Material Safety Data Sheet
2,4'-Dibromoacetophenone, 98%

MSDS# 91812
Section 1 - Chemical Product and Company Identification

MSDS Name: 2,4'-Dibromoacetophenone, 98%
Catalog Numbers: AC112680000, AC112680100, AC112680500, AC112682500, BTB07599DA, BTB07599EA, BTB07599EE
Synonyms: 4'-Bromophenacyl Bromide; 2-Bromo-1-(4-Bromophenyl)Ethanone

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticalaan 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

CAS#: 99-73-0
Chemical Name: 2,4'-DIBROMOACETOPHENONE
%: 98
EINECS#: 202-783-6

Hazard Symbols: C
Risk Phrases: 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW
Danger! Corrosive. Lachrymator (substance which increases the flow of tears). Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. Target Organs: None.

Potential Health Effects
Eye: Causes eye burns. Lachrymator (substance which increases the flow of tears).
Skin: Causes skin burns.
Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns.
Inhalation: Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.
Chronic: None

Section 4 - First Aid Measures
Eyes: Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Autoignition Temperature: Not available

Flash Point: Not available

Explosion Limits: Lower: N/A

Explosion Limits: Upper: N/A

NFPA Rating: health: 3; flammability: 0; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Do not breathe dust, mist, or vapor. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Use with adequate ventilation. Use only in a chemical fume hood. Discard contaminated shoes. Store in a cool, dry place. Keep container closed when not in use. Store in a tightly closed container. Corrosives area.

Section 8 - Exposure Controls, Personal Protection

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
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<tbody>
<tr>
<td>2,4'-DIBROMOACETOPH</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
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<tr>
<td>ENONE</td>
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</tbody>
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OSHA Vacated PELs: 2,4'-DIBROMOACETOPHENONE: None listed

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a Respirators: 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: Solid
Color: slightly yellow
Odor: Not available
pH: Not available
Vapor Pressure: Not available
Vapor Density: 9.6
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: 1415 deg C @ 760.00mm Hg (2,579.00°F)
Freezing/Melting Point: 108 - 110 deg C
Decomposition Temperature: Not available
Solubility in water: insoluble
Specific Gravity/Density:

Molecular Formula: C8H6Br2O
Molecular Weight: 277.94

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.
Conditions to Avoid: Incompatible materials, dust generation.
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide, carbon monoxide, carbon dioxide, hydrogen bromide.
Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 99-73-0: AM6950000
LD50/LC50: RTECS: CAS# 99-73-0: Oral, mouse: LD50 = >2 gm/kg;
Carcinogenicity: 2,4'-DIBROMOACETOPHENONE - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Not available

Section 13 - Disposal Considerations

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

Section 14 - Transport Information

US DOT
Shipping Name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.
Hazard Class: 8
UN Number: UN3261
Packing Group: III
Canada TDG
Shipping Name: TOXIC SOLID CORROSIVE ORGANIC NOS (2,4'-DIBROMOACETOPHENONE)
Hazard Class: 6.108
UN Number: UN2928
Packing Group: II
European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:
R 34 Causes burns.

Safety Phrases:
S 25 Avoid contact with eyes.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 99-73-0: Not available

Canada

CAS# 99-73-0 is listed on Canada's DSL List

Canadian WHMIS Classifications: Not available

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 99-73-0 is not listed on Canada's Ingredient Disclosure List.

US Federal

TSCA

CAS# 99-73-0 is listed on the TSCA Inventory.

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