

Triple Se7en® Propellants

SAFETY DATA SHEET

December 2025

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

Granular

Triple Se7en® FF Triple Se7en® FFF

Granular 1.4C EX Approval= (EX-2017030031)

Pellets

Triple Se7en® Magnums
Triple Se7en® BP5050
Triple Se7en® 4550
Triple Se7en® 5030
Triple Se7en® 5050
FireStar

<u>T7BP5050 1.4C Approval= (EX-2016060018) Other Pellets 1.4C Approvals= (EX-2016050278)</u> <u>FireStar 1.4C Approval=EX-2017100420</u>

Safety Data Sheet

according to Federal Register / Vol. 89, No. 98 / Monday, May 20, 2024 / Rules and Regulations

Version: 3.0

Issue date: 11/03/2020 Revision date: 11/10/2025 Supersedes: 01/06/2023

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture

Product name : Triple Seven (Granular and Pellets)

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Gun Powder

1.4. Supplier's details

Hodgdon Powder Company, Inc.

6430 Vista Drive

Shawnee, Kansas 66218

USA

(913) 362-9455

1.5. Emergency phone number

No additional information available

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Expl. 1.4 H204 Ox. Sol. 1 H271 Acute Tox. 4 (Oral) H302 Eye Irrit. 2 H319

2.2. Label elements

GHS US labelling

Hazard pictograms (GHS US)







Signal word (GHS US) : Danger

Hazard statements (GHS US) : H204 - Fire or projection hazard

H271 - May cause fire or explosion; strong oxidizer

H302 - Harmful if swallowed

H319 - Causes serious eye irritation

Precautionary statements (GHS US)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P220 - Keep/Store away from combustible materials.

P221 - Take any precaution to avoid mixing with combustible materials

P240 - Ground/Bond container and receiving equipment.

P250 - Do not subject to friction, grinding, shock.

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear eye protection, face shield, protective gloves, protective clothing. P283 - Wear fire resistant or flame retardant clothing.

P301+P312 - If swallowed: Call a doctor, a POISON CENTER if you feel unwell.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P306+P360 - IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty

of water before removing clothes.

P330 - Rinse mouth

P337+P313 - If eye irritation persists: Get medical advice or attention.

P370+P378 - In case of fire: Use Carbon dioxide (CO2), dry extinguishing powder to

extinguish.

P370+P380 - In case of fire: Evacuate area.

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P371+P380+P375 - In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

P372 - Explosion risk.

P373 - DO NOT fight fire when fire reaches explosives.

P374 - Fight fire with normal precautions from a reasonable distance.

P401 - Store in accordance with local, regional, national, or international regulations.

P501 - Dispose of a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%*
Potassium nitrate	(CAS-No.) 7757-79-1	15 – 40
Potassium perchlorate	(CAS-No.) 7778-74-7	15 – 40
Sodium benzoate	(CAS-No.) 532-32-1	7 – 13
Sodium nitrate	(CAS-No.) 7631-99-4	1 – 5

^{*}In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general

: If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.

First-aid measures after inhalation

: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if breathing is affected. If breathing is difficult, supply oxygen.

First-aid measures after skin contact

IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention.

First-aid measures after eye contact

: IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Continue rinsing. If pain, blinking, or irritation develops or persists, get medical attention. Continue rinsing.

First-aid measures after ingestion

: IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Get medical attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects

: Harmful if swallowed. Causes serious eye irritation.

Symptoms/effects after inhalation

: May cause respiratory irritation.

Symptoms/effects after skin contact

: May cause skin irritation.

Symptoms/effects after eye contact

: Causes serious eye irritation.

Symptoms/effects after ingestion

: Harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

: Use extinguishing media appropriate for surrounding fire. Flood fire area with water from a

distance. Dry chemical. Carbon dioxide.

Unsuitable extinguishing media

: Keep away from heat.

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5.2. Specific hazards arising from the chemical

Fire hazard : Explosive; fire, blast or projection hazard. May cause fire or explosion; strong oxidiser.

Explosion hazard : Explosive. Mass fire hazard.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical

fire. Do not dispose of fire-fighting water in the environment.

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Ventilate area. Keep upwind. Spill should be handled by trained cleaning

personnel properly equipped with respiratory and eye protection.

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air

respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Product is not soluble, but can cause particulate emission if discharged into waterways. Dike all entrances to sewers and drains to avoid introducing material to waterways. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A SPECIALIST.

