


Section 1: Identification

Common Name/Trade Name	Phenylbutazone USP	
Supplier Information	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	IN CASE OF EMERGENCY: Chemtrec 1 (800) 424-9300 (24 hours)
Product Synonym(s)	Phenylbutazone. 3,5-Pyrazolidinedione, 4-butyl-1,2-diphenyl-	
Relevant Use(s) of Product	Manufacture or Compounding of Substances	

Section 2: Hazards Identification

Classification of Substance or Mixture	Acute toxicity, oral, Category 3, Serious eye damage/eye irritation, Category 2A, Reproductive toxicity, Category 2, Specific target organ toxicity, repeated exposure, Category 1 (cardiovascular system, gastrointestinal tract).	
Signal Word	Danger	
Hazard Statement(s)	H301 H319 H361 H372	Toxic if swallowed Causes serious eye irritation Suspected of damaging fertility or the unborn child Causes damage to organs through prolonged or repeated exposure
Pictogram(s)		
Precautionary Statement(s)	P201 P202 P264 P280 P301+P310+P330 P305+P351+P338 P308+P313 P337+P313 P405 P501	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF SWALLOWED Immediately call a POISON CENTER or doctor/physician. Rinse mouth. IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. continue rinsing. IF exposed or concerned Get medical advice/attention. If eye irritation persists Get medical advice/attention. Store locked up. Dispose of contents/container to an approved waste disposal plant.
Hazards Not Otherwise Classified	Not classified.	
Ingredient(s) with Unknown Toxicity	No data available.	

Section 3: Composition/Information on Ingredients

Chemical Name	3,5-Pyrazolidinedione, 4-butyl-1,2-diphenyl-
Common Name	Phenylbutazone
CAS Number	50-33-9
Impurities and/or Stabilizing Additives	No data available

Section 4: First Aid Measures

General Advice	Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposures. In the United States, the national poison control center phone number is 1-800-222-1222. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen if available. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention.
If Inhaled	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
In Case of Skin Contact	Rinse skin with water/shower. Get medical attention if irritation develops and persists.
In Case of Eye Contact	Rinse with water. Get medical attention if irritation develops and persists.
If Swallowed	Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.
Most Important Symptoms and Effects	Treatment of nonsteroidal anti-inflammatory drug (NSAID) overdose should be symptomatic and supportive and may include the following: Induce vomiting (DO NOT use syrup of ipecac) or perform gastric lavage. Administer activated charcoal as a slurry. For gastrointestinal hemorrhage, monitor stool guaiac and administer antacids or sucralfate. For mild/moderate allergic reactions, administer antihistamines with or without inhaled beta agonists, corticosteroids, or epinephrine. For severe allergic reactions, administer oxygen, antihistamines, epinephrine, or corticosteroids. Nephritis or nephrotic syndrome, thrombocytopenia, or hemolytic anemia may respond to glucocorticoid administration. For severe acidosis, administer sodium bicarbonate. Administer as required: plasma volume expanders for severe hypotension; diazepam or other benzodiazepine for convulsions; vitamin K1 for hypoprothrombinemia; and/or dopamine plus dobutamine intravenously to prevent or reverse early indications of renal failure. Forced diuresis, alkalinization of urine, and hemoperfusion may not be useful. (Poisindex) (USP DI)

Section 5: Fire Fighting Measures

Suitable Extinguishing Media	Use fire-extinguishing media appropriate for surrounding materials. Water. Foam. Dry chemical or CO2.
Special Hazards Arising From the Substance/Mixture	No unusual fire or explosion hazards noted.
Special PPE and/or Precautions for Firefighters	Wear suitable protective equipment. Use water spray to cool unopened containers. As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing. Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6: Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures	Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Avoid inhalation of dust from the spilled material. Wear appropriate personal protective equipment
Methods and Materials Used for Containment	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid the generation of dusts during clean-up. For waste disposal, see section 13 of the SDS. Clean surface thoroughly to remove residual contamination.
Cleanup Procedures	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid the generation of dusts during clean-up. For waste disposal, see section 13 of the SDS. Clean surface thoroughly to remove residual contamination.

