

Safety data sheet

Page: 1/10

BASF Safety data sheet

Date / Revised: 25.07.2023 Version: 5.0

Product: Hardener 529 liquid

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

1. Substance/preparation and manufacturer/supplier identification

Product name:

Hardener 529 liquid

Use: Chemical

Recommended use: Chemical

Not recommended use: Technical information in support will be provided by BASF at the request of

competent authorities.

Manufacturer/supplier:

BASF Vietnam Co. Ltd.

Level 23, Deutsches Haus, 33 Le Duan, Sai Gon Ward, Ho Chi Minh City, Vietnam

Telephone: +84 28 3824 3833 Telefax number: +84 28 3824 3832

E-mail address: minh-triet.thieu@basf.com

Emergency information:

18001703 (Vietnam)

Telefax number: +84 28 3824 3832 International emergency number: Telephone: +49 180 2273-112

2. Hazard identification

Classification of the substance and mixture:

Acute toxicity: Cat.5 (oral)
Skin corrosion/irritation: Cat.2

Hazardous to the aquatic environment - acute: Cat.2

Label elements and precautionary statement:

Product: Hardener 529 liquid

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

Pictogram:



Signal Word: Warning

Hazard Statement:

H315 Causes skin irritation. H303 May be harmful if swallowed.

H401 Toxic to aquatic life.

Precautionary Statements (Prevention):

P280 Wear protective gloves.

P273 Avoid release to the environment.

P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

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

feel unwell.

P332 + P313 If skin irritation occurs: Get medical attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste

collection point.

Other hazards which do not result in classification:

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

3. Composition/information on ingredients

Chemical nature

Substance nature: mixture

salts of an inorganic acid

aqueous solution

Hazardous ingredients

Product: Hardener 529 liquid

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

Ethanol, 2-amino-, sulfite (2:1) (salt)

Content (W/W): >= 43 % - <= 43 % Acute Tox.: Cat. 5 (oral) CAS Number: 15535-29-2 Skin Corr./Irrit.: Cat. 2 Aquatic Acute: Cat. 2

4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

Wash thoroughly with soap and water

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:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Note to physician: Symptoms: skin irritation

Hazards: No hazard is expected under intended use and appropriate handling.

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

antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, foam, carbon dioxide, dry powder

Specific hazards:

sulfur oxides, carbon oxides

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

Special protective equipment:

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

Further information:

Suppress gases/vapours/mists with water spray jet.

6. Accidental Release Measures

Personal precautions:

Use personal protective clothing.

Product: Hardener 529 liquid

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

Environmental precautions:

Do not release untreated into natural waters.

Methods for cleaning up or taking up:

For large amounts: Pump off product.

For residues: Pick up with suitable absorbent material.

7. Handling and Storage

Handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

No special precautions necessary.

Storage

Segregate from acids and acid forming substances.

Suitable materials for containers: Stainless steel 1.4301 (V2), Polyester resin, glass reinforced (Palatal A410), High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4401, enamelled

Unsuitable materials for containers: Aluminium, Galvanized carbon steel (Zinc), Lead-plated,

Paper/Fibreboard, Carbon steel (Iron), tinned carbon steel (Tinplate)

Further information on storage conditions: Keep in a cool place. Keep container tightly closed.

The packed product is not damaged by low temperatures or by frost.

The packed product will not be damaged by high temperatures.

8. Exposure controls and personal protection

Components with occupational exposure limits

No occupational exposure limits known.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate.

Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Standard work clothes and shoes.

Product: Hardener 529 liquid

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

General safety and hygiene measures:

Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form: liquid
Colour: yellowish
Odour: faint odour

Odour threshold: No data available.

pH value: approx. 6.5 (DIN ISO 976)

(20 °C)

solidification temperature: approx. -19 °C

Boiling point: approx. 114 °C

130 °C (1.013 bar)

Flash point: $> 114 \, ^{\circ}\text{C}$ (DIN 51758)

Evaporation rate:

Value can be approximated from Henry's Law Constant or vapor

pressure.

Flammability (solid/gas): not highly flammable

Lower explosion limit: (DIN 51649-1) Ignition temperature: 445 °C (DIN 51794)

Thermal decomposition: approx. 114 °C

No decomposition if correctly stored

and handled.

Self ignition: not self-igniting

Self heating ability: It is not a substance capable of

spontaneous heating.

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

Radioactivity:

not radioactive for transport

purposes

Vapour pressure: approx. 6.7 mbar

(20 °C) 10 mbar (20 °C) 47 mbar (50 °C) 59 mbar (55 °C)

Product: Hardener 529 liquid

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

Density: approx. 1.35 g/cm3 (ISO 2811-3)

(20 °C)

Relative density:

No data available.

