Material Safety Data Sheet
Ibuprofen

Section 1 - Chemical Product and Company Identification

MSDS Name: Ibuprofen
Catalog Numbers: 25861-0000, 25861-0010, 25861-0100
Synonyms: alpha-Methyl-4-(2-methylpropyl)benzeneacetic acid; p-Isobutylhydratropic acid; 2-(4-Isobutylphenyl)-propionic acid

Company Identification: Acros Organics BVBA
Janssen Pharmaceuticalalaan 3a
2440 Geel, Belgium

Company Identification: (USA)
Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>%</th>
<th>EINECS#</th>
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<tr>
<td>15687-27-1</td>
<td>Ibuprofen</td>
<td>99%</td>
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</table>

Hazard Symbols: XN N
Risk Phrases: 22 51/53 63

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Harmful if swallowed. Possible risk of harm to the unborn child. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects
Eye: May cause eye irritation.
Skin: May cause skin irritation. May be harmful if absorbed through the skin. Harmful if swallowed. May cause irritation of the digestive tract. May cause perforation of the digestive tract. Substance poses serious aspiration hazard. May cause alopecia (loss of hair). May cause central nervous system effects. May result in Stevens-Johnson syndrome. May cause hemolytic anemia. May cause headache, nausea, fatigue, and dizziness. Ingestion may cause renal failure.
Inhalation: May cause respiratory tract irritation. May be harmful if inhaled.
Chronic: Possible risk of harm to the unborn child.

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Get medical aid. Wash mouth out with water. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.
Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

Section 7 - Handling and Storage

Handling: Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Avoid ingestion and inhalation.
Storage: Store in a cool, dry place. Store in a tightly closed container.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.
Exposure Limits

CAS# 15687-27-1:
Personal Protective Equipment

Eyes: Wear chemical splash goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder

Color: white

Odor: Not available

pH: Not available

Vapor Pressure: Not available

Viscosity: Not available

Boiling Point: 157 deg C @4mmHg (314.60°F)

Freezing/Melting Point: 75 - 78 deg C

Autoignition Temperature: Not available

Flash Point: Not available

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

Decomposition Temperature: Not available

Solubility in water: Insoluble

Specific Gravity/Density:

Molecular Formula: C13H18O2

Molecular Weight: 206.27
Section 10 - Stability and Reactivity

Chemical Stability: Stable.
Conditions to Avoid: Incompatible materials, dust generation.
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 15687-27-1: MU6640000
RTECS:
CAS# 15687-27-1: Oral, mouse: LD50 = 740 mg/kg;
Oral, rabbit: LD50 = 1400 mg/kg;
Oral, rat: LD50 = 636 mg/kg;
LD50/LC50: 
Other: Ibuprofen - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop
Carcinogenicity: 65.

Other: The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information. Possible teratogen.

Section 12 - Ecological Information

Ecotoxicity: Fish: Bluegill/Sunfish: LC50: 173 mg/L; 96H; .
Daphnia: Daphnia: EC50: 9.06-11.5 mg/L; 48H; .
Other: Do not empty into drains. Readily biodegradable.
Biodegradability: 10-60% (28d) (OECD Guide-line 301 B: Modified Sturm Test)31.1% (28d) (OECD Guide-line 301 D: Closed Bottle Test)log Pow: 3.94

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>IATA Shipping Name:</th>
<th>IMO Shipping Name:</th>
<th>RID/ADR Shipping Name:</th>
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<td>UN Number: 3077</td>
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</table>
Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN N

Risk Phrases:

R 22 Harmful if swallowed.
R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 63 Possible risk of harm to the unborn child.

Safety Phrases:

S 36/37 Wear suitable protective clothing and gloves.
S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 15687-27-1: Not available

Canada

CAS# 15687-27-1 is listed on Canada's DSL List

US Federal

TSCA

CAS# 15687-27-1 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 2/03/2000
Revision #1 Date 8/21/2006
Revisions were made in Sections: 1, 2, 3, 4, 6, 7, 8, 9, 10, 11

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