

Safety Data Sheet

ADESILEX G 19 comp.A

Safety Data Sheet dated: 4/24/2019 - version 1



Section 1. Identification of the substance and supplier

Product identifier

Mixture identification:

Trade name: ADESILEX G 19 comp.A

Trade code: 904103

Recommended use of the chemical and restrictions on use

Recommended use: Epoxy-polyurethane adhesive

Uses advised against: Data not available

Supplier's details

Company: MBP (NZ) Ltd. - 88 Carbine Road, Mount Wellington, Auckland 1060, New Zealand Email: enquiries@MBPLtd.co.nz

Website: www.MBPLtd.co.nz - Phone: +64 9 921 1994 (Mon-Fri 9am-5pm) - Fax: +64 9 921 1993

Emergency phone number

New Zealand Poisons Centre: Ph: 0800 764 766

Section 2. Hazards identification

HSNO hazard classification

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2017.

HSNO classification:

- | | |
|--------------------------|---|
| 6.3A | H315 - Causes skin irritation. |
| 6.4A | H319 - Causes serious eye irritation. |
| 6.5B | H317 - May cause an allergic skin reaction. |
| 6.8B | H361.G - Suspected of damaging fertility or the unborn child if inhaled, in contact with skin and if swallowed. |
| 6.9B (Repeated exposure) | H373.G - May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed. |
| 9.1D | H402 - Harmful to aquatic life. |
| 9.1C | H412 - Harmful to aquatic life with long lasting effects. |

Hazard information

Pictograms and Signal Words



Warning

Hazard statements:

- | | |
|------|--|
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H361 | Suspected of damaging fertility or the unborn child if inhaled, in contact with skin and if swallowed. |
| H373 | May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed. |
| H402 | Harmful to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary statements:

- | | |
|-----------|--|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P260 | Do not breathe mist/vapours/spray. |
| P264 | Wash hands thoroughly after handling. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P281 | Use personal protective equipment as required. |
| 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. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P314 | Get medical advice/attention if you feel unwell. |
| P321 | Specific treatment (see ... on this label). |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with applicable regulations. |

Other hazards which do not result in a classification

No other hazards

Section 3. Composition/information on ingredients

Substances

N.A.

Mixtures

Mixture identification: ADESILEX G 19 comp.A

Hazardous components within the meaning of HSNO Act and related classification

| Quantity | Name | Ident. Numb. | Classification |
|--------------|---|--|--|
| ≥5 - <10 % | reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700) | CAS:25068-38-6 EC:500-033-5 Index:603-074-00-8 | 6.4A, H319; 6.3A, H315; 6.5B, H317; 9.1B, H411 |
| ≥2.5 - <5 % | o-xylene | CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9 | 3.1C, H226; 6.1E (aspiration), H304; 6.9B (Repeated exposure), H373; 6.1D (dermal), H312; 6.1D (inhalation), H332; 6.3A, H315; 6.4A, H319; 6.1E (respiratory tract irritant), H335 |
| ≥0.49 - <1 % | 4-nonylphenol, branched | CAS:84852-15-3 EC:284-325-5 Index:601-053-00-8 | 6.8B, H361fd; 8.2B, H314; 9.1A, H400; 9.1A, H410; 6.1D (oral), H302 |

Section 4. First aid measures

Description of necessary first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- Remove contaminated clothing immediately and dispose of 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, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

- If breathing is irregular or stopped, administer artificial respiration.
- In case of inhalation, consult a doctor immediately and show him packing or label.

Indication of immediate medical attention and special treatment needed, if necessary

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

Most important symptoms/effects, acute and delayed

- Eye irritation
- Eye damages
- Skin Irritation
- Erythema

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

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

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

Environmental precautions

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

Retain contaminated washing water and dispose it.

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

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

Methods and materials for containment and cleaning up

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

Wash with plenty of water.

Section 7. Handling and storage

Precautions for safe handling

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

Exercise the greatest care when handling or opening the container.

