

Safety data sheet

Page: 1/13

BASF Safety data sheet

Date / Revised: 12.09.2025 Version: 18.0

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

1. Substance/preparation and manufacturer/supplier identification

Product name:

Amasil® 85

Use: feed additive(s)

Manufacturer/supplier:

BASF Philippines, Inc.
Upper Penthouse CTP ASEAN Tower
Asean Drive, Spectrum District
Filinvest Corporate City, Alabang,
Muntinlupa City, 1781, Metro Manila
PHILIPPINES

Telephone: +63 2 8811-8001 E-mail address: psr.ph@basf.com

Emergency information:

National emergency number:

+63 2 8831 5576

International emergency number: Telephone: +49 180 2273-112

2. Hazard identification

Classification of the substance and mixture:

Flammable liquids: Cat.4

Acute toxicity: Cat.3 (Inhalation - vapour)

Acute toxicity: Cat.4 (oral) Skin corrosion: Cat.1B Serious eye damage: Cat.1

Label elements and precautionary statement:

Pictogram:

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025





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 dust/gas/mist/vapours.

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.

P311 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.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you

feel unwell.

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 and container to hazardous or special waste

collection point.

Other hazards which do not result in classification:

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.

Corrosive to the respiratory tract.

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

3. Composition/information on ingredients

Chemical nature

Substance nature: mixture

carboxylic acid

, formic acid (Content (W/W): > 85 %)

Hazardous ingredients

formic acid

Content (W/W): >= 85 % - <= 86 % Flam. Lig.: Cat. 3

CAS Number: 64-18-6 Acute Tox.: Cat. 3 (Inhalation - vapour)

Acute Tox.: Cat. 4 (oral) Skin Corr.: Cat. 1A Eye Dam.: Cat. 1

4. 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.

On skin contact:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:

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

On ingestion:

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

Note to physician:

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.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

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

Specific hazards:

carbon monoxide

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

Special protective equipment:

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:

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

Environmental precautions:

Do not empty into drains.

Methods for cleaning up or taking 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

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.

Storage

Segregate from alkalies and alkalizing substances.

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.

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

8. Exposure controls and personal protection

Components with occupational exposure limits

formic acid, 64-18-6;

TWA value 5 ppm (ACGIHTLV)
TWA value 9 mg/m3; 5 ppm (OEL (PH))

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Gas filter for acid inorganic gases/vapours such as SO2, HCl (e.g. EN 14387 Type E). Gas filter for gases/vapours of inorganic compounds (e.g. EN 14387 Type B) Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK). Suitable respiratory protection for higher concentrations or long-term effect: Self-contained breathing apparatus.

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

Performance level 6, corresponding to a breakthrough time of >480 min according to EN ISO 374-1 chloroprene rubber (CR) - 0.5 mm coating thickness

butyl rubber (butyl) - 0.7 mm coating thickness

fluoroelastomer (FKM) - 0.7 mm coating thickness

Polyethylene-Laminate (PE laminate) - ca. 0.1 mm coating thickness

Performance level 5, corresponding to a breakthrough time of >240 min according to EN ISO 374-1 polyvinylchloride (PVC) - 0.7 mm coating thickness

Performance level 3, corresponding to a breakthrough time of >60 min according to EN ISO 374-1 natural rubber/natural latex (NR) - 0.5 mm coating thickness

Performance level 1, corresponding to a breakthrough time of >10 min according to EN ISO 374-1 nitrile rubber (NBR) - 0.4 mm coating thickness

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Tightly fitting safety goggles (cage goggles) (e.g. EN 166) and face shield.

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

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.

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

9. Physical and Chemical Properties

Form: liquid

Colour: colourless to yellow

Odour: of formic acid, pungent odour

Odour threshold: not determined

pH value: 2.2

(10 g/l, 20 °C)

pKA: 3.70 (OECD Guideline 112)

(20 °C)

Melting point: -13 °C Boiling point: 107.3 °C

Flash point: 65 °C (DIN 51755)

Refers to Formic acid 85%

Information on: formic acid

Flash point: 49.5 °C (Directive 92/69/EEC, A.9,

closed cup)

Evaporation rate:

Value can be approximated from

Henry's Law Constant or vapor

pressure.

Flammability (solid/gas): Combustible liquid. (derived from flash - and boiling

point)

Lower explosion limit: 14.9 %(V) Upper explosion limit: 47.6 %(V)

Ignition temperature: 500 °C (DIN 51794)

Self heating ability: not applicable, the product is a liquid

SADT: Substance/mixture liable to self-decomposition according to GHS.

Explosion hazard: Based on the chemical structure

there is no indication of explosive

properties.

Fire promoting properties: Based on its structural properties

the product is not classified as

oxidizing.

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)

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

(OECD Guideline 121)

Date of print: 14.10.2025

1.161 g/cm3 (50 °C) 1.15 g/cm3 (55 °C)

Relative vapour density (air):

Water content greater than 10%.

