

Amasil® 85

Revision date : 2025/09/10 Page: 1/12

Version: 14.1 (30041102/SDS_GEN_CA/EN)

1. Identification

Product identifier used on the label

Amasil® 85

Recommended use of the chemical and restriction on use

Recommended use*: feed additive(s)

Unsuitable for use: Not intended for sale to or use by the general public.

Details of the supplier of the safety data sheet

Company:

BASF Canada Inc. 5025 Creekbank Road Building A, Floor 2 Mississauga, ON, L4W 0B6, CANADA

Telephone: +1 289 360-1300

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Molecular formula: CH(2)O(2) Chemical family: carboxylic acid

Synonyms: Not available. Use: for industrial use, feed additive, biocide,

detergent and cleaning agent for the chemical industry

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2022-272)

Classification of the product

Flam. Liq. 4 Flammable liquids Acute Tox. 3 (Inhalation - vapour) Acute toxicity

^{*} 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.

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Acute Tox.4 (oral)Acute toxicitySkin Corr.1BSkin corrosionEye Dam.1Serious eye damage

Label elements

Pictogram:

Signal Word: Danger

Hazard Statement:

H227 Combustible liquid. H331 Toxic if inhaled. H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary Statements (Prevention):

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

P280 Wear protective gloves, protective clothing and eye protection or face

protection.

P260 Do not breathe mist or vapour or spray.

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

P270 Do not eat, drink or smoke when using this product.
P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

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 POISON CENTER or physician.

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 or shower.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use alcohol-resistant foam, carbon dioxide, dry powder

or water spray for extinction.

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

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

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Labeling of special preparations (GHS):

Corrosive to the respiratory tract.

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2022-272)

Formic Acid

CAS Number: 64-18-6

Content (W/W): >= 85.0 - <= 86.0% Synonym: No data available.

4. First-Aid Measures

Description of first aid measures

General advice:

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

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:

Immediately wash thoroughly with plenty of water, apply sterile dressings, 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

Do not induce vomiting. Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Information on: Formic Acid

Symptoms: Overexposure may cause:, vomiting, aspiration pneumonia, circulatory collapse, death, acidosis, abdominal cramps, dyspnea, hypotension (low blood pressure), nausea, diarrhea, salivation

Hazards: No applicable information available.

Indication of any immediate medical attention and special treatment needed

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Note to physician

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

known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, dry powder, alcohol-resistant foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon monoxide,

The substances/groups of substances mentioned can be released if the product is involved in a fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Breathing protection required. Avoid contact with the skin, eyes and clothing.

Environmental precautions

Do not empty into drains.

Methods and material for containment and cleaning up

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material (e.g. acid binder). Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Sealed containers should be protected against heat as this results in pressure build-up.

Protection against fire and explosion:

Sources of ignition should be kept well clear.

Conditions for safe storage, including any incompatibilities

Segregate from alkalies and alkalizing substances.

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Suitable materials for containers: Stainless steel 1.4571, Stainless steel 1.4404, High density

polyethylene (HDPE), Low density polyethylene (LDPE), glass

Unsuitable materials for containers: Paper/Fibreboard, Carbon steel (Iron)

Storage stability:

Storage temperature: < 30 °C Storage duration: <= 36 Months

From the data on storage duration in this safety data sheet no agreed statement regarding the

warrantee of application properties can be deduced.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Formic Acid ACGIH, US: TWA value 5 ppm;

OSHA Z1: PEL 5 ppm 9 mg/m3;

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. For emergency or non-routine, high exposure situations, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves should be worn to prevent all skin contact., Suitable materials may include, chloroprene rubber (Neoprene), butyl rubber, nitrile rubber (Buna N), Protective glove selection must be based on the user's assessment of the workplace hazards., Consult with glove manufacturer for testing data.

Eye protection:

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

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Contact with eyes and skin must be avoided. Avoid inhalation of vapour. Avoid contact with skin and eyes. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Hands and/or face should be washed before breaks and at the end of the shift. When using, do not eat, drink or smoke.

9. Physical and Chemical Properties

Physical state: liquid Form: liquid

Odour: of formic acid, pungent odour

Odour threshold: not determined

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Colour: colourless to yellow

pH value: 2.2

(10 g/l, 20 °C)

-13 °C Melting point:

Freezing point: No data available.

Boiling point: 107.3 °C

Sublimation point: No applicable information available.

65 °C Flash point: (DIN 51755)

Refers to Formic acid 85%

Information on: Formic Acid

Flash point: 49.5 °C (Directive

> 92/69/EEC, A.9, closed cup)

(derived from flash -Flammability: Combustible liquid.

and boiling point)

Lower explosion limit: 14.9 %(V)

> 14.9 %(V) (57°C)

Upper explosion limit: 47.6 %(V)

Autoignition: 500 °C (DIN 51794) SADT:

Substance/mixture liable to self-decomposition according to

GHS.

Vapour pressure: 24.2 hPa

(20°C) 112.5 hPa (50°C)

Density: 1.195 g/cm3 (20°C)

> 1.20 g/cm3 (15°C) 1.173 g/cm3 (40°C) 1.161 g/cm3 (50°C) 1.15 g/cm3 (55°C)

Relative density: No data available.

Relative vapour density: Water content greater than 10%.