Use localized ventilation system.

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.

Conditions for safe storage, including any incompatibilities

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

Section 8. Exposure controls/personal protection

Workplace Exposure Standards

Biological Exposure Index

| CAS-No. | Component | Value | UoM | Medium | Biological Indicator | Sampling Period |
|-----------|-----------|-------|---------|--------|----------------------|-----------------|
| 1330-20-7 | o-xylene | 1,5 | GGCREAT | Urine | Methyl uric Acid | End of turn |

Predicted No Effect Concentration (PNEC) values

| Component | CAS-No. | PNEC LIMIT | Exposure Route | Exposure Frequency | Remark |
|---|------------|------------|----------------|--------------------|--------|
| reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average | 25068-38-6 | 0,006 mg/l | Fresh Water | | |

molecular weight <= 700)

| | | | |
|-------------------------|------------|----------|----------------|
| | | 0,0006 | Marine water |
| | | mg/l | |
| | | 0,0627 | Freshwater |
| | | mg/kg | sediments |
| | | 0,00627 | Marine water |
| | | mg/kg | sediments |
| o-xylene | 1330-20-7 | 0,327 | Fresh Water |
| | | mg/l | |
| | | 0,327 | Marine water |
| | | mg/l | |
| | | 12,46 | Freshwater |
| | | mg/kg | sediments |
| | | 12,46 | Marine water |
| | | mg/kg | sediments |
| | | 2,31 | Soil |
| | | mg/kg | |
| | | 6,58 | Microorganisms |
| | | mg/l | in sewage |
| | | | treatments |
| | | 0,32 | Intermittent |
| | | mg/l | release |
| 4-nonylphenol, branched | 84852-15-3 | 0,000614 | Fresh Water |
| | | mg/l | |
| | | 0,000527 | Marine water |
| | | mg/l | |
| | | 4,62 | Freshwater |
| | | mg/kg | sediments |
| | | 1,23 | Marine water |
| | | mg/kg | sediments |

Derived No Effect Level. (DNEL)

| Component | CAS-No. | Worker Industrial | Worker Professional | Consumer | Exposure Route | Exposure Frequency | Remark |
|--|------------|-------------------|---------------------|----------|------------------|--------------------|------------------------------|
| reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) | 25068-38-6 | 8,3 | | | Human Dermal | | Short Term, systemic effects |
| | | | | | Human Inhalation | | Short Term, systemic effects |
| | | 8,3 | | | Human Dermal | | Long Term, systemic effects |
| | | | | | Human Inhalation | | Long Term, systemic effects |
| | | | | 3,571 | Human Dermal | | Short Term, systemic effects |
| | | | | 0,75 | Human Oral | | Short Term, systemic effects |
| | | | | 3,571 | Human Dermal | | Long Term, systemic effects |
| | | | | 0,75 | Human Oral | | Long Term, systemic effects |

| | | | | | |
|-------------------------|------------|-----------|------------|------------------|------------------------------|
| o-xylene | 1330-20-7 | 289 mg/m3 | 174 mg/m3 | Human Inhalation | Short Term, local effects |
| | | 289 mg/m3 | 174 mg/m3 | Human Inhalation | Short Term, systemic effects |
| | | 180 mg/kg | 108 mg/kg | Human Dermal | Long Term, systemic effects |
| | | 77 mg/m3 | 14,8 mg/m3 | Human Inhalation | Long Term, systemic effects |
| | | | 1,6 mg/kg | Human Oral | Long Term, systemic effects |
| 4-nonylphenol, branched | 84852-15-3 | 0,5 mg/m3 | 0,4 mg/m3 | Human Inhalation | Long Term, systemic effects |
| | | 1 mg/m3 | 0,8 mg/m3 | Human Inhalation | Short Term, systemic effects |
| | | 7,5 mg/kg | 3,8 mg/kg | Human Dermal | Long Term, systemic effects |
| | | 15 mg/kg | 7,6 mg/kg | Human Dermal | Short Term, systemic effects |
| | | | 0,08 mg/kg | Human Oral | Long Term, systemic effects |
| | | | 0,4 mg/kg | Human Oral | Short Term, systemic effects |

Engineering Controls

N.A.

