚠ 3.1/4/Inhal Acute Tox. 4 H332

⚠ 3.3/2 Eye Irrit. 2 H319

⚠ 3.1/4/Oral Acute Tox. 4 H302

5% - 10% Phenol, styrenated

REACH No.: 02-2119629611-43-0000, CAS: 61788-44-1, EC: 262-975-0

Xi,N; R38-43-51/53

⚠ 3.2/2 Skin Irrit. 2 H315

⚠ 3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317

⚠ 4.1/C2 Aquatic Chronic 2 H411

2.5% - 4.99% bis[(dimethylamino)methyl]phenol

CAS: 71074-89-0, EC: 275-162-0

C; R34

⚠ 3.2/1B Skin Corr. 1B H314

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

CONSULT A PHYSICIAN IMMEDIATELY.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

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

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

Give nothing to eat or drink.

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

A suspension of activated charcoal in water, or petroleum jelly may be administered.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

The product is harmful following acute exposure to it and poses a serious health threat if ingested or brought into contact with the skin.

The product is corrosive and, if brought into contact with the skin, causes burning, with the destruction of the entire thickness of skin tissue.

If brought into contact with the skin, the product may cause sensitisation of the skin.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

None in particular.

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Water.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

The original ingredients or unidentified toxic and/or irritant compounds may be present in the combustion fumes.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Limit leakages with earth or sand.

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

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

Rapidly recover the product, wearing protective clothing.

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Always keep the containers tightly closed.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No occupational exposure limit available

DNEL Exposure Limit Values

3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

Worker Industry: 20.1 mg/m³ - Exposure: Human Inhalation Short Term, systemic effects

Worker Industry: 20.1 mg/m³ - Exposure: Human Inhalation Short Term, local effects

Consumer: 0.526 mg/kg - Exposure: Human Oral Long Term, systemic effects

benzyl alcohol - CAS: 100-51-6

Consumer: 25 mg/kg - Exposure: Human Oral Short Term, systemic effects

Consumer: 5 mg/kg - Exposure: Human Oral Long Term, systemic effects

PNEC Exposure Limit Values

3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

Target: Microorganisms in sewage treatments - Value: 3.18 mg/l

Target: Soil (agricultural) - Value: 1.121 mg/kg

Target: Marine water - Value: 0.006 mg/l

Target: Freshwater sediments - Value: 5.784 mg/kg

Target: Marine water sediments - Value: 0.578 mg/kg

Target: Fresh Water - Value: 0.06 mg/l

8.2. Exposure controls

Eye protection:

Safety goggles.

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

The use of LLPDE (0,06 mm), nitrile (0,4) or butyl (0,5 mm) gloves is suggested.

Latex gloves are not recommended.

Respiratory protection:

Not needed for normal use.

Personal Protective Equipment should comply with relevant CE standards (as EN 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Thermal Hazards:

None

Environmental exposure controls:

None

In case of insufficient ventilation use mask with AK2 filters (EN 141).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	liquid
Colour:	transparent
Odour:	ammonia
Odour threshold:	N.A.
pH:	10.5-11,5
Melting point / freezing point:	N.A.
Initial boiling point and boiling range:	127 °C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	N.A.

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Flash point: >100 °C
 Evaporation rate: N.A.
 Vapour pressure: N.A.
 Relative density: 0.92 g/cm³ (23°C)
 Vapour density (air=1): N.A.
 Solubility in water: partly soluble
 Solubility in oil: soluble
 Viscosity: 30 mPa.s (23°C)

Auto-ignition temperature: == °C
 Explosion limits(by volume): ==
 Decomposition temperature: N.A.
 Partition coefficient (n-octanol/water): N.A.
 Explosive properties: ==
 Oxidizing properties: N.A.

9.2. Other information

Miscibility: N.A.
 Fat Solubility: N.A.
 Conductivity: N.A.
 Substance Groups relevant properties N.A.

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
 Route(s) of entry:
 Ingestion: Yes
 Inhalation: Yes
 Contact: Yes
 Toxicological information related to the product:
 There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.
 Toxicological information on main components of the mixture:
 Toxicological information of the mixture:
 N.A.
 Toxicological information of the main substances found in the mixture:
 3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2
 a) acute toxicity:
 Test: LD50 - Route: Oral - Species: Rat = 1030 mg/kg
 Test: LC50 - Route: Inhalation - Species: Rat > 5.01 mg/l - Duration: 4h
 Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

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benzyl alcohol - CAS: 100-51-6

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit 2000 mg/kg

Test: LD50 - Route: Oral - Species: Rat 1230 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 4.1 mg/l - Duration: 4h

Phenol, styrenated - CAS: 61788-44-1

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 5 mg/l

3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

DL50 orale/ratto: 1030 mg/kg

Corrosive/Irritating Properties:

Skin:

Corrosive. The product can cause burns by contact.

Eye:

The product can cause damage to eyes by contact

Sensitizing Properties:

Frequent contact may cause sensitization.

Carcinogenic Effects:

No effects are known.

