1. Identification

Product identifier used on the label

Ibuprofen Sodium Dihydrate

Recommended use of the chemical and restriction on use
Recommended use*: Pharmaceutical

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification
Synonyms: Sodium 2-(4-isobutylphenyl)propionate

2. Hazards Identification


Classification of the product

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Classification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox.</td>
<td>4 (oral)</td>
<td>Acute toxicity</td>
</tr>
<tr>
<td>Eye Dam./Irrit.</td>
<td>2B</td>
<td>Serious eye damage/eye irritation</td>
</tr>
<tr>
<td>STOT SE</td>
<td>3 (irritating to respiratory system)</td>
<td>Specific target organ toxicity — single exposure</td>
</tr>
<tr>
<td>Aquatic Acute</td>
<td>3</td>
<td>Hazardous to the aquatic environment - acute</td>
</tr>
<tr>
<td>Combustible Dust</td>
<td>Combustible Dust (1)</td>
<td>Combustible Dust</td>
</tr>
</tbody>
</table>

Label elements
Signal Word:
Warning

Hazard Statement:
May form combustible dust concentration in air.
H320 Causes eye 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.

Precautionary Statements (Storage):
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Precautionary Statements (Disposal):
P501 Dispose of contents/container to hazardous or special waste collection point.

Hazards not otherwise classified

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.

Labeling of special preparations (GHS):
The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 80 - 100 %

3. Composition / Information on Ingredients


<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>31121-93-4</td>
<td>90.0 - 94.0%</td>
<td>Benzeneacetic acid, .alpha.-methyl-4-(2-methylpropyl)-, sodium salt</td>
</tr>
</tbody>
</table>
4. First-Aid Measures

**Description of first aid measures**

**General advice:**
Remove contaminated clothing.

**If inhaled:**
Keep patient calm, remove to fresh air. If symptoms persist, seek medical advice.

**If on skin:**
Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

**If in eyes:**
Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

**If swallowed:**
Rinse mouth and then drink plenty of water. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. 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**

**Note to physician**
**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**

Hazards during fire-fighting:
carbon oxides
Dust explosion hazard. Burning produces harmful and toxic fumes.
Advice for fire-fighters
Protective equipment for fire-fighting:
Wear self-contained breathing apparatus and chemical-protective clothing.

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

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.

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental release measures

Further accidental release measures:
Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

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.
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.

Nonsparking tools should be used.

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:
Avoid whirling up the material/product because of the danger of dust explosion. Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

Conditions for safe storage, including any incompatibilities
Further information on storage conditions: Keep container tightly closed. Protect contents from the effects of light.

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

**Advice on system design:**
It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

**Personal protective equipment**

**Respiratory protection:**
Wear a NIOSH-certified (or equivalent) particulate respirator.

**Hand protection:**
Chemical resistant protective gloves

**Eye protection:**
Wear safety goggles (chemical goggles) if there is potential for airborne dust exposures.

**Body protection:**
Body protection must be chosen based on level of activity and exposure.

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

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>crystalline, powder</td>
</tr>
<tr>
<td>Odour</td>
<td>faint odour</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>not determined</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>pH value</td>
<td>8 - 10</td>
</tr>
<tr>
<td>(10 % (m), 20 °C)</td>
<td></td>
</tr>
<tr>
<td>Melting range</td>
<td>&gt; 200 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>The substance / product decomposes therefore not determined.</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable, the product is a solid</td>
</tr>
<tr>
<td>Flammability</td>
<td>not determined</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>For solids not relevant for classification and labelling.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>For solids not relevant for classification and labelling.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>negligible</td>
</tr>
<tr>
<td>Vapour density</td>
<td>The product is a non-volatile solid.</td>
</tr>
</tbody>
</table>
10. Stability and Reactivity

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

Oxidizing properties:
not fire-propagating

**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**
strong oxidizing agents

**Hazardous decomposition products**

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

Thermal decomposition:
No data available.

11. Toxicological information

**Primary routes of exposure**
Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

**Acute Toxicity/Effects**

**Acute toxicity**
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.

**Oral**
Type of value: LD50
Species: rat
Value: 636 mg/kg
Literature data.

Irritation / corrosion
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.

Skin
Result: Slightly irritating.

Eye
Result: Irritant.

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.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Genetic toxicity
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.

Teratogenicity
Assessment of teratogenicity: 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.

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

12. Ecological Information

Toxicity
Aquatic 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 (H2O)
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
The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is not expected.

13. Disposal considerations

Waste disposal of substance:
Dispose of in a licensed facility. Dispose of in accordance with national, state and local regulations. Do not discharge into waterways or sewer systems without proper authorization.

Container disposal:
Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
USDOT
Not classified as a dangerous good under transport regulations

Sea transport
IMDG
Not classified as a dangerous good under transport regulations
15. Regulatory Information

**Federal Regulations**

**Registration status:**

- Chemical: TSCA, US blocked / not listed
- Pharma: TSCA, US released / exempt

**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

**CERCLA RQ**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000 LBS</td>
<td>n-hexane</td>
</tr>
</tbody>
</table>

**Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:**

**WARNING:** This product can expose you to chemicals including N-HEXANE, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

**NFPA Hazard codes:**

- Health: 2
- Flammability: 1
- Reactivity: 0
- Special:

**HMIS III rating**

- Health: 2
- Flammability: 1
- Physical hazard: 0

16. Other Information

**SDS Prepared by:**

- BASF NA Product Regulations
- SDS Prepared on: 2018/09/10

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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