



# SAFETY DATA SHEETS

According to the UN GHS revision 9

Version: 1.0  
Creation Date: July 15, 2019  
Revision Date: July 15, 2019

## SECTION 1: Identification

### 1.1 GHS Product identifier

Product name Ibuprofen

### 1.2 Other means of identification

Product number

-

Other names

Andran; Bluton; 2-(4-Isobutylphenyl)propanoic acid

### 1.3 Recommended use of the chemical and restrictions on use

Identified uses

Industrial and scientific research use.

Uses advised against

no data available

### 1.4 Supplier's details

Company

Shanghai Yien Chemical Technology Co., Ltd

Address

Building 6, 28 Yingong Road, Fengxian District, Shanghai  
Chemical Industry Zone, Shanghai, 201400, China

Telephone

+86-400-133-2688

### 1.5 Emergency phone number

Emergency phone  
number

+86-400-133-2688

Service hours

Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT  
+8 hours).

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

Acute toxicity - Category 4, Oral

Specific target organ toxicity – single exposure, Category 3

### 2.2 GHS label elements, including precautionary statements

Pictogram(s)



Signal word

Warning

Hazard statement(s)

H302 Harmful if swallowed  
H320 Causes eye irritation  
H335 May cause respiratory irritation

Precautionary statement(s)

Prevention

P264 Wash ... thoroughly after handling.

<b>Response</b>	<p>P270 Do not eat, drink or smoke when using this product.</p> <p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray.</p> <p>P271 Use only outdoors or in a well-ventilated area.</p> <p>P301+P317 IF SWALLOWED: Get medical help.</p> <p>P330 Rinse mouth.</p> <p>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</p> <p>P319 Get medical help if you feel unwell.</p>
<b>Storage</b>	<p>P403+P233 Store in a well-ventilated place. Keep container tightly closed.</p> <p>P405 Store locked up.</p>
<b>Disposal</b>	<p>P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.</p>

### 2.3 Other hazards which do not result in classification

no data available

---

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Ibuprofen	Ibuprofen	15687-27-1	239-784-6	100%

---

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

#### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

### 4.2 Most important symptoms/effects, acute and delayed

no data available

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

When acute overdosage of ibuprofen occurs, the stomach should be emptied by inducing emesis or by lavage, particularly if there is evidence that the drug has been ingested recently (within 1 hour), and standard measures to maintain urine output should be instituted. Since ibuprofen is acidic and is excreted in the urine, alkaline diuresis might be beneficial.

---

## SECTION 5: Fire-fighting measures

### 5.1 Suitable extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

## **5.2 Specific hazards arising from the chemical**

no data available

## **5.3 Special protective actions for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

---

## **SECTION 6: Accidental release measures**

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

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **6.2 Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### **6.3 Methods and materials for containment and cleaning up**

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

---

## **SECTION 7: Handling and storage**

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

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

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

Preparations containing ibuprofen tablets should be stored in well closed, light resistant containers at 15-30 deg C.

---

## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

#### **Occupational Exposure limit values**

no data available

#### **Biological limit values**

no data available

### **8.2 Appropriate engineering controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### **8.3 Individual protection measures, such as personal protective equipment (PPE)**

#### **Eye/face protection**

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

#### **Skin protection**

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Respiratory protection**

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

**Thermal hazards**

no data available

---

**SECTION 9: Physical and chemical properties and safety characteristics**

<b>Physical state</b>	Solid. Crystalline.
<b>Colour</b>	Colorless.
<b>Odour</b>	Characteristic odor
<b>Melting point/freezing point</b>	75 - 77 °C.
<b>Boiling point or initial boiling point and boiling range</b>	154 - 157 °C. Atm. press.:5.32 hPa.
<b>Flammability</b>	no data available
<b>Lower and upper explosion limit/flammability limit</b>	no data available
<b>Flash point</b>	216.7 °C.
<b>Auto-ignition temperature</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	no data available
<b>Solubility</b>	In water: 0.011 g/L. Temperature:25 °C. Remarks:PH value is not reported..Readily soluble in most organic solvents.
<b>Partition coefficient n-octanol/water</b>	log Pow = 3.87. Temperature:25 °C. Remarks:PH value is not reported.
<b>Vapour pressure</b>	0 hPa. Temperature:25 °C.
<b>Density and/or relative density</b>	1.18 g/cm <sup>3</sup> .
<b>Relative vapour density</b>	no data available
<b>Particle characteristics</b>	no data available

