



Pyrodex® Propellants
SAFETY DATA SHEET
June 2017

The following Muzzleloading Propellants
are manufactured and distributed by Hodgdon Powder Company.

Granular

Pyrodex® RS **(EX-2017030030)**
Pyrodex® P **(EX-2017030030)**
Pyrodex® Select **(EX-2013031304)**

Pellets

Pyrodex® BP5050 **(EX-2013031283)**
Pyrodex® P5050 **(EX-2016050297)**
Pyrodex® RP4430 **(EX-2012020788)**

1.4C EX Approvals in bold parenthesis

Section 1: Identification**Product Identifier:** Pyrodex® (a pyrotechnic mixture in either granular or pellet form)**Manufacturer's Name:** Hodgdon Powder Company, Inc.**Informational Telephone Number:** 1-(913) 362-9455**Address:** 6430 Vista Drive
Shawnee, Kansas 66218**Emerg. Phone Number:** 1-(800) 255-3924 (Chem Tel)**Recommended Use:** for use in muzzleloading reloading and shooting.**Section 2: Hazard(s) Identification**

<u>Hazard category:</u>	<u>Signal Word</u>	<u>Hazard statement</u>	<u>Pictogram</u>
Division 1.3	Danger	Explosive, fire, blast or projection hazard	
Division 1.4	Warning	Fire or projection hazard	

Target Organ Warning: Above OSHA levels, chronic exposure can cause skin irritation and damage to the respiratory system, and acute exposure can cause skin, eye, and respiratory irritation.**Section 3: Composition/information on ingredients**

<u>Component</u>	<u>CAS-Number</u>	<u>Weight %</u>
Charcoal	16291-96-6	8%
Sulfur	7704-34-9	8%
Potassium Nitrate	7757-79-1	30%
Potassium Perchlorate	7778-74-7	30%
Graphite	7782-42-5	<1%

Note: Other ingredients are trade secrets, but can be disclosed per 29CFR1910.1200(i)

Section 4: First-aid measures

Ingestion:	* if vomiting occurs, turn patient on side to maintain open airway. Do not induce vomiting. contact a Poison control center for advice on treatment, if unsure.
Eye Contact:	* flush eye with water for at least 15 minutes.
Inhalation;	* remove patient from area to fresh air.
Skin Contact:	* wash the affected area with copius amounts of water. Some persons may be sensitive to product.
Note to Physician:	* Treat symptomatically.

Section 5: Fire-fighting measures**Extinguishing media:** * For unattended fire prevention, water can be used to disburse burning Pyrodex®. Pyrodex® has its own oxygen supply; flame smothering techniques are ineffective. Water may be used on unburnt Pyrodex® to retard further spread of fire.**Special Procedures:** * Pyrodex® is extremely flammable and may deflagrate. Get away and evacuate the area.**Unusual Hazards:** * As with any pyrotechnic, if under confinement or piled in moderate quantities, Pyrodex® can explode. Toxic fumes, such as sulfur dioxide are emitted while burning.**Flash Point:** not determined**Autoignition Temp:** 740 degrees F for Granular; 500 degrees F for Pellets**NFPA Ratings:****Health=1****Flammability=3****Reactivity=1****Advice and PPE for Firefighters:**

* Fires involving Pyrodex® should not be fought unless extinguishing media can be applied from a well protected and distant location from the point of fire. Self-contained breathing apparatus (SCBA) and protective clothing must be worn. Wash all clothes prior to reuse.

Section 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures:**

* Non-flammable or flame retardant clothing should be worn when cleaning up spilled material. Material is sensitive to ignition from sources such as heat, flame, impact, friction or sparks. Therefore, non-sparking utensils should be used.

Environmental precautions:

* Clean up spills immediately using non-sparking utensils. Do not dispose of in the ground.

* Spill residues may be disposed of per guidelines under Section 13: Disposal Considerations.

Section 7: Handling and storage

* Avoid heat, impact, friction and static. Protect against heat effects. Keep away from heat, open flame and ignition sources.

* Absolutely no smoking around open powder or packages. Keep away from combustibles. Avoid electrostatic charges.

* Keep containers closed at all times when not being used. Keep out of reach of children. Open and handle container with care.

* Follow all local, state and federal laws when storing this product.

Section 8: Exposure controls/personal protection**Personal protection for routine use:**

* Respiratory protection is not normally needed. If significant dusting occurs, a NIOSH approved dust mask should be worn. Good ventilation is recommended when working with Pyrodex®. Gloves may be worn to protect skin. Safety glasses with side shields are recommended for eye protection. Flame retardant outerwear such as coveralls or lab coat may be worn.

Health Hazards (Acute or chronic): * TLV is unknown for ingestion of dust. Acute oral LD⁵⁰ in rats is calculated to be 4.0 [g/kg body weight].

Signs/Symptoms of Exposure: * Burning or itching of the eyes, nose or skin; shortness of breath.

First Aid Procedures: * Remove the patient from exposure and if skin contact, wash the affected area with water

Section 9: Physical and chemical properties

Physical State: Granular solid or pellet

Solubility: Partial in water

Appearance: Medium to dark grey

Auto-ignition Temp.: 740 deg. F (granular)/ 500deg. F (pellets)

Odor: Slight odor when ignited

Bulk Density: 0.75 (g/cc)

Section 10: Stability and reactivity

General Information: * Loading data and the instructions for loading must be observed.

Conditions to Avoid: Avoid heat, impact, friction or static. Protect against heat effects. Keep away from heat, open flame and ignition sources. A violent burn or deflagration could occur by above mentioned items.

Substances to Avoid: Avoid contact with alkaline substances or strong acids.

Section 11: Toxicological information

* LD₅₀ Values-acute oral in rats is calculated to be 4.0 (g/kg body weight)

* TLV unown for ingestion of dust. Some persons may be unusually sensitive to the product.

* Routes of entry include Skin, Inhalation and Ingestion. (Acute Toxicity=Category 4) per Table A.1.1 of 29CFR1910.1200

Section 12: Ecological information

* Do not dispose of powder or residues into any water streams or bodies of water. Avoid spilling powders onto any soils. Clean up any spills promptly.

* No known adverse effects on marine or other aquatic organisms.

Section 13: Disposal considerations

* Care must be taken to prevent environmental contamination from the use of this material. The user has the responsibility to dispose of unused material, residues and containers in compliance with all relevant laws and regulations regarding treatment, storage and disposal for hazardous and non-hazardous waste. Powder can be burned in very small quantities and in very thin layer and must only be ignited from a safe distance.

* Do not dispose of powders down a drain or sewer.

Section 14: Transport informationLabel required: Explosive**Highway:****Class or division:** 1.3C or 1.4C.**UN Number:** UN0499 (for 1.3C) or UN0501 (for 1.4C)**Shipping Name:** Propellant, Solid**Air Transport:****Forbidden!****Maritime IMDG****Class or division:** 1.3C or 1.4C**UN Number:** UN0499 (for 1.3C) or UN0501 (for 1.4C)**Shipping Name:** Propellant, Solid**Section 15: Regulatory information**

* All products related to Pyrodex® are reported annually as per Community Right-to Know (Tier II). Pyrodex® granular and pellets have been approved by PHMSA and copies of the approvals are on file with Environmental, Health and Safety Manager.

Section 16: Other information

Prepared By: Mark Wendt, Environmental, Health and Safety Manager email: mwendt@hodgdon.com

SDS Creation Date: June 9, 2017 (Rev 1)

SDS Print Date: June 9, 2017 (Rev 1)

Disclaimer:

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.