

Safety data sheet

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BASF Safety data sheet

Date / Revised: 06.08.2024 Version: 2.0

Product: **iso-Phytol R**

(30035164/SDS_GEN_VN/EN)

Date of print: 12.10.2025

1. Substance/preparation and manufacturer/supplier identification

Product name:

iso-Phytol R

Use: Chemical, Chemical for detergents, Chemical for soaps, detergents and cosmetic

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:

Skin irritation: Cat.2

Hazardous to the aquatic environment - acute: Cat.1 Hazardous to the aquatic environment - chronic: Cat.1

M-factor acute: 1

Label elements and precautionary statement:

Pictogram:

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Signal Word: Warning

Hazard Statement:

H315 Causes skin irritation. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P273 Avoid release to the environment.

P280 Wear protective gloves.

P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

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

P391 Collect spillage.

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:

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.

3. Composition/information on ingredients

Chemical nature

Substance nature: Substance

3,7,11,15-tetramethylhexadec-1-en-3-ol

CAS Number: 505-32-8

Hazardous ingredients

3,7,11,15-tetramethylhexadec-1-en-3-ol

Content (W/W): >= 75 % - <= 100 Skin Corr./Irrit.: Cat. 2 Aguatic Acute: Cat. 1

CAS Number: 505-32-8 Aquatic Chronic: Cat. 1

M-factor acute: 1

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Content (W/W): > 0 % - < 1 % CAS Number: 502-69-2

Skin Irrit.: Cat. 3 Aquatic Acute: Cat. 1 Aquatic Chronic: Cat. 1 M-factor acute: 1 M-factor chronic: 1

4. First-Aid Measures

General advice:

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

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

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

Specific hazards:

harmful vapours, carbon oxides

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

Special protective equipment:

Wear a self-contained breathing apparatus.

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Further information:

Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Cool endangered containers with water-spray.

6. Accidental Release Measures

Personal precautions:

Use personal protective clothing. Information regarding personal protective measures, see section 8. Ensure adequate ventilation. Do not breathe vapour/spray. Avoid contact with the skin, eyes and clothing.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.Inform authorities in the event of product spillage to water courses or sewage systems.

Methods for cleaning up or taking up:

For small amounts: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

<u>Handling</u>

Ensure thorough ventilation of stores and work areas. Wear suitable protective clothing and eye/face protection. Avoid contact with the skin, eyes and clothing. Keep container tightly sealed.

Protection against fire and explosion:

Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame.

Storage

Further information on storage conditions: Keep at temperature not exceeding 50°C. Keep container in a well-ventilated place. Do not keep the container sealed.

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

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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):

butyl rubber (butyl) - 0.7 mm coating thickness

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.

Eye 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:

Avoid contact with skin. Wearing of closed work clothing is required additionally to the stated personal protection equipment. Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

9. Physical and Chemical Properties

Form: liquid
Colour: colourless
Odour: flowery

pH value: 6.7

(0.0058 g/l, 25 °C)

Melting point:

not applicable

Boiling point: 320 °C

Flash point: 174 °C (ISO 2719, closed cup)

Flammability (solid/gas): hardly combustible (derived from flash point)

Lower explosion limit:

For liquids not relevant for classification and labelling., 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: 230 °C

Thermal decomposition: 225 °C (DSC (DIN 51007))

(DIN 51794)

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Self ignition: Based on its structural properties the

product is not classified as self-

igniting.

Test type: Spontaneous self-

ignition at room-temperature.

Explosion hazard: not explosive (other)
Fire promoting properties: not fire-propagating (other)

Vapour pressure: < 0.001 hPa

(20 °C)

Literature data. 0.07 mbar (100 °C)

Density: 0.843 g/cm3 (ISO 2811-3)

(20 °C)

Relative density: approx. 0.844

(20 °C)

Relative vapour density (air):10.2 (calculated)

(20 °C)

Heavier than air.

Solubility in water:

5.8 mg/l

(25 °C)

Solubility (qualitative) solvent(s): organic solvents

soluble

Partitioning coefficient n-octanol/water (log Pow): 8.8

(25 °C)

Adsorption/water - soil: log KOC: 4.296

log KOC: 4.296 (calculated) Adsorption to solid soil phase is

(measured)

expected.

Surface tension:

Based on chemical structure, surface

activity is not to be expected.

Viscosity, dynamic: 76.3 mPa.s (OECD Guideline 114)

(20 °C)

Molar mass: 296.54 g/mol

10. Stability and Reactivity

Conditions to avoid:

See SDS section 7 - Handling and storage.

Thermal decomposition: 225 °C (DSC (DIN 51007))

Substances to avoid:

acids, bases

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Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:

Strong exothermic reaction.

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:

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

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:

LD50rat (oral): > 5,400 mg/kg (BASF-Test)

Acute dermal toxicity

LD50 rabbit (dermal): > 5,000 mg/kg (other)

Literature data.

