

# Triple Se7en® Propellants

# SAFETY DATA SHEET

January 2023

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

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/03/2020

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name

: Triple Seven (Granular and Pellets)

Product form

: Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Details of the supplier of the safety data sheet 1.3.

Hodgdon Powder Company, Inc. 6430 Vista Drive Shawnee, Kansas 6621

USA

(913) 362-945

1.4 Emergency telephone number

Emergency number

: (800) 255-3924 (CHEM-TEL)

# **SECTION 2: Hazards identification**

#### lassification of the substance or mixture

### **GHS-US** classification

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

#### 2.2. Label elements

## **GHS-US** labeling

Hazard pictograms (GHS-US)



GHS01

GHS03



Signal word (GHS-US)

Hazard statements (GHS-US)

: Danger

H204 - Fire or projection hazard

H271 - May cause fire or explosion; strong oxidizer

H302 - Harmful if swallowed

H319 - auses 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/flame resistant/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/attention.

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

P370+P380 - In case of fire: Evacuate area

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 in case of fire.

P373 - DO NOT fight fire when fire reaches explosives. P401 - Store in accordance with local regulations on explosives

P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous

waste

Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

No data available

# **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%
Potassium perchlorate	(CAS-No.) 7778-74-7	15 – 40
Potassium nitrate	(C S-No.) 7757-79-1	15 – 40
Sodium benzoate	(CAS-No.) 532-32-1	5 – 10
Sodium nitrate	(CAS-No.) 7631-99-4	1 – 5

<sup>\*</sup>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

# **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, both acute and delayed

Symptoms/effects

: Harmful if swallowed. Causes serious eye irritation.

Symptoms/effects after inhalation Symptoms/effects after skin contact : May cause respiratory irritation.

Symptoms/effects after eye contact

: May cause skin irritation.: Causes serious eve irritation.

Symptoms/effects after ingestion

: Harmful if swallowed.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

# **SECTION 5: Firefighting measures**

## 5.1. 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.

# 5.2. Special hazards arising from the substance or mixture

Fire hazard

: May cause or intensify fire; oxidizer.

Explosion hazard

: Explosive. Mass fire hazard.

Reactivity

: Explosive; mass explosion hazard.

5.3. Advice for firefighters

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 clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

# Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

## 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 of 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.

# 7.2. onditions for safe storage, including any 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.

## 7.3 Specific end use(s)

No additional information available

# **SECTION 8: Exposure controls/personal protection**

## 8.1 ontrol parameters

Sodium nitrate (7631-99-4)		
Remark (OSHA)	OELs not established	
Remark (ACGIH)	OELs not established	
Potassium nitrate (7757-79-1)		
Remark (OSHA)	OELs not established	
Remark (ACGIH)	OELs not established	
Potassium perchlorate (7778-74-7)		
Remark (OSHA)	OELs not established	
Remark (ACGIH)	OELs not established	
Sodium benzoate (532-32-1)		
Remark (OSHA)	OELs not established	
Remark (ACGIH)	OELs not established	

## 8.2. Exposure 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.

# Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

740 degrees F (granular), 500 degrees F (pellets)

vapor, 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

Appearance : Granular solid.
Color : Medium to dark gray.

Odor Chreshold : Slight sulfur.

Odor Threshold : No data available pH : No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available Freezing point : No data available Boiling point : No data available Boiling point : No data available

Flash point : No data available

Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : No data available

Specific gravity / density : 0.75 g/cm<sup>3</sup>

Solubility : Water: Partial in water
Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

Explosive properties : Sensitive to mechanical impact.

Oxidizing properties : No data available Explosion limits : No data available

# 9.2. Other informationNo additional information available

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Auto-ignition temperature

Explosive; mass explosion hazard.

# 10.2. C emical stability

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

## 10.3. Possibility of hazardous reactions

None under normal conditions.

#### 10.4. 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.

# Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

#### 10.5. Incompatible materials

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

#### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

# **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral)

: Harmful if swallowed.

Acute toxicity (dermal)

: Not classified

Acute toxicity (inhalation)

: Not classified

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

Sodium nitrate (7631-99-4)

1267 mg/kg LD50 oral rat

Sodium benzoate (532-32-1)

LD50 oral rat

4070 mg/kg

Skin corrosion/irritation

: Not classified

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitization Germ cell mutagenicity

Not classified Not classified

Carcinogenicity

Not classified : Not classified

Reproductive toxicity Specific target organ toxicity - single exposure

: Not classified

Specific target organ toxicity - repeated

exposure

: Not classified

Aspiration hazard

: Not classified

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

# SECTION 12: Ecological information

#### 12.1 **Toxicity**

No additional information available

#### 12.2 Persistence and degradability

No additional information available

#### 12.3 Bioaccumulative potential

No additional information available

#### Mobility in soil 12.4

No additional information available

#### Other adverse effects 12.5.

No additional information available

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

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.

# Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

# **SECTION 14: Transport information**

In accordance with DOT

UN0501 Propellant, solid, 1.4 Transport document description

UN-No.(DOT) 0501 (for 1.4C) DOT NA no. UN0501

Proper Shipping Name (DOT) Propellant, solid

Class (DOT)

1.4 - lass 1.4 - Explosives (with no significant blast hazard) 49 CFR 173.50

Hazard labels (DOT) 1.4C - Explosive

Packing group (DOT) Not specified DOT Quantity Limitations Passenger aircraft/rail :

(49 CFR 173.27)

Forbidden

DOT Quantity Limitations Cargo aircraft only (49 : 75kg limitation for Cargo aircraft ONLY.

CFR 175.75)

: 02 - The material may be stowed "on deck" or "under deck" on a cargo vessel (up to 12 **DOT Vessel Stowage Location** 

passengers); the material is allowed on a passenger vessel.

DOT Vessel Stowage Other : 25 - Shade from radiant heat,

> 26E - Stowage category "13" and, for on deck stowage, non-metallic lining of closed cargo transport unit is required when not in effectively sealed, sift-proof packages; Stowage category

"10" permitted when in effectively sealed, sift-proof packages

Additional information

Other information : No supplementary information available.

Transport by sea (IMDG)

UN-No. (IMDG) : 0501 (for 1.4C) Proper Shipping Name (IMDG) : PROPELLANT, SOLID Class (IMDG) : 1 - Explosives

Air transport (IATA) (cargo aircraft ONLY)

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

# **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 - Carcinogenicity	

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 Part 372.

Health hazard - Acute toxicity (any route of exposure)

### 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

# Safety Data Sheet

Prepared according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and 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

# **SECTION 16: Other information**

Indication of changes: Revision 2.0:Revision date: 01/20/2023Other information: Author: NA

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

temporary incapacitation or residual injury.

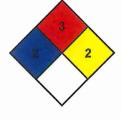
NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended

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 : 2 Flammability : 3 Physical : 2

Personal protection : 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