

Revision date : 2018/08/07 Page: 1/13
Version: 6.0 (54935228/SDS_CPA_CA/EN)

1. Identification

Product identifier used on the label

Myacide® GA 25

Recommended use of the chemical and restriction on use

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF Canada Inc. 100 Milverton Drive Mississauga, ON L5R 4H1, CANADA

Telephone: +1 289 360-1300

Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666 BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Molecular formula: CHO(CH2)3CHO

Chemical family: dialdehydes, aqueous solution

28339

Synonyms: GLUTARALDEHYDE

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Classification of the product

Acute Tox. 3 (oral) Acute toxicity
Acute Tox. 4 (Inhalation - mist) Acute toxicity

Skin Corr./Irrit. 1B Skin corrosion/irritation

Eye Dam./Irrit. 1 Serious eye damage/eye irritation

Resp. Sens. 1 Respiratory sensitization Skin Sens. 1A Skin sensitization

STOT SE 3 (irritating to Specific target organ toxicity — single exposure

Revision date: 2018/08/07 Page: 2/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

respiratory system)

Aquatic Acute 1 Hazardous to the aquatic environment - acute Aquatic Chronic 2 Hazardous to the aquatic environment - chronic

Label elements

Pictogram:



Signal Word: Danger

Hazard Statement:

H332 Harmful if inhaled. H301 Toxic if swallowed.

H334 May cause allergy or asthma symptoms or breathing difficulties if

inhaled.

H317 May cause an allergic skin reaction. H335 May cause respiratory irritation.

H314 Causes severe skin burns and eye damage. H411 Toxic to aquatic life with long lasting effects.

H400 Very toxic to aquatic life.

Precautionary Statements (Prevention):

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

P271 Use only outdoors or in a well-ventilated area.

P260 Do not breathe dust/mist/vapours. P273 Avoid release to the environment.

P284 In case of inadequate ventilation wear respiratory protection.
P264 Wash with plenty of water and soap thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P310 Immediately call a POISON CENTER, doctor/physician or emergency

number 112.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P362 + P364 Take off contaminated clothing and wash it before reuse.

P391 Collect spillage.

Precautionary Statements (Storage):

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container in accordance with local regulations.

Hazards not otherwise classified

Revision date: 2018/08/07 Page: 3/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

No specific dangers known, if the regulations/notes for storage and handling are considered.

Labeling of special preparations (GHS):

Corrosive to the respiratory tract.

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

<u>CAS Number</u> <u>Weight %</u> <u>Chemical name</u> 111-30-8 >= 20.0 - < 50.0% glutaral

111-30-8 >= 20.0 - < 50.0% glutaral 67-56-1 >= 0.0 - < 0.3% Methanol

4. First-Aid Measures

Description of first aid measures

General advice:

Immediately remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). First aid personnel should pay attention to their own safety.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

If on skin:

Remove contaminated clothing. Rinse skin immediately with plenty of water for 15 - 20 minutes. Seek medical attention. Consult a skin specialist.

If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known. Hazards: No applicable information available.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treat according to symptoms (decontamination, vital functions), no

known specific antidote, administer corticosteroid dose aerosol to

prevent pulmonary odema.

Revision date: 2018/08/07 Page: 4/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: water spray, dry powder, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus in confined areas or when exposed to combustion products.

Further information:

Contaminated extinguishing water must be disposed of in accordance with official regulations.

Impact Sensitivity:

Impact Weight: 10 kg Height of Fall: 0.4 m

Method: Explosive properties

Remarks: Substance/product is not impact sensitve at room temperature.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with regulations.

For large amounts: Pump off product.

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

No special precautions necessary.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Revision date: 2018/08/07 Page: 5/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

Further information on storage conditions: Keep container tightly closed and in a cool place. Store protected against freezing.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Components with occupational exposure limits

Methanol OSHA PEL PEL 200 ppm 260 mg/m3 ; TWA value 200

ppm 260 mg/m3; SKIN_FINAL;

The substance can be absorbed through the skin.

STEL value 250 ppm 325 mg/m3;

ACGIH TLV TWA value 200 ppm; STEL value 250 ppm;

Skin Designation;

The substance can be absorbed through the skin.

glutaral OSHA PEL CLV 0.2 ppm 0.8 mg/m3;

ACGIH TLV CLV 0.05 ppm;

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Respiratory protection in case of vapour/aerosol release. Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Wear chemical resistant protective gloves.