Solubility in water: miscible

(20 °C, 1,013.25 hPa)

Miscibility with water:

miscible in all proportions

Solubility (qualitative) solvent(s): organic solvents

miscible

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

(23 °C; pH value: 5)

Adsorption/water - soil: KOC: < 17.8; log KOC: 1.25

Surface tension: 71.5 mN/m

71.5 mN/m (OECD Guideline 115) (20 °C; 1 g/l)

Viscosity, dynamic: 1.70 mPa.s

(20 °C) 0.92 mPa.s (55 °C) 1.42 mm2/s

Viscosity, kinematic: 1.42 mm2/s

(20 °C) 0.8 mm2/s (55 °C)

Molar mass: 46.03 g/mol

Particle characteristics

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

form. -

10. Stability and Reactivity

Conditions to avoid: Temperature: > 30 °C

Substances to avoid:

bases, non-coated metals, base metals

Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:

Reacts with alkalies. Reacts with amines. Exothermic reaction.

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

Hazardous decomposition products:

carbon monoxide

Chemical stability:

Slow decomposition possible.

Reactivity:

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

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:

LD50rat (oral): 730 mg/kg (OECD Guideline 401)

Acute inhalation toxicity

LC50 rat (by inhalation): 7.85 mg/l 4 h (BASF-Test)

Acute dermal toxicity

(dermal):No data available. Study scientifically not justified.

Assessment of acute toxicity

Of moderate toxicity after single ingestion. Of pronounced toxicity after short-term inhalation.

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.

Irritation

Assessment of irritating effects:

Highly corrosive! Damages skin and eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Corrosive. (OECD Guideline 404)

Literature data.

Serious eye damage/irritation:Study scientifically not justified. As the product corrodes the skin, it can be expected to have a similar effect on the eyes also.

Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:

Buehler test guinea pig: Non-sensitizing. (OECD Guideline 406)

Germ cell mutagenicity

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

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.

Developmental toxicity

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.

Specific target organ toxicity (single exposure)

Corrosive to the respiratory tract.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

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.

Aspiration hazard

No aspiration hazard expected.

12. Ecological Information

Ecotoxicity

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.

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

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) 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.

Microorganisms/Effect on activated sludge:

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

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:

Study scientifically not justified.

Other terrestrial non-mammals:

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

Literature data.

Mobility

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.

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

Persistence and degradability

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)

Bioaccumulation potential

Bioaccumulation potential:

Significant accumulation in organisms is not to be expected.

13. Disposal Considerations

Incinerate in suitable incineration plant, observing local authority regulations.

Do not discharge into waterways or sewer systems without proper authorization.

A waste code in accordance with the European waste catalog (EWC) cannot be specified, due to dependence on the usage.

The waste code in accordance with the European waste catalog (EWC) must be specified in cooperation with disposal agency/manufacturer/authorities.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. Transport Information

Domestic transport:

UN number or ID number: UN 1779
UN proper shipping name: FORMIC ACID

Transport hazard class(es): 8, 3
Packing group: II
Environmental hazards: no

Special precautions for

None known

user:

Sea transport

IMDG

UN number or ID number: UN 1779
UN proper shipping name: FORMIC ACID

Page: 12/13

BASF Safety data sheet
Date / Revised: 12.09.2025
Version: 18.0

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

Transport hazard class(es): 8, 3 Packing group: II Environmental hazards: no

Marine pollutant: NO

Special precautions for

user:

EmS: F-E; S-C

Air transport

IATA/ICAO

UN number or ID number: UN 1779
UN proper shipping name: FORMIC ACID

Transport hazard class(es): 8, 3 Packing group: II

Environmental hazards: No Mark as dangerous for the environment is needed

Special precautions for None known

user:

Maritime transport in bulk according to IMO instruments

Regulation: IBC-Code

Product name: Formic acid (over 85%)

Pollution category: Y Ship Type: 3

15. Regulatory Information

Other regulations

- 1. Joint DTI-DENR-DA-DOF-DOH-DILG-DOLE-DOTC Administrative Order No. 01 Series of 2009 on "The Adoption and Implementation of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS)"
- 2. DAO 2015-09 "Rules and Procedures for the Implementation of the Globally Harmonized System (GHS) of Classification and Labelling of Chemicals in Prepration of Safety Data Sheet (SDS) and Labelling Requirements of Toxic Chemical Substances"
- 3. Republic Act No. 6969, "Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990"

The regulatory information is not intended to be comprehensive. Other regulations may apply to the material

Product: Amasil® 85

(30041102/SDS_GEN_PH/EN)

Date of print: 14.10.2025

Registration status:

PICCS, PH

Listed in PICCS.

16. Other Information

flue gas desulphurizationrubber industrytextile industryleather industryplastics processing industry

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.