Mutagenic Effects:

No effects are known.

Teratogenic Effects:

No effects are known.

Additional Information:

Susceptibility to skin irritation and sensitization varies from person to person.

In a sensitized individual the allergic dermatitis may not appear until after several days or weeks of frequent and prolonged contact.

Therefore, even though the skin irritation potential is slight, skin contact should be avoided. Once sensitization has occurred, exposure of the skin to very small quantities of the material may cause erythema and edema.

For this reason, the contact with the skin should be avoided. Once sensitization has occurred, exposures to small amounts of material may cause erythema and edema locally.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation

c) serious eye damage/irritation

d) respiratory or skin sensitisation

e) germ cell mutagenicity

f) carcinogenicity

g) reproductive toxicity

h) STOT-single exposure

i) STOT-repeated exposure

j) aspiration hazard

SECTION 12: Ecological information

12.1. Toxicity

Not available data on the mixture

Adopt good industrial practices, so that the product is not released into the environment.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3-aminomethyl-3,5,5-trimethylcyclohexylamine - CAS: 2855-13-2

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a) Aquatic acute toxicity:
 Endpoint: LC50 - Species: Fish = 110 mg/l - Duration h: 96
 Endpoint: EC50 - Species: Daphnia = 23 mg/l - Duration h: 48
 Endpoint: EC50 - Species: Algae > 50 mg/l - Duration h: 72

benzyl alcohol - CAS: 100-51-6

a) Aquatic acute toxicity:
 Endpoint: LC50 - Species: Fish = 10 mg/l - Duration h: 96
 Endpoint: LC50 - Species: Fish = 460 mg/l - Duration h: 96
 Endpoint: EC50 - Species: Algae = 700 mg/l - Duration h: 72

Phenol, styrenated - CAS: 61788-44-1

a) Aquatic acute toxicity:
 Endpoint: LC50 - Species: Daphnia = 1-10 mg/l - Duration h: 48
 Endpoint: LC50 - Species: Algae = 3.14 mg/l - Duration h: 72
 Endpoint: EC50 - Species: Fish = 14.8 mg/l - Duration h: 96

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

Not available data on the mixture

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

This material and its container must be disposed of as hazardous waste.

91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

Disposal of not hardened product (EC waste code) : 08 04 09

The suggested European waste code is just based on the composition of the product.

According to the specific process or application field a different waste code may be necessary.

SECTION 14: Transport information

14.1. UN number

UN Number: 2735

14.2. UN proper shipping name

ADR-Shipping Name: UN 2735 POLYAMINES, LIQUID, CORROSIVE N.O.S.

14.3. Transport hazard class(es)

Rail/Road(RID/ADR): 8,III

ADR-Upper number: NA

Air (ICAO/IATA): 8,III

Sea (IMO/IMDG): 8,III

EMS no: (F-A, S-B)

14.4. Packing group

14.5. Environmental hazards

ADR Environmental Pollutant:

Marine pollutant: No

14.6. Special precautions for user

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EMS no:	(F-A, S-B)
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	No
SECTION 15: Regulatory information	
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture	
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)	
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)	
Dir. 98/24/EC (Risks related to chemical agents at work)	
Dir. 2000/39/EC (Occupational exposure limit values)	
Dir. 2006/8/EC	
Regulation (EC) n. 1907/2006 (REACH)	
Regulation (EC) n. 1272/2008 (CLP)	
Regulation (EC) n. 790/2009 (ATP 1 CLP)	
Regulation (EU) n. 453/2010 (Annex I)	
Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:	
None	
REACH Regulation (1907/2006)	
REACH Regulation (1907/2006) – All. XVII: N.A.	
REACH Regulation n° 1907/2006 (REACH) – Art. 59 (Substances in “Candidate List”): N.A.	
CLP Regulation n° 1272/2008 (CLP) and s.m.i.	
Directive n° 1999/45/CE (Dangerous Preparation) and s.m.i.	
Directive n° 67/548/CEE (Substances) and s.m.i.	
Directive 2000/39/CE and s.m.i. (Professional threshold limit)	
Directive 105/2003/CE (Seveso III): N.A.	
ADR Agreement – IMDG Code – IATA Regulation	
VOC (2004/42/EC) :	N.A. g/l
15.2. Chemical safety assessment	
No	
SECTION 16: Other information	
Text of phrases referred to under heading 3:	
R20/22 Harmful by inhalation and if swallowed.	
R21/22 Harmful in contact with skin and if swallowed.	
R34 Causes burns.	
R38 Irritating to skin.	
R43 May cause sensitization by skin contact.	

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R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

H411 Toxic to aquatic life with long lasting effects.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX'S - Dangerous properties of industrial materials

Istituto Superiore di Sanità - Inventario Nazionale Sostanze Chimiche

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

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TWA	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
OEL:	European threshold limit value
VLE:	Threshold Limiting Value.
WGK:	German Water Hazard Class.
TSCA:	United States Toxic Substances Control Act Inventory
DSL:	DSL - Canadian Domestic Substances List