Eye protection:

Tightly fitting safety goggles (chemical goggles) and face shield.

Body protection:

Body protection must be chosen based on level of activity and exposure., Protective coverall and/or impermeable apron and boots as necessary.

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Remove contaminated clothing. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form: liquid

Odour: characteristic

Odour threshold: No applicable information available.

Colour: yellow pH value: 5.9

(0.5 %(m), 23 °C)

Revision date: 2018/08/07 Page: 6/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

Freezing point: approx. -5 °C

(1 ATM)

Boiling point: > 100 °C (1 ATM)

Sublimation point: No applicable information available.

Flash point: not applicable

Flammability: No applicable information available. Lower explosion limit: No applicable information available. No applicable information available. Upper explosion limit:

> 275 °C Autoignition: (DIN 51794)

approx. 17.5 mmHg Vapour pressure:

(20°C)

The product has not been tested. The statement has been derived from the

properties of the individual

components. 1.06 g/cm3

(20°C)

Vapour density: No applicable information available. Partitioning coefficient n-No applicable information available.

octanol/water (log Pow):

Density:

Thermal decomposition: No decomposition if correctly stored and handled.

Viscosity, dynamic: No applicable information available. Viscosity, kinematic: No applicable information available.

Solubility in water: soluble

Solubility (quantitative): No applicable information available. Solubility (qualitative): No applicable information available.

Molar mass: 100 g/mol

Value can be approximated from **Evaporation rate:**

Henry's Law Constant or vapor

pressure.

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals:

No corrosive effect on metal. Formation of

Remarks: Forms no flammable gases in the

flammable gases: presence of water.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

The product is chemically stable.

Conditions to avoid

No conditions to avoid anticipated.

Incompatible materials

acids, bases, amines

Revision date: 2018/08/07 Page: 7/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: carbon monoxide, carbon dioxide

Thermal decomposition:

No decomposition if correctly stored and handled.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of high toxicity after single ingestion. Of moderate toxicity after short-term inhalation. Of low toxicity after short-term skin contact.

Oral

Type of value: ATE Value: 299 mg/kg

Tested as a preparation.

Information on: glutaral Type of value: LD50 Species: rat (female)

Value: approx. 77 mg/kg (similar to OECD guideline 401)

Information on: Methanol Type of value: LD50

Species: rat

Value: > 1187 - 2769 mg/kg (BASF-Test)

Inhalation

Type of value: ATE Value: 1.08 mg/l Determined for mist

<u>Dermal</u>

Type of value: ATE Value: 3,762 mg/kg

Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

Skin

Information on: glutaral

Revision date: 2018/08/07 Page: 8/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

Species: rabbit Result: Corrosive.

Method: similar to OECD guideline 404

<u>Eye</u>

Information on: glutaral

Species: rabbit

Result: Risk of serious damage to eyes.

Method: Draize test

Sensitization

Information on: glutaral

Open epicutaneous test (OET)

Species: guinea pig Result: sensitizing

Species: human Result: sensitizing

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Information on: glutaral

Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation. The substance may cause damage to the upper respiratory tract after repeated inhalation, as shown in animal studies.

Genetic toxicity

Information on: glutaral

Assessment of mutagenicity: The substance was mutagenic in various test systems with bacterias and cell cultures; however, these results could not be confirmed in tests with mammals.

Carcinogenicity

Assessment of carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

Reproductive toxicity

Information on: glutaral

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Revision date: 2018/08/07 Page: 9/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

Information on: glutaral

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

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Other Information

The product has not been tested. The statement has been derived from the properties of the individual components.

The data on toxicology refer to the active ingredient.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

The ecological data given are those of the active ingredient.

Toxicity to fish

LC50 (96 h) 0.8 mg/l, Salmo gairdneri, syn. O. mykiss (Fish test acute, static) The details of the toxic effect relate to the nominal concentration.

LC50 (96 h) 6.2 mg/l, Cyprinodon variegatus (Fish test acute, static) The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates

EC50 (48 h) 2.1 mg/l, Daphnia magna (Daphnia test acute, static) The details of the toxic effect relate to the nominal concentration.

