Alpha Chemika
ISO 9001 QUALITY SYSTEM CERTIFIED ORGANIZATION
MATERIAL SAFETY DATA SHEET
MSDS
Savgan Heights ; 102 ,B Wing ; R.T.O. Lane ,Andheri (West) Mumbai - 400053 , INDIA

Section 1 - Chemical Product and Company Identification

Product Name : IBUPROFEN (powder)

Synonyms: Acide (isobutyl-4 phenyl)-2 propionique (French), Adran , Advil , Anflagen , Artril 300 , Benzeneacetic acid, alpha-methyl-4-(2-methylpropyl)- , Bluton , Brufanic , Brufen , Buburone , Butylenin , Dolgin , Epobron , Ibufen , Ibuprocin , Ibuprofen ,IP-82, p-Isobutylhydratropic acid ,4-Isobutylhydratropic acid ,2-(4-Isobutylphenyl)propanoic acid , alpha-p-Isobutylphenylpropionic acid ,alpha-(4-Isobutylphenyl)propionic acid ,2-(p-Isobutylphenyl)propionic acid , Lamidon ,Liptan , Motrin , Mynosedin , Napacetin ,Nobfelon , Nobfen , Nobgen , Nuprin , Nurofen , Paduden , Proflex , RD 13621 , Rebugen, Roidenin , Rufin , Unipron
CAS No.: 15687-27-1
Molecular Weight:
Chemical Formula: $C_{13}H_{18}O_2$

Section 2 - Composition, Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Ibuprofen	15687-27-1	98-100%	Yes

Section 3 - Hazardous Identification

EMERGENCY OVERVIEW
Harmful.
Harmful if swallowed.
Target organ(s): Kidneys.
HMIS RATING
HEALTH: 1*
FLAMMABILITY: 0
REACTIVITY: 0
NFPA RATING
HEALTH: 1
FLAMMABILITY: 0
REACTIVITY: 0

Section 4 - First Aid Measures

ORAL EXPOSURE
If swallowed, wash out mouth with water provided person is conscious. Call a physician.
INHALATION EXPOSURE
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
DERMAL EXPOSURE
In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.
EYE EXPOSURE
In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 - Fire Fighting Measures

FLASH POINT
N/A
AUTOIGNITION TEMP
N/A
FLAMMABILITY
N/A
EXTINGUISHING MEDIA
Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
FIREFIGHTING
Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific Hazard(s): Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area.
PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.
METHODS FOR CLEANING UP
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

Section 7 - Handling and Storage

HANDLING
User Exposure: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.
STORAGE
Suitable: Keep tightly closed.

Section 8 - Exposure Controls, Personal Protection

ENGINEERING CONTROLS
Safety shower and eye bath. Mechanical exhaust required.
PERSONAL PROTECTIVE EQUIPMENT
Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.
Hand: Compatible chemical-resistant gloves.
Eye: Chemical safety goggles.
GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

Section 9 - Physical and Chemical Properties

Appearance Physical State: Solid
Property Value At Temperature or Pressure
Molecular Weight 206.29 AMU
pH N/A
BP/BP Range N/A
MP/MP Range 77.0 - 78.0 °C
Freezing Point N/A
Vapor Pressure N/A Vapor
Density N/A Saturated
Vapor Conc. N/A
SG/Density N/A
Bulk Density N/A
Odor Threshold N/A
Volatile% N/A
VOC Content N/A
Water Content N/A
Solvent Content N/A
Evaporation Rate N/A
Viscosity N/A
Surface Tension N/A
Partition Coefficient N/A
Decomposition Temp. N/A
Flash Point N/A
Explosion Limits N/A
Flammability N/A
Autoignition Temp N/A
Refractive Index N/A
Optical Rotation N/A
Miscellaneous Data N/A
Solubility N/A
N/A = not available

Section 10 - Stability and Reactivity

STABILITY
Stable: Stable.
Materials to Avoid: Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.
HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE
Skin Contact: May cause skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: May cause eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: Harmful if swallowed.
SENSITIZATION
Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
TARGET ORGAN(S) OR SYSTEM(S)
Kidneys.
SIGNS AND SYMPTOMS OF EXPOSURE
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Clinical trials have shown the following possible adverse reactions: gastrointestinal disturbances including nausea, vomiting, cramps, diarrhea, constipation, bloating, central nervous system effects which include dizziness, headache, depression, insomnia, aseptic meningitis, somnolence, dermatological effects of maculopapular and vesiculobullous eruptions, urticaria, alopecia, erythema multiforme, stevens-johnson syndrome, hematologic effects of neutropenia, aplastic and hemolytic anemia, thrombocytopenia, decreases in hemoglobin and hematocrit.
TOXICITY DATA
Oral
Man
171 mg/kg
LDLO
Remarks: Behavioral:General anesthetic. Vascular:BP lowering not charactertized in autonomic section.
Oral
Child
469 mg/kg
LDLO
Remarks: Behavioral:Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration:Dyspnea.
Oral
Rat
636 mg/kg
LD50