Bulk density: (ISO 697)

Solubility in water: miscible

soluble (15 °C)

Miscibility with water:

(15 °C)

completely (e.g. >=90%)

Hygroscopy: Non-hygroscopic

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

not determined

Viscosity, dynamic: 200 - 350 mPa.s

(20 °C)

Viscosity, kinematic:

No data available.

Solids content: 80 %

10. Stability and Reactivity

Conditions to avoid:

See SDS section 7 - Handling and storage.

Thermal decomposition: approx. 114 °C

No decomposition if correctly stored and handled.

(DIN EN ISO 3219)

Substances to avoid:

strong acids

Corrosion to metals: Corrosive effect on metals.

Hazardous reactions:

Evolution of sulphur dioxide under influence of acids.

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

Hazardous decomposition products:

Sulphur dioxide

Chemical stability:

The product is chemically stable.

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Product: Hardener 529 liquid

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

Experimental/calculated data:

LD50rat (oral): 3,560 mg/kg (BASF-Test)

Acute inhalation toxicity

rat (by inhalation): 7 h (IRT)

No mortality within the stated exposition time as shown in animal studies.

Assessment of acute toxicity

Virtually nontoxic after a single ingestion. The inhalation of a highly enriched/saturated vapor-air-mixture represents an unlikely acute hazard.

Symptoms

skin irritation

Irritation

Assessment of irritating effects:

Irritating to skin. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: (Draize test)

Serious eye damage/irritation rabbit: non-irritant

Serious eye damage/irritation rabbit: (Draize test)

Respiratory/Skin sensitization

Assessment of sensitization:

The chemical structure does not suggest a sensitizing effect.

Germ cell mutagenicity

Assessment of mutagenicity:

The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Carcinogenicity

Assessment of carcinogenicity:

The whole of the information assessable provides no indication of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Developmental toxicity

Assessment of teratogenicity:

The chemical structure does not suggest a specific alert for such an effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Product: Hardener 529 liquid

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

Specific target organ toxicity (single exposure)

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

Assessment of repeated dose toxicity:

Study not necessary due to exposure considerations.

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. Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible.

Toxicity to fish:

LC50 (96 h) > 460 - < 680 mg/l, Leuciscus idus (DIN 38412 Part 15, static) Nominal concentration.

Aquatic invertebrates:

EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static) Nominal concentration.

Microorganisms/Effect on activated sludge:

EC20 approx. 90 mg/l, activated sludge, industrial (DIN EN ISO 8192-OECD 209-88/302/EEC,P. C, aerobic)

Depending on local conditions and existing concentrations, disturbances in the biodegradation process of activated sludge are possible.

Mobility

Assessment transport between environmental compartments:

No data available.

Because of the high water solubility, part of the product will immediately dissolve.

Persistence and degradability

Elimination information:

96 % DOC reduction (10 d) (OECD 302B; ISO 9888; 88/302/EEC,part C) (aerobic, activated sludge, industrial)

90 - 100 % (28 d) (OECD 301F; ISO 9408; 92/69/EEC, C.4-D) (aerobic, activated sludge, domestic)

Product: Hardener 529 liquid

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

93 % DOC reduction (21 d) (OECD 301 A (new version)) (aerobic, activated sludge, domestic)

Bioaccumulation potential

Bioaccumulation potential:

Accumulation in organisms is not to be expected. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

13. Disposal Considerations

Incinerate in suitable incineration plant, observing local authority regulations.

14. Transport Information

Domestic transport:

Not classified as a dangerous good under transport regulations

UN number or ID number Not applicable UN proper shipping name: Not applicable Transport hazard class(es): Not applicable Packing group: Not applicable Environmental hazards:

Special precautions for

user

Not applicable None known

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable UN proper shipping name: Not applicable Not applicable Transport hazard class(es): Packing group: Not applicable Environmental hazards: Not applicable

Marine pollutant: no

Special precautions for

user

None known

None known

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

UN number or ID number Not applicable Proper shipping name: Not applicable Transport hazard class(es): Not applicable Packing group: Not applicable Environmental hazards: Not applicable

Special precautions for

user

Product: **Hardener 529 liquid**

(30034887/SDS_GEN_VN/EN)

Date of print: 21.10.2025

15. Regulatory Information

Other regulations

The SDS is composed base on the Global Harmonization Globally Harmonized System of Classification and Labeling of Chemicals and applicable local chemical regulations as following:

- The Chemical Law.
- The decree No. 113/2017/ND-CP, Circulars and their replacement (if yes).
- The decree 42/2020/ND-CP guiding on dangerous goods (DG) list, transport and licensing of DG by road and inland waterway.
- Other applicable local regulations.

In case there is a replacement of the above decrees and their circulars, we will update all relevant data accordingly.

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

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.