

Safety data sheet

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BASF Safety data sheet
Date / Revised: 03.08.2023
Product: **PALAMOLL® 654**

Version: 4.0

(30034730/SDS_GEN_TH/EN)

Date of print: 21.10.2025

1. Substance/preparation and manufacturer/supplier identification

Product name:
PALAMOLL® 654

Use: plasticizers

Manufacturer/supplier:

BASF (Thai) Limited
23rd Floor, Emporium Tower, 622, Sukhumvit 24 Rd.,
Klongton, Klongtoey, Bangkok 10110, THAILAND
Telephone: +66 2624-1999
Telefax number: +66 2664-9254
E-mail address: Thailand-SDS-info@basf.com

Emergency information:

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

2. Hazard identification

Classification according to UN GHS 2009

Classification of the substance and mixture:
No need for classification according to GHS criteria for this product.

Label elements and precautionary statement:

The product does not require a hazard warning label in accordance with GHS criteria.

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.

3. Composition/information on ingredients

Chemical nature

Substance nature: Substance

Hexanedioic acid, polymer with 1,4-butanediol and 2,2-dimethyl-1,3-propanediol, isononyl ester
CAS Number: 208945-12-4

4. First-Aid Measures

General advice:

| Remove contaminated clothing.

If inhaled:

| Keep patient calm, remove to fresh air.

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.

On ingestion:

| Rinse mouth and then drink 200-300 ml of water.

Note to physician:

Symptoms: The most important known symptoms and effects are described in section 2 and/or in section 11.

| Treatment: Symptomatic treatment (decontamination, vital functions).

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:

Do not breathe gas/vapour. The product is combustible. Burning produces harmful and toxic fumes.

Shut off or stop released substance/product under safe conditions. Cool endangered containers with water-spray. Due to the organic compound content of the preparation, fire will produce dense black smoke. Inhalation of dangerous decomposition products may cause serious damage to health.

Do not release chemically contaminated water into drains, soil or surface water. Sufficient measures must be taken to retain the water used for extinguishing. Dispose of contaminated water and soil according to local regulations.

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.

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.

Shut off or stop source of leak. Shut off or stop released substance/product under safe conditions.

Pack in tightly closed containers for disposal.

7. Handling and Storage

Handling

Handle in accordance with good industrial hygiene and safety practice. Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:

Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Electrical devices must meet the specified temperature class.

Storage

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

8. Exposure controls and personal protection

Components with occupational exposure limits

No substance specific occupational exposure limits known.

Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc. 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.

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:

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

9. Physical and Chemical Properties

Form:	viscous	
Colour:	colourless to slightly yellow	
Odour:	ester-like	
Odour threshold:	not determined	
pH value:	not applicable, of very low solubility	
pour point:	-18 °C (1 ATM)	(DIN ISO 3016)
Boiling point:	not applicable	
Flash point:	186 °C	(ISO 2719)

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Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Flammability (solid/gas):	not highly flammable	
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:	400 °C	(DIN 51794)
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Explosion hazard:	not explosive	(other)
Fire promoting properties:	not fire-propagating	(other)
Vapour pressure:	< 0.1 hPa (20 °C)	
Density:	1.070 - 1.085 g/cm ³ (20 °C)	(DIN 51757)
Relative density:	1.070 - 1.085 (20 °C)	
Relative vapour density (air):	> 1 (20 °C) Heavier than air.	(estimated)
Solubility in water:	< 0.1 mg/l (20 °C)	
Solubility (qualitative) solvent(s):	organic solvents soluble	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
Viscosity, dynamic:	4,500 - 5,500 mPa.s (20 °C)	(calculated (from kinematic viscosity))

10. Stability and Reactivity

Conditions to avoid:
 No special precautions other than good housekeeping of chemicals.

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

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Substances to avoid:
strong oxidizing agents

Corrosion to metals: No corrosive effect on metal.

Hazardous reactions:
Reacts with strong oxidizing agents.

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.

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:
LD50rat (oral): > 2,000 mg/kg (BASF-Test)

Assessment of acute toxicity

Virtually nontoxic after a single ingestion.

Symptoms

The most important known symptoms and effects are described in section 2 and/or in section 11.

Irritation

Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

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.

Carcinogenicity

Assessment of carcinogenicity:
Based on the structure there is no suspicion of a carcinogenic effect.

Reproductive toxicity

Assessment of reproduction toxicity:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Specific target organ toxicity (single exposure)

Not relevant.

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

Assessment of repeated dose toxicity:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Aspiration hazard

not applicable

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The LC50 is higher than the solubility limit. 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, *Oncorhynchus mykiss* (OECD 203; ISO 7346; 84/449/EEC, C.1, static)
Nominal concentration.

Microorganisms/Effect on activated sludge:

EC10 (16 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.

Mobility

Assessment transport between environmental compartments:

No data available.

Persistence and degradability

Elimination information:

88 % BOD of COD (28 d) (OECD 301F; ISO 9408; 92/69/EEC, C.4-D) (aerobic, activated sludge, industrial) Biodegradable.

Bioaccumulation potential

Bioaccumulation potential:

Because of the product's consistency and low water solubility, bioavailability is improbable.

Additional information

Other ecotoxicological advice:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. Do not release untreated into natural waters.

13. Disposal Considerations

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

Contaminated packaging:

Disposal must be made according to official 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:	Not applicable
Special precautions for user	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
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
	Marine pollutant: no
Special precautions for user	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	None known

user

15. Regulatory Information

Other regulations

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.