Personal Protective Equipment (PPE)

Eye protection:

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.

Respiratory protection:

Use adequate protective respiratory equipment.

Thermal Hazards:

N.A.

Section 9. Physical and chemical properties

Physical state: Liquid

Appearance and colour: paste various

Odour: characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: >100 °C (>212 °F)

Flash point: N.A.

Flammability (Solid, Gas): N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour pressure: N.A.

Vapour density: N.A.

Relative density: 1.38 g/cm3

Solubility in water: Insoluble

Solubility in oil: Soluble

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Kinematic viscosity: N.A.

Particle characteristics: No Data Available

Viscosity: 125,000.00 cPs

Section 10. Stability and reactivity

Reactivity

Stable under normal conditions

Chemical stability

Data not available.

Possibility of hazardous reactions

None.

Conditions to avoid

Stable under normal conditions.

Incompatible materials

None in particular.

Hazardous decomposition products

None.

Section 11. Toxicological information

Information on toxicological effects

Toxicological information of the mixture:

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:

| | | |
|--|---|--|
| reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) | a) acute toxicity | LD50 Oral Rat > 15000 mg/kg |
| | | LD50 Skin Rabbit > 23000 mg/kg |
| | | LD50 Oral Rat = 11400 mg/kg |
| | i) STOT-repeated exposure | NOAEL Oral Rat = 50 mg/kg NOAEL Skin Rat = 100 mg/kg |
| o-xylene | a) acute toxicity | LD50 Oral Rat = 3523 mg/kg LC50 Inhalation Rat = 6700 mg/l 4h LD50 Skin Rabbit = 2000 mg/kg |
| | e) germ cell mutagenicity | NOAEL Inhalation Rat > 2000 ppm |
| | f) carcinogenicity | NOAEL Oral Rat = 500 mg/kg NOAEL Oral Rat = 1000 mg/kg |
| | g) reproductive toxicity | NOAEL Inhalation Rat = 500 ppm |
| | | |
| 4-nonylphenol, branched | a) acute toxicity | LD50 Oral Rat > 5000 mg/kg LD50 Skin Rabbit 2140 mg/kg LD50 Skin Rabbit = 2000 mg/kg LD50 Oral Rat = 1300 mg/kg |
| | b) skin corrosion/irritation | Skin Irritant Rabbit Negative |
| | d) respiratory or skin sensitisation | Skin Sensitization Rat Negative |
| | | |
| | | |

If not differently specified, the information required in the regulation and 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

Ecotoxicity

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

Eco-Toxicological Information:

List of components with eco-toxicological properties

| Quantity | Component | Ident. Numb. | Ecotox Infos |
|---------------|--|---|---|
| >=5 - <10 % | reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700) | CAS: 25068-38-6 - EINECS: 500-033-5 - INDEX: 603-074-00-8 | a) Aquatic acute toxicity : LC50 Fish > 2 mg/L 96 a) Aquatic acute toxicity : EC50 Daphnia > 1,8 mg/L 48 a) Aquatic acute toxicity : LC50 Algae > 11 mg/L 72 a) Aquatic acute toxicity : LC50 Daphnia = 1,3 mg/L 96 b) Aquatic chronic toxicity : NOEC Daphnia = 0,3 mg/L |
| >=2.5 - <5 % | o-xylene | CAS: 1330-20-7 - EINECS: 215-535-7 - INDEX: 601-022-00-9 | a) Aquatic acute toxicity : EC50 Daphnia = 3,82 mg/L 48 a) Aquatic acute toxicity : LC50 Fish = 2,6 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = 2,2 mg/L 72 c) Bacteria toxicity : EC50 = 96 mg/L 24 b) Aquatic chronic toxicity : NOEC Fish > 1,3 mg/L b) Aquatic chronic toxicity : NOEC Daphnia = 1,57 mg/L |
| >=0.49 - <1 % | 4-nonylphenol, branched | CAS: 84852-15-3 - EINECS: 284-325-5 - INDEX: 601-053-00-8 | a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 0,135 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 0,1351 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 0,14 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 0,36 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 0,16 mg/L 72h EPA a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 1,3 mg/L 72h IUCLID |

Persistence and degradability

N.A.