Methods for cleaning up : Prevent further leakage or spillage if safe to do so. Do not touch or walk through spilled

material. DO NOT CLEAN-UP OR DISPOSE OF, EXCEPT UNDER SUPERVISION OF A

SPECIALIST

6.4. Reference to other sections

See Sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures. Use personal protective

equipment as required. Avoid contact with eyes. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Use explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion

proof. Avoid striking the primer of unchambered cartridges. Avoid impact.

7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep only in

original container. Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking

Incompatible materials : Acids. Bases. Water. Alcohols. Alkalis. Oxidizing agent. Reducing agents. Nitrites. Amines.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium nitra	ate (7757-79-1)	
ACGIH	Remark (ACGIH®)	OELs not established
OSHA	Remark (OSHA)	OELs not established
Sodium nitrate	(7631-99-4)	
ACGIH	Remark (ACGIH®)	OELs not established
OSHA	Remark (OSHA)	OELs not established

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Potassium perchlorate (7778-74-7)		
ACGIH	Remark (ACGIH®)	OELs not established
OSHA	Remark (OSHA)	OELs not established
Sodium benzoate (532-32-1)		
ACGIH	ACGIH® TLV® TWA	2.5 mg/m³ (inhalable particulate matter)
ACGIH	Remark (ACGIH®)	OELs not established
ACGIH	Regulatory reference	ACGIH 2024
OSHA	Remark (OSHA)	OELs not established

8.2. Appropriate engineering controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment symbol(s):







Personal protective equipment:

Gloves. Protective clothing. Wear chemical goggles and face shield in combination.

Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.

Eye protection:

Wear eye protection, including chemical splash goggles and a face shield when possibility exists for eye contact due to spraying liquid or airborne particles.

Skin and body protection:

Wear long sleeves, and chemically impervious PPE/coveralls to minimize bodily exposure.

Respiratory protection:

Use NIOSH (or other equivalent national standard) -approved dust/particulate respirator. Where vapour, mist, or dust exceed PELs or other applicable OELs, use NIOSH-approved respiratory protective equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Granular solid. Appearance Colour Medium to dark gray Slight sulfur odor Odour Odour threshold No data available рΗ : No data available No data available Melting point No data available Freezing point No data available Boiling point No data available Flash point : No data available Relative evaporation rate (butylacetate=1) Flammability (solid, gas) No data available

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Vapour pressure No data available Relative vapour density at 20°C No data available Relative density No data available Density 0.75 g/cm3

Water: Partial in water Solubility Partition coefficient n-octanol/water (Log Pow) No data available

Auto-ignition temperature 393 °C (739.4°F) (granular),

260 °C (500°F) (pellets)

: No data available Decomposition temperature Viscosity, kinematic No data available Viscosity, dynamic No data available No data available **Explosive limits**

Sensitive to mechanical impact. Explosive properties

Oxidising properties No data available Particle characteristics No data available

Other information No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Explosive; mass explosion hazard.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

Possibility of hazardous reactions

None under normal conditions.

Conditions to avoid

Ignition sources. Heat. Sparks. Open flame. Static electricity. Storage near to reactive materials. Do not subject to shock. Contact with other chemicals. Humidity. Direct heating, dirt, chemical contamination, sunlight, UV or ionizing radiation.

10.5. Incompatible materials

Acids. Bases. Water. alcohols. Amines. Alkalis. Oxidizing agent. Reducing agents. Nitrites.

Hazardous decomposition products

Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

: Harmful if swallowed. Acute toxicity (oral) : Not classified Acute toxicity (dermal) Acute toxicity (inhalation) : Not classified

Potassium nitrate (7757-79-1)		
LD50 oral rat	3015 mg/kg	
LD50 dermal rat	> 5000 mg/kg (Source: ECHA)	
LC50 Inhalation - Rat	> 0.527 mg/l/4h	

Sodium nitrate (7631-99-4) LD50 oral rat

Sodium benzoate (532-32-1)	
LD50 oral rat	4070 mg/kg
LD50 dermal rabbit	≥ 2000 mg/kg Source: OECD Screening Information Data Set
LC50 Inhalation - Rat	> 12.2 mg/l air Animal: rat

Skin corrosion/irritation : Not classified

Serious eye damage/irritation Causes serious eye irritation.

: Not classified Respiratory or skin sensitisation Germ cell mutagenicity : Not classified

1267 mg/kg

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Carcinogenicity : Not classified Reproductive toxicity : Not classified : Not classified STOT-single exposure STOT-repeated exposure : Not classified Aspiration hazard : Not classified

: Harmful if swallowed. Causes serious eye irritation. Symptoms/effects

Symptoms/effects after inhalation : May cause respiratory irritation. Symptoms/effects after skin contact : May cause skin irritation. Symptoms/effects after eye contact : Causes serious eye irritation. : Harmful if swallowed. Symptoms/effects after ingestion

SECTION 12: Ecological information

12.1. **Ecotoxicity**

Hazardous to the aquatic environment, short-term (acute) : Not classified : Not classified Hazardous to the aquatic environment, long-term (chronic)

Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Bioaccumulative potential

No additional information available Other adverse effects 12.5.

