

# Safety data sheet

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BASF Safety data sheet  
Date / Revised: 06.11.2020  
Product: **Luphen® 3644**

Version: 1.0

(30631739/SDS\_GEN\_TH/EN)

Date of print 10.10.2025

## 1. Substance/preparation and manufacturer/supplier identification

### Luphen® 3644

Use: Raw material, for industrial use only

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:

No specific dangers known, if the regulations/notes for storage and handling are considered. If the product adheres to skin, irritation may occur when it dries.

### 3. Composition/information on ingredients

#### Chemical nature

Aqueous dispersion of a polymer based on: polyurethane

#### Hazardous ingredients

mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one

Content (W/W): < 15 PPM

CAS Number: 55965-84-9

Acute Tox.: Cat. 3 (oral)

Acute Tox.: Cat. 2 (Inhalation - mist)

Acute Tox.: Cat. 2 (dermal)

Skin Corr./Irrit.: Cat. 1C

Eye Dam./Irrit.: Cat. 1

Skin Sens.: Cat. 1A

Aquatic Acute: Cat. 1

Aquatic Chronic: Cat. 1

M-factor acute: 100

M-factor chronic: 100

### 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:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting unless told to by a poison control center or doctor.

Note to physician:

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

Hazards: No hazards anticipated.

Treatment: Symptomatic treatment (decontamination, vital functions).

### 5. Fire-Fighting Measures

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

Specific hazards:

No particular hazards known.

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Special protective equipment:  
No data available.

Further information:  
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.  
Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered.

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## 6. Accidental Release Measures

Personal precautions:  
Use personal protective clothing. Avoid contact with skin and eyes.

Environmental precautions:  
Do not release untreated into natural waters.

Methods for cleaning up or taking up:  
For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations.  
For large amounts: Pump off product.

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## 7. Handling and Storage

### Handling

Handle in accordance with good industrial hygiene and safety practice. After long storage, slight quantities of carbon monoxide may be formed. To our best knowledge, the occupational exposure limit (OEL) is not exceeded during use. Entering of tanks must only be performed after intensive cleaning and when it is ensured that residual vapours have been removed. Consideration of national laws and international standards for confined space entry should be taken in to account. In case of doubt, the concentration of Carbon monoxide must be determined.

### Storage

Further information on storage conditions: Store protected against freezing.

Protect from temperatures below: 5 °C  
Protect from temperatures above: 60 °C

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## 8. Exposure controls and personal protection

### Components with occupational exposure limits

none

### Personal protective equipment

#### Hand protection:

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

#### General safety and hygiene measures:

Hands and/or face should be washed before breaks and at the end of the shift. Avoid contact with skin and eyes.

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## 9. Physical and Chemical Properties

Form:	liquid, dispersion
Colour:	white
Odour:	almost odourless
Odour threshold:	not determined

pH value:	6.5 - 8.5	(DIN ISO 976)
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Information on: water

Melting point:	0 °C
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Information on: water

Boiling point:	100 °C
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Flash point:

not applicable

Flammability (solid/gas): not flammable

Lower explosion limit:

For liquids not relevant for classification and labelling.

Upper explosion limit:

For liquids not relevant for classification and labelling.

Ignition temperature:

not applicable

Thermal decomposition: No decomposition if used correctly.

Self ignition: not self-igniting

Self heating ability: It is not a substance capable of spontaneous heating.

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Explosion hazard: not explosive  
Fire promoting properties: not fire-propagating

Information on: water

Vapour pressure: 23.4 hPa  
(20 °C)  
Literature data.

Density: 1.0 - 1.1 g/cm<sup>3</sup> (ISO 2811-1)  
(20 °C)

Relative density: No data available.

Relative vapour density (air):  
not applicable

Solubility in water: partly soluble  
(15 °C)

Miscibility with water:  
miscible

Partitioning coefficient n-octanol/water (log Pow):  
not applicable

Viscosity, dynamic: 10 - 200 mPa.s (DIN EN ISO 3219)  
(23 °C, 250 1/s)

Solids content: 49.0 - 51.0 % (DIN EN ISO 3251)

Other Information:  
Range of particle size: < 0,1 µm - 10 µm

## 10. Stability and Reactivity

Conditions to avoid:  
Avoid extreme temperatures.

Thermal decomposition: No decomposition if used correctly.

Substances to avoid:  
No substances known that should be avoided.

Hazardous reactions:  
No hazardous reactions when stored and handled according to instructions. After long storage, slight quantities of carbon monoxide may be formed.

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

## 11. Toxicological Information

### Acute toxicity

Assessment of acute toxicity:  
Virtually nontoxic after a single ingestion. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:  
LD50 rat (oral): > 2,000 - 10,000 mg/kg

## **Irritation**

Assessment of irritating effects:  
If the product adheres to skin, irritation may occur when it dries.

Not irritating to the eyes. Not irritating to the skin. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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:  
Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

## **Germ cell mutagenicity**

Assessment of mutagenicity:  
The substance was not mutagenic in bacteria. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

## **Carcinogenicity**

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

## **Reproductive toxicity**

Assessment of reproduction toxicity:  
Not expected to cause reproductive toxicity (based on composition).

## **Developmental toxicity**

Assessment of teratogenicity:  
The data available for an assessment of the effect of the substance on developmental toxicity are not sufficient for a proper evaluation.

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

Assessment of STOT single:  
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:

No adverse effects were observed after repeated inhalative exposure in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### **Aspiration hazard**

not applicable

### **Other relevant toxicity information**

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The statement was derived from products of similar composition.

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## **12. Ecological Information**

### **Ecotoxicity**

Toxicity to fish:

LC50 (96 h) > 100 mg/l, Brachydanio rerio (OECD Guideline 203, static)

Aquatic invertebrates:

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

Aquatic plants:

EC50 (72 h) > 100 mg/l, Scenedesmus subspicatus (OECD Guideline 201)

Nominal concentration.

Microorganisms/Effect on activated sludge:

EC20 (0.5 h) > 100 mg/l, activated sludge, domestic (DIN EN ISO 8192-OECD 209-88/302/EEC, P. C)

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

### **Mobility**

Assessment transport between environmental compartments:

No data available.

### **Persistence and degradability**

Elimination information:

> 70 % DOC reduction (OECD 302B; ISO 9888; 88/302/EEC, part C) Easily eliminated from water.

### **Bioaccumulation potential**

Bioaccumulation potential:

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

### Other adverse effects

Adsorbable organically-bound halogen (AOX):  
No data available.

### Additional information

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

Ecological data are determined by analogy.

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## 13. Disposal Considerations

Must be disposed of or incinerated in accordance with local regulations.  
A waste code in accordance with the European waste catalog (EWC) cannot be specified, due to dependence on the usage.  
Observe national and local legal requirements.

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## 14. Transport Information

### Domestic transport:

Not classified as a dangerous good under transport regulations

### Sea transport IMDG

Not classified as a dangerous good under transport regulations

### Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

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## 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.

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## 16. Other Information

Any other intended applications should be discussed with the manufacturer.

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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.