IDENTIFICATION

MSDS Record Number: 5618277
Product Name(s): 2,4-PENTANEDIONE
Product Identification: MSDS NUMBER: P0825
PRODUCT CODE: S926, S985
C.A.S. NUMBER: 123-54-6
Date of MSDS: 2006-08-17
Currency Note: This MSDS was acquired from the supplier on 2007-09-06.

MANUFACTURER/SUPPLIER INFORMATION

Company: MALLINCKRODT BAKER INC

MATERIAL SAFETY DATA

Effective Date: 08/17/06
Supercedes: 11/12/03

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MSDS MATERIAL SAFETY DATA SHEET
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From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865
Emergency Telephone Number: 908-859-2151

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

J. T. B A K E R

2,4-PENTANEDIONE

1. Product Identification

Synonyms: Acetoacetone; acetylacetone; diacetyl methane;
pentanedione
CAS No: 123-54-6
Molecular Weight: 100.11
Chemical Formula: CH3COCH2COCH3
4. First Aid Measures

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion:
Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

Skin Contact:
Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Wash clothes before reuse. Get medical attention if irritation develops or persists.

Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:
Flash point: 34C (93F) CC
Autoignition temperature: 335C (635F)
Flammable limits in air % by volume:
LEL: 2.4; UEL: 11.6
Flammable Liquid and Vapor!

Explosion:
Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Vapors can flow along surfaces to distant ignition source and flash back. Sensivel a descargas estáticas.

Fire Extinguishing Media:
Dry chemical, alcohol foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. This highly flammable liquid must be kept from sparks, open flame, hot surfaces, and all sources of heat and ignition.

6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

J. T. Baker SOLUSORB(R) solvent adsorbent is recommended for spills of this product.
10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:
Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:
Will not occur.

Incompatibilities:
Oxidizing agents, zinc, copper, nickel and related alloys.

Conditions to Avoid:
Heat, flame, ignition sources, air, light and incompatibles.

11. Toxicological Information

Oral rat LD50: 55 mg/kg; skin rabbit LD50: 810 mg/kg; Irritation skin rabbit 488 mg open mildly irritating; irritation eye rabbit 20 mg severely irritating; inhalation rat LCLo: 1000 ppm/4H; investigated as a mutagen, reproductive effector.

\[\text{Cancer Lists}\]

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>NTP Carcinogen--</th>
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<tbody>
<tr>
<td>2,4-Pentanedione (123-54-6)</td>
<td>Known Anticipated</td>
</tr>
<tr>
<td>2,4-Pentanedione (123-54-6)</td>
<td>No No</td>
</tr>
</tbody>
</table>

12. Ecological Information

Environmental Fate:
When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into water, this material may biodegrade to a moderate extent. This material has a log octanol-water partition coefficient of less than 3.0. This material is not expected to significantly bioaccumulate. When released into the air, this material may be moderately degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to be readily removed from the atmosphere by wet deposition. When released into air, this material is expected to have a half-life between 10 and 30 days.

Environmental Toxicity:
96 Hr LC50 Pimephales promelas: 104 mg/L [flow-through];
96 Hr LC50 Lepomis macrochirus: 29 mg/L;
48 Hr EC50 Daphnia magna: 34.4 mg/L.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a
16. Other Information

NFPA Ratings:
Health: 2 Flammability: 2 Reactivity: 0

Label Hazard Warning:
WARNING! FLAMMABLE LIQUID AND VAPOR. HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM.

Label Precautions:
Keep away from heat, sparks and flame.
Keep container closed.
Use with adequate ventilation.
Avoid breathing vapor.
Wash thoroughly after handling.
Avoid contact with eyes, skin and clothing.

Label First Aid:
In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person. In all cases, get medical attention.

Product Use:
For Laboratory, Research or Manufacturing Use.

Revision Information:
MSDS Section(s) changed since last revision of document include: 3, 12.

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