: Not classified Ozone

Fluorinated greenhouse gases : No

SECTION 13: Disposal considerations

Disposal methods 13.1.

Waste treatment methods : Product should not be allowed to enter drains, water courses, or the soil. Dispose in a safe manner in accordance with local/national regulations. DO NOT CLEAN-UP OR DISPOSE OF,

EXCEPT UNDER SUPERVISION OF A SPECIALIST.

Product/Packaging disposal recommendations Dispose in a safe manner in accordance with local/national regulations. Do not allow the

product to be released into the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : UN0501 Propellant, solid, 1.4, II

: UN0501 (for 1.4C) UN-No. (DOT) Proper Shipping Name (DOT) : Propellant, solid

: 1.4 - Class 1.4 - Explosives (with no significant blast hazard) 49 CFR 173.50 Class (DOT)

Packing group (DOT) : II - Medium Danger Hazard labels (DOT) : 1.4C - Explosive



DOT Quantity Limitations Passenger aircraft/rail : Forbidden

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 75 kg

CFR 175.75)

DOT Vessel Stowage Location

: 02 - The material may be stowed "on deck" or "under deck" on a cargo vessel (up to 12 passengers) and "on deck" in closed cargo transport units or "under deck" in closed cargo

transport units on a passenger vessel.

DOT Vessel Stowage Other

: 25 - Protected from sources of heat

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: No supplementary information available. Other information

Transportation of Dangerous Goods

: UN0501 PROPELLANT, SOLID, 1.4C, II Transport document description (TDG)

: UN0501 UN-No. (TDG)

: PROPELLANT, SOLID Proper Shipping Name (TDG)

TDG Primary Hazard Classes : 1.4C - Class 1.4C - A substance or article which presents no significant hazard; explosion

effects are largely confined to the package and no projection or fragments of appreciable size

or range are to be expected

Packing group (TDG) : II - Medium Danger

Explosive Limit and Limited Quantity Index : 0

Passenger Carrying Road Vehicle or Passenger : Forbidden

Carrying Railway Vehicle Index

Passenger Carrying Ship Index : 10 kg

Transport by sea (IMDG)

Transport document description (IMDG) : UN 0501 PROPELLANT, SOLID, 1.4C

UN-No. (IMDG) : 0501 (for 1.4C)

Proper Shipping Name (IMDG) : PROPELLANT, SOLID

Class (IMDG) : 1 - Explosives

Limited quantities (IMDG) : 0

Air transport (IATA)

Transport document description (IATA) : UN 0501 Propellant, solid, 1.4C

: 0501 (for 1.4C) UN-No. (IATA) Proper Shipping Name (IATA) : Propellant, solid Class (IATA) : 1 - Explosives

SECTION 15: Regulatory information

15.1. US Federal regulations

Triple Seven (Granular and Pellets)	
All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb. 2019, as amended Feb. 2021, or are otherwise exempt or regulated by other agencies such as FDA or FIFRA	
SARA Section 311/312 Hazard Classes	Physical hazard - Explosive Physical hazard - Oxidizer (liquid, solid or gas) Health hazard - Serious eye damage or eye irritation Health hazard - Acute toxicity (any route of exposure)

This product or mixture is not known to contain a chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR

15.2. International regulations

No additional information available

15.3. US State regulations

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Component	State or local regulations
Potassium nitrate (7757-79-1)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List; U.S Massachusetts - Right To Know List
Sodium nitrate (7631-99-4)	U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) List
Potassium perchlorate (7778-74-7)	U.S New Jersey - Right to Know Hazardous Substance List; U.S Massachusetts - Right To Know List; U.S Pennsylvania - RTK (Right to Know) List

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SECTION 16: Other Information

Issue date: 11/3/2020Revision date: 11/10/2025Other information: Author: JMM.

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause

temporary incapacitation or residual injury.

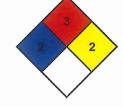
NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended

solids) that can be ignited under almost all ambient

temperature conditions.

NFPA reactivity : 2 - Materials that readily undergo violent chemical change

at elevated temperatures and pressures.



HMIS Hazard Rating

Health: 2Flammability: 3Physical: 2Personal protection: X

X - Special handling directions

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.