



## MATERIAL SAFETY DATA SHEET

NAME OF PRODUCT: Diclofenac Sodium      MSDS DATE: 19 July, 2011

### Notice

NSF Reference Standards are for test and assay use only and are not intended for human or animal consumption. This document communicates information relating to test and assay use only and may not be applicable for any unauthorized use.

#### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name:            Diclofenac Sodium  
Catalog Code:            RS1-0038  
Synonym:                 o - (2-6-Dichloroanilino) phenylacetic acid, sodium salt  
Chemical Formula:         $C_{14}H_{10}Cl_2NNaO_2$   
CAS #:                     15307-79-6

#### Contact Information:

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#### SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Name:                     Diclofenac Sodium

CAS#:                     15307-79-6

% by Weight:    100%

Toxicological Data on Ingredients:  
LD50 (mouse) 95 mg/kg, LD50 (Rat) 53 mg/kg

#### SECTION 3: HAZARDS IDENTIFICATION

#### Potential Acute Health Effects:

Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (sensitizer, permeator). Severe overexposure can result in death.



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Potential Chronic Health Effects:  
CARCINOGENIC EFFECTS: Not available.  
MUTAGENIC EFFECTS: Not available.  
TERATOGENIC EFFECTS: Not available.  
DEVELOPMENTAL TOXICITY: Not available.

Repeated or prolonged exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

### SECTION 4: FIRST AID MEASURES

**Eye Contact:**

Check for and remove contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes keeping eyelids open. Do not use eye ointment. Seek medical attention.

**Skin Contact:**

In case of contact, immediately wash skin with disinfectant soap and plenty of water. Cover the irritated skin with an emollient. Seek medical attention.

**Serious Skin Contact:**

Wash with a disinfecting soap and cover contaminated area with antibiotic cream. Seek immediate medical attention.

**Inhalation:**

If inhaled, remove to fresh air. Seek immediate medical attention.

**Serious Inhalation:**

Not available

**Ingestion:**

Do not induce vomiting. Loosen tight clothing. If victim is not breathing, perform mouth to mouth resuscitation. Seek immediate medical attention.

**Serious Ingestion:** Not available.

### SECTION 5: FIRE-FIGHTING MEASURES

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flammable Limits: Not available.

Flash Points: Not available

Products of Combustion: These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...), halogenated compounds.

Special Remarks on Explosion Hazards: Not available.

Fire Hazards in Presence of Various Substances: Not available.



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### Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Special Remarks on Fire Hazards: Not available

### Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder.

LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container. After powder clean up, spread water on the contaminated surface and dispose of according to local and regional authority requirements.

### Large Spill:

Use appropriate tools to put the material into a suitable waste disposal container. After powder clean up, spread water on the contaminated surface and dispose of according to local and regional authority requirements.

## SECTION 7: HANDLING AND STORAGE

### Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes.

### Storage:

Keep container tightly closed. Keep container in a cool, well-ventilated area. Protect from light.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls:

If laboratory operations generate dust, use local exhaust ventilation or other appropriate engineering controls to keep exposure to airborne contaminants below the exposure limit.

### Personal Protection:



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Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.  
Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance: Solid.

Odor: Odorless

Taste: Not available

Molecular Weight: 318.13 g/mol

Color: White

pH (1% soln/water): Not available

Boiling Point: Decomposes

Melting Point: 284 °C (543.2 °F)

Critical Temperature: Not available.

Specific Gravity: Not available.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.

Ionicity (in Water): Not available.

Dispersion Properties: See Solubility on Water.

Solubility: Soluble in cold water.

### SECTION 10: STABILITY AND REACTIVITY

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Not available.

Incompatibility with various substances: Not available.

Corrosivity: Non-corrosive in presence of glass

Special Remarks on Reactivity: Incompatible with acid chloride and acid anhydrides.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.



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### SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Eye Contact, Inhalation. Ingestion.

Toxicity to Animals: LD50 (mouse) 95 mg/kg, LD50 (Rat) 53 mg/kg

Chronic effects on Humans: Not available.

Other Toxic Effects on Humans:

Very hazardous in case of skin contact (irritant), of ingestion. Hazardous in case of inhalation. Slightly hazardous in case of skin contact (sensitizer, permeator).

Special Remarks on Toxicity to Animals: Not available

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available

### SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation:

The products of degradation are more toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available

### SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.



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### SECTION 14: TRANSPORT INFORMATION

DOT Classification: Class 6.1: Poisonous Material.  
Identification: Toxic Solid, n.o.s. (Diclofenac Sodium); UN2811 PG: III  
Special Provisions for Transport: Not applicable.

### SECTION 15: REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: Not Found

Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

Other Classifications:

WHMIS (Canada): Class D-1B: Material causing immediate and serious toxic effects (TOXIC). Class D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):

R22 – Toxic if swallowed. R36/38 – Irritating to eyes and skin.

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

### SECTION 16: OTHER INFORMATION



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References: Not available.

Other Special Considerations: Not available.

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