Section 7: Handling and Storage

Precautions for Safe Handling	Avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Clean equipment and work surfaces with suitable detergent or solvent after use. After removing gloves, wash hands and other exposed skin thoroughly.
Conditions for Safe Storage	Store in tight container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity

Section 8: Exposure Controls/Personal Protection

Components with Workplace Control Parameters	TWA 0.5 mg/m3 Biological limit values No biological exposure limits noted for the ingredient(s).
Appropriate Engineering Controls	Airborne exposure should be controlled primarily by engineering controls such as general dilution ventilation, local exhaust ventilation, or process enclosure. Local exhaust ventilation is generally preferred to general exhaust because it can control the contaminant at its source, preventing dispersion into the work area. An industrial hygiene survey involving air monitoring may be used to determine the effectiveness of engineering controls. Effectiveness of engineering controls intended for use with highly potent materials should be assessed by use of nontoxic surrogate materials. Local exhaust ventilation such as a laboratory fume hood or other vented enclosure is recommended, particularly for grinding, crushing, weighing, or other dust-generating procedures. Handle in accordance with good industrial hygiene and safety practice.
PPE - Eye/Face Protection	Safety glasses with sideshields are recommended. Face shields or goggles may be required if splash potential exists or if corrosive materials are present. Approved eye protection (e.g., bearing the ANSI Z87 or CSA stamp) is preferred. Maintain eyewash facilities in the work area.
PPE - Skin Protection	Chemically compatible gloves. For handling solutions, ensure that the glove material is protective against the solvent being used. Use handling practices that minimize direct hand contact. Employees who are sensitive to natural rubber (latex) should use nitrile or other synthetic nonlatex gloves. Use of powdered latex gloves should be avoided due to the risk of latex allergy.
PPE - Body Protection	For handling of laboratory scale quantities, a cloth lab coat is recommended. Where significant quantities are handled, work clothing may be necessary to prevent take-home contamination.
PPE - Respiratory Protection	Where respirators are deemed necessary to reduce or control occupational exposures, use NIOSH-approved respiratory protection and have an effective respirator program in place (applicable U.S. regulation OSHA 29 CFR 1910.134).

Section 9: Physical and Chemical Properties

Appearance	White to off-white crystalline powder. Physical state: Solid. Form: Powder.
Upper/Lower Flammability or Explosive Limits	Flammability limit - lower (%) 30 % Flammability limit - upper (%) Not available. Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.
Odor	Odorless or slight odor.
Vapor Pressure	< 0.0000001 kPa at 25 °C
Odor Threshold	Not available.
Vapor Density	Not available.
pH	6.3 (2.8% solution)
Relative Density	Not available
Melting Point/Freezing Point	219.2 - 224.6 °F (104 - 107 °C)
Solubility	Very slightly soluble in water. Solubility (other) Freely soluble in acetone, in ether, and in benzene; soluble in alcohol, in chloroform, and in ethyl acetate.
Initial Boiling Point and Boiling Range	Not available.
Flash Point	Not available.
Evaporation Rate	Not available.
Flammability (Solid, Gas)	Not applicable.
Partition Coefficient	5 3.16
Auto-Ignition Temperature	788 °F (420 °C) (BAM, fluidized dust)
Decomposition Temperature	Not available.
Viscosity	Not available.

Section 10: Stability and Reactivity

Reactivity	No reactivity hazards known.
Chemical Stability	Material is stable under normal conditions.
Possibility of Hazardous Reactions	No dangerous reaction known under conditions of normal use.
Conditions to Avoid	None known.
Incompatible Materials	Oxidizing agents. Strong acids. Strong bases.
Hazardous Decomposition Products	NOx. Irritating and/or toxic fumes or gases. Emits toxic fumes under fire conditions.

