

# Safety data sheet

Page: 1/14

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

Date / Revised: 28.03.2025

Version: 7.0

Product: **OXOOIL 9 N**

(ID no. 30035083/SDS\_GEN\_00/EN)

Date of print 16.10.2025

## 1. Identification

### Product identifier

### **OXOOIL 9 N**

Chemical name: hydroformylation products of C8-alkenes, high-boiling

CAS Number: 68526-89-6

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

Relevant identified uses: solvent(s)

### 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

---

## 2. Hazards Identification

## Classification of the substance or mixture

### According to UN GHS criteria

Skin Sens. 1B

For the classifications not written out in full in this section the full text can be found in section 16.

## Label elements

### Globally Harmonized System (GHS)

Pictogram:



Signal Word:

Warning

Hazard Statement:

H317 May cause an allergic skin reaction.

Precautionary Statements (Prevention):

P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...
P261	Avoid breathing mist or vapour or spray.
P272	Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash 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

### 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.

---

### 3. Composition/Information on Ingredients

#### Substances

##### Chemical nature

Octene, hydroformylation products, high-boiling (Content (W/W): 100 %)

CAS Number: 68526-89-6

EC-Number: 271-237-7

##### Hazardous ingredients (GHS)

According to UN GHS criteria

Octene, hydroformylation products, high-boiling

Content (W/W):  $\geq 100\%$  -  $\leq 100\%$  Skin Sens. 1B  
H317

CAS Number: 68526-89-6

EC-Number: 271-237-7

For the classifications not written out in full in this section the full text can be found in section 16.

#### Mixtures

Not applicable

---

### 4. First-Aid Measures

#### Description of first aid measures

Remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and 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.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

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

**Indication of any immediate medical attention and special treatment needed**

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

---

**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.

---

**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.

Avoid contact with the skin, eyes and clothing.

Take off immediately all contaminated clothing.

**Environmental precautions**

Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants.

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.

---

**7. Handling and Storage****Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice. Avoid all direct contact with the substance/product. Ensure thorough ventilation of stores and work areas. Change clothes immediately after contamination.

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.

---

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

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

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) (f.e. EN 166) and face shield

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

### 9.1. Information on basic physical and chemical properties

State of matter:	liquid	
Form:	liquid	
Colour:	yellowish	
	clear to cloudy	
Odour:	almost odourless	
Odour threshold:	not determined	
pour point:	< -50 °C	(measured)
Boiling point:	294 °C	(measured)
	(1.013 hPa)	
Flammability:	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.	
Flash point:	131 °C	(ISO 2719, closed cup)
Auto-ignition temperature:	240 °C	(DIN 51794)
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
pH value:	4,5	(OECD Guideline 105)
	(258 mg/l, 20 °C)	
Viscosity, kinematic:	25,55 mm <sup>2</sup> /s	(DIN 51562)
	(20 °C)	
Viscosity, dynamic:	22 mPa.s	(calculated (from kinematic viscosity))
	(20 °C)	
Thixotropy:	not thixotropic	

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

Date / Revised: 28.03.2025

Version: 7.0

Product: **OXOIL 9 N**

(ID no. 30035083/SDS\_GEN\_00/EN)

Date of print 16.10.2025

Solubility in water: 8 - 258 mg/l  
(20 °C, pH 4,5 - 5,5)

Solubility (qualitative) solvent(s): organic solvents  
soluble

Partitioning coefficient n-octanol/water (log Kow): 6,1 - 11,2 (OECD Guideline 117)  
(23 °C; pH value: 6,1)

Vapour pressure: 4,1 hPa (OECD Guideline 104)  
(20 °C)  
static

Relative density: 0,8611  
(20 °C)

Density: 0,8611 g/cm3 (DIN 53217)  
(20 °C)  
liquid

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular form. -

**9.2. Other information****Information with regard to physical hazard classes**Explosives

Explosion hazard: Based on the chemical structure  
there is no indication of explosive  
properties.

Oxidizing properties

Fire promoting properties: Based on its structural properties  
the product is not classified as  
oxidizing.

Pyrophoric properties

Self-ignition temperature: Test type: Spontaneous self-  
ignition at room-temperature.

Based on its structural properties the product is not classified as self-  
igniting.

Self-heating substances and mixtures

Self heating ability: not applicable, the product is a liquid

Substances and mixtures, which emit flammable gases in contact with water

Formation of flammable gases:  
Forms no flammable gases in the presence of water.

Corrosion to metals

Corrosive effects to metal are not anticipated.

**Other safety characteristics**

pKA:

The substance does not dissociate.

Adsorption/water - soil: log KOC: > 5,63 (OECD Guideline 121)

Surface tension:

Based on chemical structure, surface  
activity is not to be expected.

SAPT-Temperature:

Study scientifically not justified.

Evaporation rate:

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

---

## 10. Stability and Reactivity

### Reactivity

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

Corrosion to metals: Corrosive effects to metal are not anticipated.

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.

---

## 11. Toxicological Information

### Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

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

Experimental/calculated data:

LD50 rat (oral): > 2.000 mg/kg (OECD Guideline 420)



(by inhalation): Study scientifically not justified.