Partitioning coefficient n--1.9 octanol/water (log Pow): (23°C)

Thermal decomposition: No data available. 1.70 mPa.s

Viscosity, dynamic: (20°C)

0.92 mPa.s (55 °C) 1.42 mm2/s

Viscosity, kinematic: (20°C)

0.8 mm2/s (55°C)

Solubility in water: (20 °C, 1,013.25 hPa)

miscible

Miscibility with water: miscible in all proportions

Solubility (quantitative): No data available.

Solubility (qualitative): miscible

solvent(s): organic solvents,

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Molecular weight: 46.03 g/mol

Evaporation rate: Value can be approximated from

Henry's Law Constant or vapor

pressure.

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular

form.

10. Stability and Reactivity

Reactivity

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

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

Based on its structural properties the product is not classified as oxidizing.

Chemical stability

Slow decomposition possible.

Possibility of hazardous reactions

Reacts with alkalies. Reacts with amines. Exothermic reaction.

Conditions to avoid

Temperature: > 30 degrees Celsius

Incompatible materials

bases, non-coated metals, base metals

Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: carbon monoxide

Thermal decomposition:

No data available.

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

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Assessment of acute toxicity: Of moderate toxicity after single ingestion. Of pronounced toxicity after short-term inhalation.

Oral

Type of value: LD50 Species: rat (male/female)

Value: 730 mg/kg (OECD Guideline 401)

Inhalation

Type of value: LC50 Species: rat (male/female) Value: 7.85 mg/l (BASF-Test)

Exposure time: 4 h

Dermal

No data available. Study scientifically not justified.

Assessment other acute effects

Assessment of STOT single:
Corrosive to the respiratory tract.

Irritation / corrosion

Assessment of irritating effects: Highly corrosive! Damages skin and eyes.

Skin

Species: rabbit Result: Corrosive.

Method: OECD Guideline 404

Literature data.

Eve

Study scientifically not justified. As the product corrodes the skin, it can be expected to have a similar effect on the eyes also.

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Caused sensitization in humans.

Buehler test

Species: guinea pig Result: Non-sensitizing. Method: OECD Guideline 406

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No substance-specific organtoxicity was observed after repeated administration to animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Genetic toxicity

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Assessment of mutagenicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in an insect test.

Carcinogenicity

Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Teratogenicity

Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other Information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

The product gives rise to pH shifts.

Toxicity to fish

LC50 (96 h) 130 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 92/69/EWG, C.1, static)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

LC50 (96 h) 68 mg/l, Leuciscus idus (DIN 38412 Part 15, static)

The details of the toxic effect relate to the nominal concentration. After neutralization, it is no longer toxic.

Aquatic invertebrates

EC50 (48 h) 365 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The statement of the toxic effect relates to the analytically determined concentration.

EC50 (48 h) 32.19 mg/l, Daphnia magna (Directive 79/831/EEC, static)

The details of the toxic effect relate to the nominal concentration. The product will cause changes in the pH value of the test system. The result refers to an unneutralized sample.

Aquatic plants

EC50 (72 h) 1,240 mg/l (growth rate), Selenastrum capricornutum (OECD Guideline 201, static)

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The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

EC50 (72 h) 32.64 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static) The details of the toxic effect relate to the nominal concentration. The product will cause changes in the pH value of the test system. The result refers to an unneutralized sample.

Chronic toxicity to fish

Study scientifically not justified.

Chronic toxicity to aquatic invertebrates

No observed effect concentration (21 d) >= 100 mg/l, Daphnia magna (OECD Guideline 211, semistatic)

The statement of the toxic effect relates to the analytically determined concentration. The product will cause changes in the pH value of the test system. The result refers to a neutralized sample. No effects at the highest test concentration.

Assessment of terrestrial toxicity

No data available.

Study scientifically not justified.

Other terrestrial non-mammals

LD50 (18 h) >= 111 mg/kg, Agelaius phoeniceus Literature data.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

other aerobic

activated sludge, domestic, non-adapted/EC10 (13 d): 72 mg/l

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Readily biodegradable (according to OECD criteria).

Elimination information

100 % DOC reduction (9 d) (OECD 301E/92/69/EWG, C.4-B) (aerobic, municipal sewage treatment plant effluent)

Assessment of stability in water

According to structural properties, hydrolysis is not expected/probable.

Information on Stability in Water (Hydrolysis)

 $t_{1/2} > 5 d$ (50 °C, pH value 4), (Directive 92/69/EEC, C.7, pH 4)

 $t_{1/2} > 5 d (50 °C, pH value 7), (Directive 92/69/EEC, C.7, pH 7)$

 $t_{1/2} > 5 d (50 °C, pH value 9), (Directive 92/69/EEC, C.7, pH 9)$

Bioaccumulative potential

Bioaccumulation potential

Significant accumulation in organisms is not to be expected.

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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 not expected.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. Do not discharge into waterways or sewer systems without proper authorization.

14. Transport Information

Land transport

TDG

Hazard class: 8 Packing group: II

ID number: UN 1779 Hazard label: 8, 3

Proper shipping name: FORMIC ACID

Sea transport

IMDG

Hazard class: 8 Packing group: II

ID number: UN 1779 Hazard label: 8, 3 Marine pollutant: NO

Proper shipping name: FORMIC ACID

Air transport

IATA/ICAO

Hazard class: 8 Packing group: II

ID number: UN 1779 Hazard label: 8, 3

Proper shipping name: FORMIC ACID

15. Regulatory Information

Federal Regulations

Registration status:

Chemical DSL, CA

DSL listed and/or otherwise compliant.

NFPA Hazard codes:

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Health: 3 Fire: 2 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2025/09/10

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.

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END OF DATA SHEET