

# Safety data sheet

Page: 1/12

BASF Safety data sheet

Date / Revised: 30.04.2025 Version: 6.0

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

# 1. Substance/preparation and manufacturer/supplier identification

# **Product name:**

# 2-ETHYLHEXANOL

Use: Chemical

# 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.5 (oral)

Acute toxicity: Cat.4 (Inhalation - mist)

Skin irritation: Cat.2 Eye irritation: Cat.2A

Specific target organ toxicity — single exposure: Cat.3 (irritating to respiratory system)

Hazardous to the aquatic environment - acute: Cat.3 Hazardous to the aquatic environment - chronic: Cat.3

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

#### Label elements and precautionary statement:

#### Pictogram:



### Signal Word: Warning

#### Hazard Statement:

H227 Combustible liquid.

H319 Causes serious eye irritation.

H315 Causes skin irritation. H332 Harmful if inhaled.

H303 May be harmful if swallowed. H335 May cause respiratory irritation.

H402 Harmful to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

### Precautionary Statements (Prevention):

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

P280 Wear protective gloves and eye protection or face protection.

P261 Avoid breathing mist. P280 Wear eye protection.

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

ignition sources. No smoking.

P273 Avoid release to the environment.
P261 Avoid breathing mist or vapour or spray.

P264 Wash contaminated body parts thoroughly after handling.

# Precautionary Statements (Response):

P312 Call a POISON CENTER or physician if you feel unwell.

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.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P332 + P313 If skin irritation occurs: Get medical attention.
P337 + P313 If eye irritation persists: Get medical attention.

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

P370 + P378 In case of fire: Use ... to extinguish.

# 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. See section 12 - Results of PBT and vPvB assessment.

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

# 3. Composition/information on ingredients

Chemical nature

Substance nature: Substance

2-ethylhexan-1-ol (Content (W/W): > 99.5 %)

CAS Number: 104-76-7

### **Hazardous ingredients**

2-ethylhexan-1-ol

Content (W/W): > 99.5 % - <= 100 Flam. Liq.: Cat. 4

% Acute Tox.: Cat. 5 (oral)

CAS Number: 104-76-7 Acute Tox.: Cat. 4 (Inhalation - mist)

Skin Irrit.: Cat. 2 Eye Irrit.: Cat. 2A

STOT SE: Cat. 3 (irr. to respiratory syst.)

Aquatic Acute: Cat. 3 Aquatic Chronic: Cat. 3

### 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.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

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: 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.

Hazards: 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. (Further) symptoms and / or effects are not known so far

BASF Safety data sheet Date / Revised: 30.04.2025

Version: 6.0 Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

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

# 5. Fire-Fighting Measures

Suitable extinguishing media:

dry powder, water spray, carbon dioxide, foam

Unsuitable extinguishing media for safety reasons:

water jet

Additional information:

Use extinguishing measures to suit surroundings.

Specific hazards:

Flammable liquid Cool endangered containers with water-spray. See SDS section 7 - Handling and storage.

Special protective equipment:

Wear a self-contained breathing apparatus. Special protective equipment for firefighters

Further information:

Evacuate area of all unnecessary personnel. Fight fire from maximum distance.

Further information:

Extend fire extinguishing measures to the surroundings. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

### 6. Accidental Release Measures

#### Personal precautions:

Handle in accordance with good industrial hygiene and safety practice.

Avoid all sources of ignition: heat, sparks, open flame. Use antistatic tools.

# Environmental precautions:

Discharge into the environment must be avoided.

#### Methods for cleaning up or taking up:

Pick up with suitable appliance and dispose of. Spills should be contained, solidified, and placed in suitable containers for disposal. Dispose of absorbed material in accordance with regulations.

Additional information: High risk of slipping due to leakage/spillage of product.

Release of substance/product can cause fire or explosion. Shut off or stop source of leak. Shut off or stop released substance/product under safe conditions.

Pack in tightly closed containers for disposal.

Version: 6.0

BASF Safety data sheet Date / Revised: 30.04.2025

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

# 7. Handling and Storage

### **Handling**

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid all sources of ignition: heat, sparks, open flame. Ground all transfer equipment properly to prevent electrostatic discharge.

#### Storage

Further information on storage conditions: Containers should be stored tightly sealed in a dry place. Keep under dry nitrogen. Blanket with nitrogen if the container is opened.

# 8. Exposure controls and personal protection

#### Components with occupational exposure limits

No substance specific occupational exposure limits known.

### Personal protective equipment

### Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

#### Hand protection:

Chemical resistant protective gloves (EN ISO 374-1)

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): nitrile rubber (NBR) - 0.4 mm coating thickness

Manufacturer's directions for use should be observed because of great diversity of types. 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.

### Eve protection:

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

#### 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:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is required additionally to the stated personal protection equipment.

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

# 9. Physical and Chemical Properties

Form: liquid
Colour: colourless
Odour: alcohol-like
Odour threshold: not determined

pH value:

neutral, of low solubility

Melting point: -89 °C (ASTM D97)

Boiling point: 186 °C (OECD Guideline 103)

(1,013 hPa)

Flash point: 75 °C (closed cup)

Evaporation rate:

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

pressure.

Flammability (solid/gas): Combustible liquid. (derived from flash point)

Lower explosion limit: 0.88 %(V)

Literature data., The lower explosion point may be 5 - 15 °C below the

flash point.

Upper explosion limit:

For liquids not relevant for classification and labelling.

Ignition temperature: 280 °C (Directive 92/69/EEC, A.15)

Thermal decomposition: No decomposition if stored and

handled as prescribed/indicated.

