

# Safety data sheet

Page: 1/12

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

## 1. Identification

### Product identifier

## Ibuprofen Sodium Dihydrate

Chemical name: Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)-, sodium salt, dihydrate

CAS Number: 31121-93-4

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

Relevant identified uses: Pharmaceutical agent

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

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Nutrition and Health

Telephone: +49 621 60-48434

E-mail address: EN-global-safety-data@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

| Acute Tox. 4 (oral)

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

Skin Corr./Irrit. 3  
 Eye Dam./Irrit. 2B  
 STOT SE 3 (irritating to respiratory system)  
 Aquatic Acute 3

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:

H320	Causes eye irritation.
H316	Causes mild skin irritation.
H302	Harmful if swallowed.
H335	May cause respiratory irritation.
H402	Harmful to aquatic life.

Precautionary Statements (Prevention):

P271	Use only outdoors or in a well-ventilated area.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P270	Do not eat, drink or smoke when using this product.
P264	Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P330	Rinse mouth.
P337 + P311	If eye irritation persists: Call a POISON CENTER or doctor/physician.
P332 + P313	If skin irritation occurs: Get medical advice/attention.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

P501

Dispose of contents/container to hazardous or special waste collection point.

### Other hazards

According to UN GHS criteria

The product is under certain conditions capable of dust explosion. The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

---

## 3. Composition/Information on Ingredients

### Substances

Chemical nature

Sodium 2-(4-isobutylphenyl)propionate

CAS Number: 31121-93-4

EC-Number: 250-477-6

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

Immediately remove contaminated clothing. If adverse health effects develop seek medical attention. First aid personnel should pay attention to their own safety.

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:

---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

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

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

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

### **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:

water spray, dry powder, carbon dioxide, foam

Unsuitable extinguishing media for safety reasons:

water jet

Additional information:

Avoid whirling up the material/product because of the danger of dust explosion.

### **Special hazards arising from the substance or mixture**

carbon oxides

Dust explosion hazard. Burning produces harmful and toxic fumes.

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

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

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, protective equipment and emergency procedures**

Avoid dust formation. Ensure adequate ventilation. Use personal protective clothing. Information regarding personal protective measures see, section 8.

### **Environmental precautions**

Do not discharge into drains/surface waters/groundwater.

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

For small amounts: Pick up with suitable appliance and dispose of.

---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

For large amounts: Pick up with suitable appliance and dispose of.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Cleaning operations should be carried out only while wearing breathing apparatus.

---

## 7. Handling and Storage

### Precautions for safe handling

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

Protection against fire and explosion:

The product is capable of dust explosion. Avoid dust formation. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy. Use explosion-proof apparatus and fittings.

### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed. Protect contents from the effects of light.

### 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

### Control parameters

#### Components with occupational exposure limits

No occupational exposure limits known.

### Exposure controls

#### Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

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.

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

Manufacturer's directions for use should be observed because of great diversity of types.

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

Do not breathe dust. Avoid contact with the skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice. Hands and/or face should be washed before breaks and at the end of the shift.

## 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Form:	crystalline, powder
Colour:	white
Odour:	faint odour
Odour threshold:	
	not determined
pH value:	8 - 10 (10 %(m), 20 °C)
melting range:	> 200 °C
Boiling point:	
	The substance / product decomposes therefore not determined.
Flash point:	
	not applicable, the product is a solid
Evaporation rate:	
	The product is a non-volatile solid.
Flammability:	not determined
Lower explosion limit:	
	For solids not relevant for classification and labelling.
Upper explosion limit:	
	For solids not relevant for classification and labelling.
Vapour pressure:	
	negligible
Relative vapour density (air):	
	The product is a non-volatile solid.
Solubility in water:	
	< 100 g/l (20 °C)

---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

Partitioning coefficient n-octanol/water (log Kow): 0,35 (calculated)  
(25 °C)

Thermal decomposition: No data available.

Viscosity, dynamic:

Explosion hazard: not applicable, the product is a solid  
Product is not explosive, however a  
dust explosion could result from an  
air / dust mixture.

Fire promoting properties: not fire-propagating

### Other information

Self heating ability: No data available.

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

---

## 10. Stability and Reactivity

### Reactivity

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

### Chemical stability

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

### Possibility of hazardous reactions

Dust explosion hazard.

### Conditions to avoid

Avoid dust formation. Avoid electro-static charge.

### Incompatible materials

Substances to avoid:  
strong oxidizing agents

### Hazardous decomposition products

:

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

---

## 11. Toxicological Information

### Information on toxicological effects

Acute toxicity

---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

Assessment of acute toxicity:

Of moderate toxicity after 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): 636 mg/kg

Literature data.

#### Irritation

Assessment of irritating effects:

May cause slight irritation to the skin. Eye contact causes irritation. Causes temporary irritation of the respiratory tract. 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: Slightly irritating.

Serious eye damage/irritation: Irritant.

#### 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 substance was not mutagenic in a test with mammals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### Carcinogenicity

Assessment of carcinogenicity:

In long-term animal studies in which the substance was given in high doses by feed, a carcinogenic effect was not observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### Developmental toxicity

Assessment of teratogenicity:



---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

No indications of a developmental toxic / teratogenic effect were seen 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

No aspiration hazard expected.

---

## 12. Ecological Information

### Toxicity

Assessment of aquatic toxicity:

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Acutely harmful for aquatic organisms.

Toxicity to fish:

LC50 (96 h) 173 mg/l, *Lepomis macrochirus* (Screening test, static)

Nominal concentration.

no data

Aquatic invertebrates:

EC50 (48 h) 29,6 mg/l, *Daphnia magna* (Daphnia test acute)

Aquatic plants:

EC50 (96 h) 20,5 mg/l (growth rate), *Skeletonema costatum* (static)

### Persistence and degradability

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

Not readily biodegradable (by OECD criteria). Moderately/partially biodegradable. The product has not been tested. The statement has been derived from substances/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 not to be expected.

### Mobility in soil

Assessment transport between environmental compartments:

Volatility: The substance will not evaporate into the atmosphere from the water surface.

Adsorption in soil: Adsorption to solid soil phase is not expected.

### Results of PBT and vPvB assessment

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. 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

Observe national and local legal requirements.

---

## 14. Transport Information

### Land transport

ADR

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

---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

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: 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: 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 bulk according to Annex II of MARPOL and the IBC Code**

Regulation: Not evaluated  
Shipment approved: Not evaluated  
Pollution name: Not evaluated  
Pollution category: Not evaluated  
Ship Type: Not evaluated

---

---

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 30.03.2018

Version: 2.0

Product: **Ibuprofen Sodium Dihydrate**

(ID no. 30260589/SDS\_GEN\_IL/EN)

Date of print 28.04.2023

---

## 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

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

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

Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
STOT SE	Specific target organ toxicity — single exposure
Aquatic Acute	Hazardous to the aquatic environment - acute

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.