



Double Base Powders  
**SAFETY DATA SHEET**  
February 2022

The following smokeless powders are  
distributed by Hodgdon Powder Company.

Hi-Skor 700X™  
Hi-Skor 800X™ (discontinued product)

***1.4C EX Approval= (EX-2016090001)***

## SAFETY DATA SHEET

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### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### **1.1 Product identifier**

Product Name: HS, SS and RF (all types)  
Synonyms : Double base, propellant powder  
File : SDS-18E001

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

Product use: Gun propellant

#### **1.3 Details of the supplier of the safety data sheet**

Supplier: General Dynamics Ordonnance and Tactical Systems- Canada Valleyfield  
55 rue Masson  
Valleyfield (Quebec)  
Canada J6S 4V9

#### **1.4 Emergency phone number**

Emergency phone number: 1-888-922-3330 (24 hours)

### SECTION 2: HAZARDS IDENTIFICATION

#### **2.1 Classification of the substance or mixture according to Regulation SIMDUT 2015**

Explosive Division 1.3

Acute oral toxicity-Category 3

Acute toxicity, dermal-Category 1B

Specific target organ toxicity (single exposure) -Category 1

Specific target organ toxicity (repeated exposure) -Category 1

Carcinogenicity-Category 1A

Physical Hazards: Explosives

Product is a mixture. Health hazards are based on published data for individual ingredients of the mixture.  
Product as a whole has not been tested for health hazards

#### **2.2 Label elements according to Regulation SIMDUT 2015**

##### **Pictogram:**



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Signal word: DANGER

### Hazard Statements:

H203 – Explosive, fire, blast or projection hazard

H301 – Toxic if swallowed

H317 – May cause an allergic skin reaction

H350 – May cause cancer

H370 – Causes damage to organs

H372 – Causes damage to organs through prolonged or repeated exposure

### Precautionary Statements:

P201 – Obtain special instructions before use.

P202 – Do not handle until all safety precautions have been read and understood.

P260 – Do not breathe dust/fumes/gas/mist/vapours/spray.

P262 – Do not get in eyes, on skin, or on clothing.

P264 – Wash your hand thoroughly after handling.

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

P272 – Contaminated work clothing should not be allowed out of the workplace.

P280 – Wear protective gloves/protective clothing/eye protection/face protection

P314 – Get medical advice/attention if you feel unwell.

P405 – Store locked up.

P501 – Dispose of contents in accordance with local/ regional/ national/ international regulation.

P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.

P307 + P311 – IF exposed: Call a POISON CENTER or doctor/physician.

P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.

P361 + P364- Take off immediately all contaminated clothing before reuse.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

Chemical name	CAS number	Classification of the substance	HS %wt	SS %wt	RF %wt
Nitrocellulose	9004-70-0	Expl. 1.1 Flammable solid	60-80	60-80	60-80
Nitroglycerin	55-63-0	Expl. 1.1 Acute oral toxicity-Category 3 Skin sensitization-Category 1B			

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		Specific target organ toxicity (single exposure) -Category 1 Specific target organ toxicity (repeated exposure) -Category 1	15-40	15-40	15-40
Ethyl centralite	85-98-3	This product isn't a hazardous product according to classification criteria.	0.5-1.5	0.5-1.5	0.5-1.5
Potassium sulfate	7778-80-5	This product isn't a hazardous product according to classification criteria.	0.1-1	0.1-1	0.1-1
Graphite	7782-42-5	Carcinogenic- Category 1A Specific target organ toxicity (repeated exposure) -Category 1	0.1-1	0.1-1	0.1-1

The actual concentration range is withheld as a trade secret.

**SECTION 4: FIRST AID MEASURE**

**4.1 Description of first aid measures**

- Inhalation                      Move victim to fresh air. If breathing is difficult, ensure airway is clear, give oxygen and continue monitoring. If victim is not breathing give CPR. Keep victim warm and get medical help.
  
- Skin contact                      Wash contaminated area with soap and water
  
- Eye contact                      Keeping eyes open, rinse immediately with running water for at least 15 minutes. If eye irritation develops, call a physician
  
- Ingestion                      Call a poison center or a doctor immediately

**4.2 Most important symptoms and effects, both acute and delayed**

May cause cancer after exposure. Irritates the eye. May cause skin irritation. Specific target organ toxicity (single exposure) category 1 and specific target organ toxicity (repeated exposure) category 1 which may cause various health problems.

**4.3 Indication of any immediate medical attention and special treatment needed**

Provide general supportive measures and treat symptomatically. Keep victim under observation.

**SECTION 5: FIRE-FIGHTING MEASURES**

**5.1 Extinguishing media**

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Large volumes of water should be applied as quickly as possible from automatic sprinklers or fire hose.

Do not use water jet as an extinguisher, as this may spread fire.

### **5.2 Special hazards arising from the substance or mixture**

Toxic vapors/gases may be formed during a fire. Combustion products vary depending on fire conditions and other combustibles present. The predominant product will be nitrogen oxide.

### **5.3 Advice for firefighters**

**Special protective equipment and precautions for firefighters** Self-contained breathing apparatus (SCBA) and full protective clothing must be worn in case of fire. This includes, but is not limited to, impervious boots, gloves, hard hat and chemically impermeable suit.

**Fire-fighting equipment/instructions** Fire involving smokeless propellant should NOT be fought unless extinguishing media can be applied from a well-protected (e.g. behind a berm or barricade) and distant location from the point of fire. Small quantities of propellant may be encountered in distribution or ammunition manufacturing, and should be evaluated in the context of applicable fire codes.