Self ignition: not self-igniting Test type: Spontaneous self-ignition at room-temperature.

(other)

(other)

Self heating ability: It is not a substance capable of

spontaneous heating.

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: 0.93 hPa (OECD Guideline 104)

(20 °C)

Density: 0.832 g/cm3 (ASTM D4052)

(20 °C)

Relative density: 0.832 (ASTM D4052)

(20 °C)

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

(calculated)

Date of print: 20.10.2025

Relative vapour density (air):4.49 (calculated)

(20 °C)

Heavier than air.

Solubility in water:

0.9 g/l (20 °C)

Partitioning coefficient n-octanol/water (log Pow): 2.9 (OECD Guideline 117)

(25 °C; pH value: 7)

Adsorption/water - soil: KOC: 35.28; log KOC: 1.55

Surface tension: 47 mN/m (OECD Guideline 115)

(20 °C; 0.81 g/l)

Viscosity, dynamic: 9.845 mPa.s

(20 °C)

Molar mass: 130.23 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:

Avoid sources of ignition.

Thermal decomposition: No decomposition if stored and handled as

prescribed/indicated.

Substances to avoid: strong oxidizing agents

Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:

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

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

Chemical stability:

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

Reactivity:

When heated can give off ignitable vapours.

# 11. Toxicological Information

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)
Date of print: 20.10.2025

# Routes of exposure

### **Acute oral toxicity**

Experimental/calculated data:

LD50rat (oral): 2,047 mg/kg (similar to OECD guideline 401)

### Acute inhalation toxicity

LC50 rat (by inhalation): > 0.89 - <= 5.3 mg/l 4 h (similar to OECD guideline 403) An aerosol was tested.

### Acute dermal toxicity

LD50 rat (dermal): > 3,000 mg/kg (OECD Guideline 402)

### Assessment of acute toxicity

Of low toxicity after single ingestion. Virtually nontoxic after a single skin contact. Of moderate 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:

Eye contact causes irritation. Skin contact causes irritation.

Experimental/calculated data:

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

Serious eye damage/irritation rabbit: Irritant. (OECD Guideline 405)

Serious eye damage/irritation rabbit: Irritant. (OECD Guideline 405)

### Respiratory/Skin sensitization

Assessment of sensitization:

The substance did not cause skin sensitization in humans.

Experimental/calculated data:

Human Maximization Test human: Non-sensitizing.

### Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with microorganisms and mammalian cell culture. The substance was not mutagenic in studies with mammals.

### Carcinogenicity

Assessment of carcinogenicity:

In long-term studies in rats and mice in which the substance was given by gavage, a carcinogenic effect was not observed.

### Reproductive toxicity

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

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:

Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

# Specific target organ toxicity (single exposure)

Causes temporary irritation of 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.

# **Aspiration hazard**

not applicable

# 12. Ecological Information

### **Ecotoxicity**

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. Harmful to aquatic organisms based on long-term (chronic) toxicity study data. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:

LC50 (96 h) 17.1 mg/l, Leuciscus idus (OECD 203; ISO 7346; 84/449/EWG, C.1, Flow through.)

Aquatic invertebrates:

EC50 (48 h) 39 mg/l, Daphnia magna (Directive 84/449/EEC, C.2, static) Nominal concentration.

Aquatic plants:

EC50 (72 h) 21.0 mg/l (growth rate), Scenedesmus subspicatus (Directive 88/302/EEC, part C, p. 89)

Nominal concentration.

EC10 (72 h) 7.41 mg/l (growth rate), Desmodesmus subspicatus (Directive 88/302/EEC, part C, p. 89)

Nominal concentration.

Microorganisms/Effect on activated sludge:

No data available.

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

Chronic toxicity to fish:

other (30 d) 0.278 mg/l, Brachydanio rerio (OECD Guideline 210, Flow through.) The statement of the toxic effect relates to the analytically determined concentration.

Chronic toxicity to aquatic invertebrates:

EC10 (21 d), 1.53 mg/l, Daphnia magna (OECD Guideline 211, semistatic)

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

Assessment of terrestrial toxicity:

### **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.

### Persistence and degradability

Elimination information:

79 - 99.9 % BOD of the ThOD (14 d) (OECD 301C; ISO 9408; 92/69/EWG, C.4-F) (aerobic, Inoculum conforming to MITI requirements (OECD 301C))

Assessment of stability in water:

No data available.

Information on Stability in Water (Hydrolysis):

No data available.

# **Bioaccumulation potential**

Assessment bioaccumulation potential:

Significant accumulation in organisms is not to be expected.

Bioaccumulation potential:

No data available.

### Other adverse effects

Adsorbable organically-bound halogen (AOX):

This product contains no organically-bound halogen.

### **Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

### 13. Disposal Considerations

Dispose of in accordance with national, state and local regulations.

Contaminated packaging:

Disposal must be made according to official regulations.

Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

# 14. Transport Information

### **Domestic transport:**

Special precautions for

Not classified as a dangerous good under transport regulations

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

user

### 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
Transport hazard class(es): Not applicable
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
Proper shipping name:
Transport hazard class(es):
Packing group:
Environmental hazards:
Special precautions for

Not applicable
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

user

### Maritime transport in bulk according to IMO instruments

Regulation: IBC-Code

Product name: Octanol (all isomers)

Pollution category: Y Ship Type: 2 BASF Safety data sheet Date / Revised: 30.04.2025

Version: 6.0 Product: 2-ETHYLHEXANOL

(30034817/SDS\_GEN\_PH/EN)

Date of print: 20.10.2025

# 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

### Registration status:

released / listed PICCS, PH

#### 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.