Bioaccumulative potential

| Component | Bioaccumulation | Test | Duratio Value n |
|-------------------------|---------------------|-------------------------------|-----------------|
| 4-nonylphenol, branched | Not bioaccumulative | BCF - Bioconcentration factor | 28 d 740 |

Mobility in soil

N.A.

Other adverse effects

N.A.

Section 13. Disposal considerations

Disposal 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.

Special precautions to be taken during disposal

No Data Available

Section 14. Transport information

Not classified as dangerous in the meaning of transport regulations.

UN number

N.A.

UN proper shipping name

N.A.

Transport hazard class(es)

N.A.

Packing group, if applicable

N.A.

Environmental hazards

N.A.

Special precautions for user

NZS-Subsidiary risks: N.A.

NZS-Special Dispositions: N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

Section 15. Regulatory information

HSNO Approval

HSNO approval number and group standard title:

HSR002544 - Construction Products (Subsidiary Hazard) Group Standard 2006

HSNO Controls

Certified Handler

No Data Available

New Zealand Inventory of Chemicals (NZIoC)

All components are listed on the NZIoC Inventory.

Regulatory references

Preparation of Safety Data Sheets - Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).

Hazardous Substances (Classification) Regulations 2001.

Labelling of Hazardous Substances: Hazard and Precautionary Information (January 2012 EPA0094).

Assigning a Product to a HSNO Approval (May 2013/Revised June 2014).

Section 16. Other information

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| Code | Description |
|------|--|
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| 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. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H361 | Suspected of damaging fertility or the unborn child if inhaled, in contact with skin and if swallowed. |

| | |
|--------|--|
| H361fd | Suspected of damaging fertility. Suspected of damaging the unborn child. |
| H373 | May cause damage to organs through prolonged or repeated exposure . |
| H373 | May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed. |
| H400 | Very toxic to aquatic life. |
| H402 | Harmful 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. |

Description of the HSN0 Classification codes used in section 2 or 3:

| Code | Description |
|-----------------------------------|--|
| 3.1C | Flammable liquid - medium hazard. |
| 6.1D (dermal) | Substances that are acutely toxic - Harmful (dermal). |
| 6.1D (inhalation) | Substances that are acutely toxic - Harmful (inhalation). |
| 6.1D (oral) | Substances that are acutely toxic - Harmful (oral). |
| 6.1E (aspiration) | Aspiration hazard. |
| 6.1E (respiratory tract irritant) | Respiratory tract irritant. |
| 6.3A | Substances that are irritating to the skin. |
| 6.4A | Substances that are irritating to the eye. |
| 6.5B | Substances that are contact sensitizers. |
| 6.8B | Substances that are suspected human reproductive or developmental toxicants. |
| 6.9B (Repeated exposure) | Substances that are harmful to human target organs or systems (Repeated exposure). |
| 8.2B | Substances that are corrosive to dermal tissue UN PGII. |
| 9.1A | Substances that are very ecotoxic in the aquatic environment. |
| 9.1B | Substances that are ecotoxic in the aquatic environment. |
| 9.1C | Substances that are harmful in the aquatic environment. |
| 9.1D | Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action. |

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

Main bibliographic sources:

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

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

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.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

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

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

IMDG: International Maritime Code for Dangerous Goods.

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).

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

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

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

GefStoffVO: Ordinance on Hazardous Substances, Germany.

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

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

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.

HSNO: Hazardous Substances and New Organisms Act 1996.