

# Safety data sheet

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BASF Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 08.09.2023

Version: 2.3

Product: **PALAMOLL® 646**

(ID no. 30034733/SDS\_GEN\_00/EN)

Date of print 11.07.2024

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## 1. Identification

### Product identifier

## **PALAMOLL® 646**

Chemical name: Palamoll 646

CAS Number: 150923-12-9

### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: plasticizers

### Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Petrochemicals

Telephone: +49 621 60-42151

E-mail address: sds-petrochemicals@basf.com

### Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## 2. Hazards Identification

### Label elements

Globally Harmonized System (GHS)

No data available.

## Other hazards

### According to UN GHS criteria

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.

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## 3. Composition/Information on Ingredients

### Substances

#### Chemical nature

Hexanedioic acid, polymer with 1,3-butanediol and 1,4-butanediol,acetate  
CAS Number: 150923-12-9

#### Hazardous ingredients (GHS)

According to UN GHS criteria

No particular hazards known.

### Mixtures

Not applicable

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## 4. First-Aid Measures

### Most important symptoms and effects, both acute and delayed

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

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## 5. Fire-Fighting Measures

### Extinguishing media

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.

### Special hazards arising from the substance or mixture

The product is combustible. Cool endangered containers with water-spray. See SDS section 7 - Handling and storage.

#### **Advice for fire-fighters**

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.

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

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## **6. Accidental Release Measures**

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.

#### **Personal precautions, protective equipment and emergency procedures**

Handle in accordance with good industrial hygiene and safety practice.

#### **Environmental precautions**

Discharge into the environment must be avoided.

#### **Methods and material for containment and cleaning 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.

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## **7. Handling and Storage**

#### **Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

No special precautions necessary. Substance/product is non-flammable.

#### **Conditions for safe storage, including any incompatibilities**

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

#### **Specific end use(s)**

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## **8. Exposure Controls/Personal Protection**

#### **Control parameters**

Components with occupational exposure limits

No substance specific occupational exposure limits known.

**Exposure controls**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****Information on basic physical and chemical properties**

Form:	viscous	
Colour:	colourless to slightly yellow	
Odour:	ester-like, of acetic acid	
Odour threshold:	not determined	
pH value:	not applicable, of very low solubility	
pour point:	-17 °C	(DIN ISO 3016)
Boiling point:	not applicable	
Flash point:	206 °C	
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.	
Flammability:	not 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:	390 °C	(DIN 51794)
Vapour pressure:	< 0,1 mbar (20 °C)	
	< 0,1 mbar (50 °C)	
Density:	1,125 - 1,140 g/cm3 (20 °C)	(DIN 51757)
Relative density:	1,125 - 1,140 (20 °C)	
Relative vapour density (air):	not determined	
Solubility in water:	3,4 mg/l (20 °C)	
Solubility (qualitative) solvent(s):	organic solvents soluble	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Self ignition:	Temperature: 20 °C not self-igniting	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	10 - 13 Pa.s (20 °C)	(calculated (from kinematic viscosity))
Explosion hazard:	not explosive	(other)
Fire promoting properties:	not fire-propagating	(other)

### Other information

pKA:  
The substance does not dissociate.

## 10. Stability and Reactivity

### Reactivity

Corrosion to metals:	No corrosive effect on metal.	
Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.

### Chemical stability

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

### Possibility of hazardous reactions

Reacts with strong oxidizing agents.

**Conditions to avoid**

No special precautions other than good housekeeping of chemicals.

**Incompatible materials**

Substances to avoid:  
strong oxidizing agents

**Hazardous decomposition products**

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

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**11. Toxicological Information****Information on toxicological effects**Acute toxicity

Assessment of acute toxicity:  
Virtually nontoxic after a single ingestion.

Experimental/calculated data:  
LD50 rat (oral): > 32.000 mg/kg (BASF-Test)

Irritation

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

Experimental/calculated data:  
Skin corrosion/irritation rabbit: non-irritant (BASF-Test)

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

Carcinogenicity

Assessment of carcinogenicity:  
The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The chemical structure does not suggest a specific alert for such an effect.

#### Specific target organ toxicity (single exposure)

Assessment of STOT single:

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 relevant.

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## 12. Ecological Information

### Toxicity

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) 1.250 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 8, aerobic)

The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

### Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):

Biodegradable.

Elimination information:

75 % BOD of COD (28 d) (OECD 301F; ISO 9408; 92/69/EEC, C.4-D) (aerobic, activated sludge, industrial) Biodegradable.

### Bioaccumulative potential

Bioaccumulation potential:

No data available.

### Mobility in soil

Assessment transport between environmental compartments:

Volatility: No data available.

## Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification

## Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

## Additional information

Other ecotoxicological advice:

Do not release untreated into natural waters. At the present state of knowledge, no negative ecological effects are expected.

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## 13. Disposal Considerations

### Waste treatment methods

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

Contaminated packaging:

Disposal must be made according to official regulations.

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## 14. Transport Information

### Land transport

ADR

	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

RID

	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



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Special precautions for user      None known

### **Inland waterway transport**

ADN

UN number or ID number:      Not classified as a dangerous good under transport regulations  
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

### **Transport in inland waterway vessel**

Not evaluated

### **Sea transport**

IMDG

UN number or ID number:      Not classified as a dangerous good under transport regulations  
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

### **Air transport**

IATA/ICAO

UN number or ID number      Not classified as a dangerous good under transport regulations  
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

### **Maritime transport in bulk according to IMO instruments**

Maritime transport in bulk is not intended.

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## 15. Regulatory Information

### **Safety, health and environmental regulations/legislation specific for the substance or mixture**

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

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## 16. Other Information

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.

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