---

**SECTION 10: Stability and reactivity****10.1 Reactivity**

no data available

**10.2 Chemical stability**

STABLE

**10.3 Possibility of hazardous reactions**

no data available

**10.4 Conditions to avoid**

no data available

**10.5 Incompatible materials**

no data available

**10.6 Hazardous decomposition products**

When heated to decomposition it emits acrid smoke and fumes.

---

## SECTION 11: Toxicological information

### Acute toxicity

- Oral: LD50 - rat (male) - ca. 1 600 mg/kg bw. Remarks: The approximate LD50 was 1600 mg/kg bw.
- Inhalation: no data available
- Dermal: no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

### STOT-single exposure

no data available

### STOT-repeated exposure

no data available

### Aspiration hazard

no data available

---

## SECTION 12: Ecological information

### 12.1 Toxicity

- Toxicity to fish: LC50 - *Lepomis macrochirus* - 173 mg/L - 96 h.
- Toxicity to daphnia and other aquatic invertebrates: EC50 - *Daphnia magna* - 36.6 mg/L - 48 h.
- Toxicity to algae: EC50 - *Desmodesmus subspicatus* (previous name: *Scenedesmus subspicatus*) - 342.2 mg/L - 72 h.
- Toxicity to microorganisms: IC50 - *Vibrio fischeri* - 800 mg/L - 15 min.

### 12.2 Persistence and degradability

AEROBIC: Ibuprofen has shown to be inherently biodegradable by sewage treatment(1). However, analysis of activated sludge from the wastewater treatment plant at Gossau, Switzerland indicates that a residence time in excess of 6 hours is required for complete removal of ibuprofen(2). A half-life of 20 days was determined from a study using water samples from lake Greifensee, Switzerland that were incubated at room temperature for 37 days with 200 ng/l racemic ibuprofen(2). Influent concentration of 0.3 ug/l in Brazilian treatment plants showed a removal efficiency of ranging from 22-75%(3).

### 12.3 Bioaccumulative potential

An estimated BCF of 3 was calculated for ibuprofen(SRC), using a log Kow of 3.97(1) and a regression-derived equation(2). According to a classification scheme(3), this BCF suggests the potential for bioconcentration in aquatic organisms is low(SRC).

## 12.4 Mobility in soil

The Koc of ibuprofen is estimated as 3,400(SRC), using a log Kow of 3.97(1) and a regression-derived equation(2). According to a classification scheme(3), this estimated Koc value suggests that ibuprofen is expected to have slight mobility in soil. The pKa of ibuprofen is 4.91(4), indicating that this compound will primarily exist in the dissociated form in the environment and anions generally do not adsorb to organic carbon and clay more strongly than their neutral counterparts(5).

## 12.5 Other adverse effects

no data available

---

# SECTION 13: Disposal considerations

## 13.1 Disposal methods

### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

---

# SECTION 14: Transport information

## 14.1 UN Number

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

## 14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

## 14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

## 14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. (For reference only, please check.)

IMDG: Not dangerous goods. (For reference only, please check.)

IATA: Not dangerous goods. (For reference only, please check.)

## 14.5 Environmental hazards

ADR/RID: No

IMDG: No

IATA: No

## 14.6 Special precautions for user

no data available

## 14.7 Transport in bulk according to IMO instruments

no data available

---

# SECTION 15: Regulatory information

## 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Ibuprofen	Ibuprofen	15687-27-1	239-784-6
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Not Listed.
Korea Existing Chemicals List (KECL)			Listed.

## SECTION 16: Other information

### Information on revision

Creation Date July 15, 2019

Revision Date July 15, 2019

### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

**Any questions regarding this SDS, Please send your inquiry to [sds@xixisys.com](mailto:sds@xixisys.com)**

*Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.*