Section 11: Toxicological Information

Acute Toxicity - LD50 Oral	LD50 Mouse Oral 238 mg/kg Rat 245 mg/kg
Acute Toxicity - Inhalation	No data available
Acute Toxicity - Dermal	No data available
Acute Toxicity - Eye	No data available.
Skin Corrosion/Irritation	Due to lack of data the classification is not possible.
Serious Eye Damage/Irritation	Causes serious eye irritation. 100 mg Irritancy test (Draize) Result: Irritant. Species: Rabbit Organ: Eye.
Respiratory or Skin Sensitization	Due to lack of data the classification is not possible.
Germ Cell Mutagenicity	Based on available data, the classification criteria are not met. Mutagenicity Chromosomal aberrations in Chinese hamster ovary cells Result: Positive (with activation). Chromosomal aberrations in bone marrow cells Result: Negative. Mutagenicity Mouse dominant lethal test Result: Negative. S. typhimurium Ames assay Result: Negative. Sister chromatid exchange in Chinese hamster ovary cells Result: Negative.
Carcinogenicity IARC	Based on available data, the classification criteria are not met. IARC: Group 3; this material is not classifiable as to its carcinogenicity in humans. This material is not considered to be a carcinogen by IARC, NTP, or OSHA.
Carcinogenicity ACGIH	No data available
Carcinogenicity NTP	This material is not considered to be a carcinogen by IARC, NTP, or OSHA.
Carcinogenicity OSHA	This material is not considered to be a carcinogen by IARC, NTP, or OSHA.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child. Therapeutic use of nonsteroidal anti-inflammatory agents (NSAIDs) during the second half of pregnancy is associated with adverse effects in the fetus such as premature closure of the ductus arteriosus, which may lead to persistent pulmonary hypertension in the newborn. Animal studies have shown that NSAIDs administered during late pregnancy can cause prolonged gestation, difficult labor, delayed birth, and decreased pup survival rates. Reproductivity 50 mg/kg/day Reproductivity study Result: No evidence of birth defects. Species: Rabbit >= 42 mg/kg/day Reproductivity study Result: No evidence of birth defects. Species: Rat
Specific Target Organ Toxicity - Single Exposure	Due to lack of data the classification is not possible.
Specific Target Organ Toxicity - Repeated Exposure	Causes damage to organs (cardiovascular system, gastrointestinal tract) through prolonged or repeated exposure.
Aspiration Hazard	Based on available data, the classification criteria are not met.

Section 12: Ecological Information

Toxicity	No ecotoxicity data noted for the ingredient(s).
Persistence and Degradability	No data is available on the degradability of this product.
Bio-accumulative Potential	Not available.
Mobility in Soil	Not available.
Other Adverse Effects	Not available.

Section 13: Disposal Considerations

Waste Treatment Methods Product	Dispose in accordance with all applicable regulations. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste
Waste Treatment Methods Packaging	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
Special Precautions Landfill or Incinerations	No data available
Other Information	No data available

Section 14: Transport Information

UN Number	UN2811
UN Proper Shipping Name	Toxic solid, organic, n.o.s. (Phenylbutazone)
Transport Hazard Class(es)	6.1
Packaging Group	III
Environmental Hazards	No data available

Section 15: Regulatory Information

US federal regulations CERCLA/SARA Hazardous Substances - Not applicable. All components are on the U.S. EPA TSCA Inventory List. Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No SARA 302 Extremely hazardous substance No SARA 311/312 Hazardous chemical No Other federal regulations Safe Drinking Water Act (SDWA) Not regulated. Food and Drug Administration (FDA) Not regulated. US state regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. International Inventories Country(s) or region Inventory name On inventory (yes/no)* Australia Australian Inventory of Chemical Substances (AICS) Yes Canada Domestic Substances List (DSL) Yes Canada Non-Domestic Substances List (NDSL) No China Inventory of Existing Chemical Substances in China (IECSC) No Europe European Inventory of Existing Commercial Chemical Substances (EINECS) Europe European List of Notified Chemical Substances (ELINCS) No Japan Inventory of Existing and New Chemical Substances (ENCS) Yes Korea Existing Chemicals List (ECL) No New Zealand New Zealand Inventory Yes Philippines Philippine Inventory of Chemicals and Chemical Substances No (PICCS) United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory Yes *A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

Section 16: Other Information

Additional Information	Information on likely routes of exposure Ingestion Toxic if swallowed. Inhalation Due to lack of data the classification is not possible. Skin contact Due to lack of data the classification is not possible. Eye contact Causes serious eye irritation. Symptoms related to the physical, chemical, and toxicological characteristics Nonsteroidal anti-inflammatory drugs: Upset stomach. Nausea. Vomiting. Diarrhea. Headache. Dizziness. Ringing in ears. Blurred vision. Nervousness. Depression. Drowsiness. Difficulty sleeping. Ulcers. Tiredness. Irritability. Constipation. Indigestion. Delayed and immediate effects of exposure Nonsteroidal anti-inflammatory drugs: Hypertension. Coma. Respiratory depression. Gastrointestinal bleeding. Central nervous system effects. Kidney impairment. Cross sensitivity Persons sensitive to aspirin or any of the other nonsteroidal anti-inflammatory agents may be sensitive to this material also. This material may cause bronchoconstriction or anaphylaxis in aspirin-sensitive asthmatics. Medical conditions aggravated by exposure Active alcoholism. Blood disorders. Bone marrow depression. Heart disease. Liver impairment. Kidney impairment. Peptic ulcer. Thyroid problems. Porphyria. Lupus erythematosus. Polymyalgia rheumatica. Temporal arteritis.
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