EC50 (96 h) 0.78 mg/l, Crassostrea virginica (OPP 72-3 (EPA-Guideline), Flow through.) The statement of the toxic effect relates to the analytically determined concentration.

Aquatic plants

EC50 (72 h) 0.6 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static) The statement of the toxic effect relates to the analytically determined concentration.

No observed effect concentration (72 h) 0.025 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201, static)

The statement of the toxic effect relates to the analytically determined concentration.

EC50 (72 h) 0.92 mg/l (growth rate), Skeletonema costatum (ISO/DIS 10253, static) The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to fish

No observed effect concentration (97 d) 1.6 mg/l, Oncorhynchus mykiss (Flow through.) The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) 5.0 mg/l, Daphnia magna (OECD Guideline 211, semistatic)

Revision date: 2018/08/07 Page: 10/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

Assessment of terrestrial toxicity

Toxic effects have been observed in studies with terrestric plants. Toxic effects have been observed in studies with soil living organisms.

Soil living organisms

Toxicity to soil dwelling organisms:

LC50 (14 d) 170 mg/kg, Eisenia foetida (OECD Guideline 207, artificial soil)

The details of the toxic effect relate to the nominal concentration.

EC10 (28 d) 10.45 mg/kg, soil dwelling microorganisms (OECD 217, natural soil)

The details of the toxic effect relate to the nominal concentration.

Toxicity to terrestrial plants

EC20 (19 d) 441 mg/kg, Vicia sativa (OECD Guideline 208)

Other terrestrial non-mammals

LD50 (14 d) 206 mg/kg, Anas platyrhynchos (other)

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

OECD Guideline 209 aerobic

activated sludge, domestic/EC20 (30 min): approx. 15 mg/l

The details of the toxic effect relate to the nominal concentration.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Readily biodegradable (according to OECD criteria).

Elimination information

90 - 100 % DOC reduction (28 d) (OECD 301 A (new version)) (aerobic, activated sludge, domestic)

Assessment biodegradation and elimination (H2O)

Information on: glutaral

Readily biodegradable (according to OECD criteria).

Elimination information

Information on: glutaral

90 - 100 % DOC reduction (28 d) (OECD 301 A (new version)) (aerobic, activated sludge, domestic)

Assessment of stability in water

In contact with water the substance will hydrolyse slowly.

Information on Stability in Water (Hydrolysis)

 $t_{1/2} > 1$ a (50 °C), (Directive 92/69/EEC, C.7, pH 7)

In contact with water the substance will hydrolyse slowly.

Assessment of stability in water

Revision date: 2018/08/07 Page: 11/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

Information on: glutaral

In contact with water the substance will hydrolyse slowly.

Bioaccumulative potential

Assessment bioaccumulation potential

No significant accumulation in organisms is expected as a result of the distribution coefficient of noctanol/water (log Pow).

Bioaccumulation potential

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

Assessment bioaccumulation potential

Information on: glutaral

No significant accumulation in organisms is expected as a result of the distribution coefficient of noctanol/water (log Pow).

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Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is possible.

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Information on: glutaral

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is possible.

Additional information

Other ecotoxicological advice:

Data refer to a diluted aqueous solution of the substance.

8

13. Disposal considerations

Waste disposal of substance:

Must be disposed of or incinerated in accordance with local regulations.

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

TDG

Hazard class:

Revision date: 2018/08/07 Page: 12/13 Version: 6.0 (54935228/SDS_CPA_CA/EN)

Packing group:

ID number: UN 2922 Hazard label: 8, 6.1, EHSM

Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (contains

GLUTARALDEHYDE, METHANOL)

Sea transport

IMDG

Hazard class: 8 Packing group: II

ID number: UN 2922 Hazard label: 8, 6.1, EHSM

Marine pollutant: YES

Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (contains

GLUTARALDEHYDE, METHANOL)

Air transport IATA/ICAO

Hazard class:

Packing group: II
ID number: UN 2922
Hazard label: 8, 6.1

Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (contains

8

GLUTARALDEHYDE, METHANOL)

15. Regulatory Information

Federal Regulations

Registration status:

Biocide DSL, CA released / exempt

28339

Chemical DSL, CA released / listed

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2018/08/07

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

Safety Data Sheet

Myacide® GA 25

Revision date: 2018/08/07 Page: 13/13
Version: 6.0 (54935228/SDS_CPA_CA/EN)

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