Intraperitoneal
Rat
626 MG/KG
LD50
Remarks: Biochemical:Metabolism (intermediary): Effect on inflammation or mediation of inflammation. Nutritional and Gross Metabolic:Changes in:Body temperature decrease. Behavioral:Analgesia.
Subcutaneous
Rat
740 MG/KG
LD50
Rectal
Rat
530 MG/KG
LD50
Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Change in motor activity (specific assay). Gastrointestinal:Hypermotility, diarrhea.
Oral
Mouse
740 mg/kg
LD50
Remarks: Behavioral:Analgesia.
Intraperitoneal
Mouse
320 MG/KG
LD50
Remarks: Behavioral:Altered sleep time (including change in righting reflex). Gastrointestinal:Ulceration or bleeding from stomach.
Subcutaneous
Mouse
395 MG/KG
LD50
Rectal
Mouse
620 MG/KG
LD50
Remarks: Gastrointestinal:Hypermotility, diarrhea. Behavioral:Change in motor activity (specific assay). Behavioral:Altered sleep time (including change in righting reflex).
Oral
Rabbit
1400 mg/kg
LD50
Rectal
Rabbit
830 MG/KG
LD50
Oral
Guinea pig
495 mg/kg
LD50
Oral

Hamster
1690 mg/kg
LD50
Oral
Mammal
1000 mg/kg
LD50

CHRONIC EXPOSURE - TERATOGEN

Result: Laboratory experiments have shown teratogenic effects.
Species: Rat
Dose: 840 MG/KG
Route of Application: Oral
Exposure Time: (8-14D PREG)
Result: Effects on Newborn: Growth statistics (e.g., reduced weight gain). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).
Species: Rat
Dose: 10 MG/KG
Route of Application: Oral
Exposure Time: (21D PREG)
Result: Effects on Embryo or Fetus: Other effects to embryo.
Species: Rat
Dose: 810 MG/KG
Route of Application: Rectal
Exposure Time: (60D MALE/2W PRE-7D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).
Species: Mouse
Dose: 1260 MG/KG
Route of Application: Oral
Exposure Time: (7-13D PREG)
Result: Effects on Embryo or Fetus: Fetal death. Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

CHRONIC EXPOSURE - MUTAGEN

Species: Mouse
Route: Oral
Dose: 1470 MG/KG
Exposure Time: 7D
Mutation test: Cytogenetic analysis
Species: Mouse
Route: Intraperitoneal
Dose: 50 MG/KG
Mutation test: Sister chromatid exchange
Species: Mouse
Route: Oral
Dose: 270 MG/KG
Mutation test: Sister chromatid exchange

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Woman
Dose: 8 MG/KG
Route of Application: Oral
Exposure Time: (1D PRE)
Result: Maternal Effects: Menstrual cycle changes or disorders.
Species: Rat
Dose: 600 MG/KG

Route of Application: Oral
Exposure Time: (3-5D PREG)
Result: Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth). Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).
Species: Rat
Dose: 9750 MG/KG
Route of Application: Oral
Exposure Time: (65D MALE)
Result: Paternal Effects: Spermatogenesis (including genetic material, sperm morphology,motility, and count). Paternal Effects: Testes, epididymis, sperm duct.
Species: Rat
Dose: 2 MG/KG
Route of Application: Intrauterine
Exposure Time: (4D PREG)
Result: Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).
Species: Rat
Dose: 270 MG/KG
Route of Application: Rectal
Exposure Time: (17-21D PREG)
Result: Effects on Newborn: Live birth index (# fetuses per litter; measured after birth). Maternal Effects: Parturition.
Species: Rat
Dose: 891 MG/KG
Route of Application: Rectal
Exposure Time: (17-21D PREG/21D POST)
Result: Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).
Species: Rat
Dose: 1 GM/KG
Route of Application: Rectal
Exposure Time: (17-21D PREG/4D POST)
Result: Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive).
Species: Rat
Dose: 8100 MG/KG
Route of Application: Rectal
Exposure Time: (60D MALE/2W PRE-7D PREG)
Result: Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth).
Species: Mouse
Dose: 420 MG/KG
Route of Application: Oral
Exposure Time: (7-13D PREG)
Result: Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth). Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea).

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION
Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.
IATA
Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION
Symbol of Danger: Xn
Indication of Danger: Harmful.
R: 22
Risk Statements: Harmful if swallowed.
S: 36
Safety Statements: Wear suitable protective clothing.
US CLASSIFICATION AND LABEL TEXT
Indication of Danger: Harmful.
Risk Statements: Harmful if swallowed.
Safety Statements: Wear suitable protective clothing.
US Statements: Target organ(s): Kidneys.
UNITED STATES REGULATORY INFORMATION
SARA LISTED: No
TSCA INVENTORY ITEM: Yes
CANADA REGULATORY INFORMATION
WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
DSL: Yes
NDSL: No

Section 16 - Additional Information

Not Regulated