Assessment of acute toxicity

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

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

Irritation

Assessment of irritating effects:

Skin contact causes irritation. Not irritating to the eyes.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant. (BASF-Test)

Serious eye damage/irritation rabbit: non-irritant (BASF-Test)

Respiratory/Skin sensitization

Assessment of sensitization:

Animal studies do not fully exclude a skin sensitizing potential.

Experimental/calculated data:

Skin painting test guinea pig: ambiguous (other)

Guinea pig maximization test guinea pig: ambiguous (OECD Guideline 406)

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Literature data.

Germ cell mutagenicity

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The substance was not mutagenic in studies with mammals.

Carcinogenicity

Assessment of carcinogenicity:

No data available concerning carcinogenic effects.

Reproductive toxicity

Assessment of reproduction toxicity:

Animal studies gave no indication of a fertility impairing effect at doses which were not toxic to the parental animals.

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)

Based on available data, the classification criteria are not met.

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

No aspiration hazard expected.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

Very toxic (acute effect) to aquatic organisms.

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) > 10,000 mg/l, Leuciscus idus (DIN 38412 Part 15, static)

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

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Aquatic invertebrates:

EC50 (48 h) 0.2 mg/l, Daphnia magna (Directive 84/449/EEC, C.2, semistatic)

The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The details of the toxic effect relate to the nominal concentration.

Aquatic plants:

EC50 (72 h) > 500 mg/l (growth rate), Scenedesmus subspicatus (DIN 38412 Part 9, static) The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

Microorganisms/Effect on activated sludge:

EC10 (17 h) > 10,000 mg/l, Pseudomonas putida (DIN 38412 Part 27 (draft), aerobic)

The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested. The details of the toxic effect relate to the nominal concentration.

Assessment of terrestrial toxicity:

Study scientifically not justified.

Mobility

Assessment transport between environmental compartments:

The substance will slowly evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is expected.

Persistence and degradability

Assessment biodegradation and elimination (H2O):

Readily biodegradable (according to OECD criteria).

Elimination information:

approx. 70 - 80 % BOD of the ThOD (28 d) (OECD 301F; ISO 9408; 92/69/EWG, C.4-D) (aerobic, activated sludge, domestic)

Bioaccumulation potential

Assessment bioaccumulation potential:

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is possible.

13. Disposal Considerations

Information on disposal regulations: Must comply with regulations on hazardous waste such as:

- Decree No. 08/2022/ND-CP of the Government: detailing a number of articles of the Law on Environmental Protection.
- Circular No. 02/2022/TT-BTNMT of the Ministry of Natural Resources and Environment: detailing a number of articles of the Law on Environmental Protection.

Observe national and local legal requirements.

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14. Transport Information

Domestic transport:

UN number or ID number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (3,7,11,15-TETRAMETHYLHEXADEC-1-EN-3-OL)

Transport hazard class(es): 9, EHSM

Packing group:

Environmental hazards: yes

Special precautions for

user:

None known

Sea transport

IMDG

UN number or ID number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (3,7,11,15-TETRAMETHYLHEXADEC-1-EN-3-OL)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Marine pollutant: YES

Special precautions for

user:

EmS: F-A; S-F

Air transport

IATA/ICAO

UN number or ID number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (3,7,11,15-TETRAMETHYLHEXADEC-1-EN-3-OL)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Special precautions for None known

user:

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

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15. Regulatory Information

Other regulations

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

- The Chemical Law 06/2007/QH12 issued on 21/11/2007.
- The decree No. 113/2017/ND-CP specifying and providing guidelines for implementation of certain articles of the law on chemicals.
- The decree No. 82/2022/ND-CP Amendments to some articles of government's decree no.113/2017/ND-CP dated October 09, 2017 specifying and providing guidelines for implementation of certain articles of the law on chemicals.
- Circular 17/2022/TT-BCT Amendments to some articles of circular no. 32/2017/TT-BCT dated December 28, 2017 of the Minister Of Industry And Trade on elaboration and provision of guidelines for implementation of certain articles of the law on chemicals and the government's decree no. 113/2017/ ND-CP dated October 09, 2017 on elaboration and provision of guidelines for implementation of certain articles of the law on chemicals.
- The decree No. 17/2020/ND-CP Amendments to some articles of decrees related to necessary business conditions in fields under the management of the Ministry Of Industry and Trade.
- -The decree No. 34/2024/ND-CP dated March 31st 2024 of the Government on the List of dangerous goods, transportation of dangerous goods by road motor vehicles and transportation of dangerous goods on inland waterways
- The Circular 32/2017/TT-BCT specifying and providing guidelines for implementation of certain articles of the law on chemicals and the government's decree no. 113/2017/ND-CP dated October 09, 2017 specifying and providing guidelines for implementation of certain articles of the law on chemicals.
- -The decree No. 33/2024/ND-CP dated March 27th 2024 of the Government on implementing the convention on the prohibition of the development, production, stockpiling and use of chemical weapons and on their destruction

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

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

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.