LD50 rat (dermal): > 2.000 mg/kg (OECD Guideline 402)

#### 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:

Sensitization after skin contact possible.

Experimental/calculated data:

In-vitro test In vitro assay: skin sensitizing (In vitro skin sensitization test battery)

#### Germ cell mutagenicity

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture.

#### Carcinogenicity

Assessment of carcinogenicity:

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

#### Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

#### Developmental toxicity

Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

#### 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 substance-specific organotoxicity was observed after repeated administration to animals.

Aspiration hazard

No aspiration hazard expected.

---

## 12. Ecological Information

### Toxicity

#### Assessment of aquatic toxicity:

No toxic effects occur within the range of solubility. There is a high probability that the product is not acutely harmful to aquatic organisms. Based on long-term (chronic) toxicity study data, the product is very likely not harmful 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:

LL50 (96 h) > 100 mg/l, *Oncorhynchus mykiss* (OECD 203; ISO 7346; 84/449/EWG, C.1, semistatic)

The product has low solubility in the test medium. An eluate has been tested. The details of the toxic effect relate to the nominal concentration.

#### Aquatic invertebrates:

EL50 (48 h) > 100 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

The product has low solubility in the test medium. An eluate has been tested. The details of the toxic effect relate to the nominal concentration.

#### Aquatic plants:

EL50 (72 h) > 100 mg/l (growth rate), *Desmodesmus subspicatus* (OECD Guideline 201)

The product has low solubility in the test medium. An eluate has been tested. Limit concentration test only (LIMIT test). Nominal concentration.

EL10 (72 h) > 100 mg/l (growth rate), *Desmodesmus subspicatus* (OECD Guideline 201)

The product has low solubility in the test medium. An eluate has been tested. Limit concentration test only (LIMIT test). Nominal concentration.

EC50 (7 d) > 100 mg/l (growth rate), *Lemna gibba* (OECD Guideline 221, semistatic)

The product has low solubility in the test medium. A saturated solution has been tested. Limit concentration test only (LIMIT test). No effects at the highest test concentration.

EC10 (7 d) > 100 mg/l (growth rate), *Lemna gibba* (OECD Guideline 221, semistatic)

The product has low solubility in the test medium. A saturated solution has been tested. Limit concentration test only (LIMIT test). No effects at the highest test concentration.

#### Microorganisms/Effect on activated sludge:

EC50 (180 min) > 1.000 mg/l, (OECD Guideline 209, static)

#### Chronic toxicity to fish:

EC10 (36 d) > 10 mg/l, *Brachydanio rerio* (OECD Guideline 210, Flow through.)

The product has low solubility in the test medium. A saturated solution has been tested. Limit concentration test only (LIMIT test). No effects at the highest test concentration.

#### Chronic toxicity to aquatic invertebrates:

EC10 (21 d) > 10 mg/l, *Daphnia magna* (OECD Guideline 211, semistatic)

The product has low solubility in the test medium. A saturated solution has been tested. Limit concentration test only (LIMIT test). No effects at the highest test concentration.

**Assessment of terrestrial toxicity:**

Toxic effects have been observed in studies with terrestrial plants.

**Soil living organisms:**

LC50 (14 d) > 1.000 mg/kg, *Eisenia foetida* (OECD Guideline 207, artificial soil)

**Terrestrial plants:**

No observed effect concentration (21 d) 125 mg/l 125 mg/kg, *Brassica napus* (OECD Guideline 208)

**Other terrestrial non-mammals:**

No data available.

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

Biodegradable.

**Elimination information:**

97 - 100 % CO<sub>2</sub> formation relative to the theoretical value (42 d) (OECD 301B; ISO 9439; 92/69/EWG, C.4-C) (aerobic, activated sludge, domestic, non-adapted)

**Assessment of stability in water:**

According to structural properties, hydrolysis is not expected/probable.

**Information on Stability in Water (Hydrolysis):**

The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

**Bioaccumulative potential****Assessment bioaccumulation potential:**

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

**Bioaccumulation potential:**

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

**Mobility in soil****Assessment transport between environmental compartments:**

Volatility: No data available.

Adsorption in soil: Adsorption to solid soil phase is expected.

**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

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

Date / Revised: 28.03.2025

Version: 7.0

Product: **OXOIL 9 N**

(ID no. 30035083/SDS\_GEN\_00/EN)

Date of print 16.10.2025

(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.

---

## 13. Disposal Considerations

### Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

---

## 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
Special precautions for user	None known

### Inland waterway transport

ADN

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

---

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

Date / Revised: 28.03.2025

Version: 7.0

Product: **OXOIL 9 N**

(ID no. 30035083/SDS\_GEN\_00/EN)

Date of print 16.10.2025

---

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

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

**Air transport**

## IATA/ICAO

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

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

Maritime transport in bulk is not intended.

---

**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.

---

## 16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Skin Sens.

Skin sensitization

H317

May cause an allergic skin reaction.

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.

---

Vertical lines in the left hand margin indicate an amendment from the previous version.