### Material Safety Data Sheet

#### Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
<th>Personal Protective Equipment</th>
</tr>
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<tbody>
<tr>
<td><img src="1" alt="NFPA" /> <img src="2" alt="HMIS" /> <img src="0" alt="PPE" /></td>
<td><img src="2" alt="Health Hazard" /> <img src="1" alt="Fire Hazard" /> <img src="0" alt="Reactivity" /></td>
<td>![PPE](See Section 15.)</td>
</tr>
</tbody>
</table>

**Phenylbutazone**

**Catalog Number(s).** P2208, YY943, PH148  
**CAS#** 50-33-9  
**RTECS** UQ8225000  
**TSCA** TSCA 8(b) inventory: Phenylbutazone  
**CI#** Not available.

**Manufacturer**  
SPECTRUM CHEMICAL MFG. CORP.  
14422 S. SAN PEDRO STREET  
GARDENA, CA 90248

**Commercial Name(s)** Not available.  
**Synonym** 4-Butyl-1,2-diphenyl-3,5-pyrazolidinedione

**Chemical Name**  
**Chemical Family** Not available.  
**Chemical Formula** C19H20N2O2

**Supplier**  
SPECTRUM CHEMICAL MFG. CORP.  
14422 S. SAN PEDRO STREET  
GARDENA, CA 90248

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#### Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Phenylbutazone</td>
<td>50-33-9</td>
<td></td>
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<td></td>
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</table>

**Toxicological Data on Ingredients**  
**Phenylbutazone:**  
**ORAL (LD50):**  
Acute: 245 mg/kg [Rat]. 238 mg/kg [Mouse].

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#### Section 3. Hazards Identification

**Potential Acute Health Effects**  
Hazardous in case of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (irritant, permeator), of inhalation.

**Potential Chronic Health Effects**  
**CARCINOGENIC EFFECTS:** Not available.  
**MUTAGENIC EFFECTS:** Not available.  
**TERATOGIC EFFECTS:** Not available.  
**DEVELOPMENTAL TOXICITY:** Not available.  
The substance is toxic to lungs, mucous membranes.  
Repeated or prolonged exposure to the substance can produce target organs damage.

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*Continued on Next Page*
Section 4. First Aid Measures

Eye Contact
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact
After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

Serious Skin Contact
Not available.

Inhalation
Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation
Not available.

Ingestion
Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion
Not available.

Section 5. Fire and Explosion Data

Flammability of the Product
May be combustible at high temperature.

Auto-Ignition Temperature
Not available.

Flash Points
Not available.

Flammable Limits
Not available.

Products of Combustion
These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Fire Hazards in Presence of Various Substances
Not available.

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.

Fire Fighting Media and Instructions
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards
Not available.

Special Remarks on Explosion Hazards
Not available.

Section 6. Accidental Release Measures

Small Spill
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.
Section 7. Handling and Storage

Precautions
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with eyes. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.

Storage
Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

Section 8. Exposure Controls/Personal Protection

Engineering Controls
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection
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.

Molecular Weight
308.38 g/mole

pH (1% soln/water)
Not available.

Boiling Point
Not available.

Melting Point
105°C (221°F)

Critical Temperature
Not available.

Specific Gravity
Not available.

Vapor Pressure
Not applicable.

Vapor Density
Not available.

Volatile
Not available.

Odor Threshold
Not available.

Water/Oil Dist. Coeff.
Not available.

Ionicity (in Water)
Not available.

Dispersion Properties
Not available.

Solubility
Very slightly soluble in cold water.

Section 10. Stability and Reactivity Data

Stability
The product is stable.

Instability Temperature
Not available.

Conditions of Instability
Not available.

Incompatibility with various substances
Not available.

Continued on Next Page
### Section 11. Toxicological Information

**Routes of Entry**  
Eye contact. Ingestion.

**Toxicity to Animals**  
Acute oral toxicity (LD50): 238 mg/kg [Mouse].

**Chronic Effects on Humans**  
The substance is toxic to lungs, mucous membranes.

**Other Toxic Effects on Humans**  
Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant, permeator), of inhalation.

**Special Remarks on Toxicity to Animals**  
Not available.

**Special Remarks on Chronic Effects on Humans**  
Passes through the placental barrier in animal. Excreted in maternal milk in human.

**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.

**Special Remarks on the Products of Biodegradation**  
Not available.

### Section 13. Disposal Considerations

**Waste Disposal**  
Not available.

### Section 14. Transport Information

**DOT Classification**  
Not a DOT controlled material (United States).

**Identification**  
Not applicable.

**Special Provisions for Transport**  
Not applicable.
DOT (Pictograms)

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations
TSCA 8(b) inventory: Phenylbutazone

California Proposition 65 Warnings

Other Regulations

Other Classifications

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

DSCL (EEC) R36- Irritating to eyes.

HMIS (U.S.A.)

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Fire Hazard</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>E</td>
</tr>
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</table>

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

Flammability 1
Reactivity 0
Specific hazard

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment

Gloves.

Lab coat.

Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Continued on Next Page
Splash goggles.

### Section 16. Other Information

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>4140P</th>
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<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Special Considerations</td>
<td>Not available.</td>
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</tbody>
</table>


**CALL (310) 516-8000**

**Notice to Reader**

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.