**Specific methods** Do not firefight; evacuate personnel immediately and consider the hazards of other involve materials.

**General fire hazards** Explosive; fire blast and projection hazard

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precaution, protective equipment and emergency procedures**

Keep unnecessary personnel away. Eliminate all ignition sources. Use only non-sparking tools. Wear appropriate protective equipment and non-flammable or flame retardant clothing during clean-up. Avoid inhalation of dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fumes at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of this SDS.

### **6.2 Environmental precaution**

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Avoid discharge into drains, water courses or onto ground.

### **6.3 Methods and material for containment and cleaning up**

Avoid dispersal of dust in the air (e.g. clearing dust surface with compressed air). Clean up spills immediately using non-sparking tools. Wet down spilled materials prior to initiating clean-up and keep material wet until ready for disposal. Avoid contamination of water bodies during clean up and disposal. This material is heavier than water. Create and overflow dam with filtration capabilities to retain material.

### **6.4 Reference to other sections**

For waste disposal, see section 13 of this SDS

## **SECTION 7: HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Do not handle until all safety precaution have been read and understood. Do not subject to mechanical shock, Avoid exposure to sunlight or artificial ultraviolet light. Minimize dust generation and accumulation. Provide appropriate exhaust ventilation. Avoid breathing dust. Avoid contact with eyes, skin and clothing.

Do not taste or swallow. Wear appropriate personal protective equipment.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store in original container. Keep container tightly closed. Store in cool, dry, well-ventilated place away from all sources of ignition and heat. Store away from incompatible material (see section 10 of this SDS)

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Exposure Limits**

Chemical name	CAS number	Limit value CAN	Limit value US
Nitrocellulose	9004-70-0	Not available	Not available
Nitroglycerin	55-63-0	0.2 ppm	0.2 ppm
Ethyle centralite	85-98-3	Not available	Not available
Potassium sulfate	7778-80-5	Not available	Not available
Graphite	7782-42-5	2 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>

Database source <http://limitvalue.ifa.dguv.de/>

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### Biological limit values

No biological exposure limits noted for the ingredients

### 8.2 Exposure controls

<b>Engineering measures</b>	Local exhaust ventilation is recommended if significant dusting occurs. Otherwise, use general exhaust ventilation. Eye wash fountain and emergency showers are recommended.
<b>Eye/face protection</b>	Wear safety glasses with side shields or goggles.
<b>Skin protection</b>	Wear appropriate chemical resistant, flame retardant clothing. Change frequently
<b>Hand protection</b>	Nitrile gloves
<b>Respiratory protection</b>	If ventilation is insufficient, wear a dust mask or a cartridge respirator
<b>General hygiene consideration</b>	Always observe good personal hygiene measure, such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Appearance</b>	Black granular solid
<b>Physical state</b>	Solid
<b>Form</b>	Granular
<b>Color</b>	Black
<b>Odor</b>	Not applicable

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<b>PH</b>	Not applicable
<b>Melting point/freezing point</b>	Not applicable
<b>Initial boiling point/boiling range</b>	Not applicable
<b>Flash point</b>	Not available
<b>Evaporation rate</b>	Not applicable
<b>Flammability</b>	Flammable solid
<b>Upper/lower flammability or explosive limits</b>	Not applicable
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>Relative density</b>	1.6g/cm <sup>3</sup>
<b>Solubility(ies)</b>	Not available
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Auto-ignition temperature</b>	170°C
<b>Decomposition temperature</b>	Not applicable
<b>Viscosity</b>	Not applicable

### **9.2 Other information**

Product can explode if ignited and confined

## **SECTION 10: STABILITY AND REACTIVITY**

### **10.1 Reactivity**

Can ignite due to mechanical shock and/or impact. Can ignite due to static discharge. Product can explode if ignited and confined.

### **10.2 Chemical stability**

Unstable when exposed to sources of heat, sunlight or artificial ultraviolet light.

### **10.3 Possibility of hazardous reactions**



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Hazardous polymerization does not occur.

### 10.4 Conditions to avoid

Avoid contact with incompatible materials. Direct sunlight, artificial ultraviolet light, flame and heat.

### 10.5 Incompatible materials

Strong acids and alkalis

### 10.6 Hazardous decomposition products

Nitrogen oxides (NO<sub>x</sub>)

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Produits	Espèces	LC50	LD50 oral	LD50 dermal
Nitrocellulose	Rat	NA	5000 mg/kg	NA
Nitroglycerin	Rat	NA	105 mg/kg	280 mg/kg (Rabbit)
Potassium sulfate	Rat	NA	NA	NA
Graphite	Rat	>64mg/L	10000	NA
Ethyl centralite	Rat	NA	2750 mg/kg	NA

<b>Acute toxicity</b>	Acute oral toxicity-Category 3
<b>Skin corrosion/irritation</b>	May cause skin irritation.
<b>Serious eye damage/irritation</b>	Causes serious eye irritation.
<b>Respiratory sensitization</b>	May cause respiratory irritation.
<b>Skin sensitization</b>	May cause skin sensitization.
<b>Germ cell mutagenicity</b>	This product or any of its ingredients are not known or reported to be mutagenic.
<b>Carcinogenicity</b>	May cause a cancer
<b>Reproductive toxicity</b>	Based on available data the classification criteria are not met.
<b>Specific target organ toxicity-single exposure</b>	Specific target organ toxicity (single exposure) -Category 1

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<b>Specific target organ toxicity-repeated exposure</b>	Specific target organ toxicity (repeated exposure) -Category 1
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.
<b>Chronic effects</b>	Based on available data the classification criteria are not met.
<b>Inhalation</b>	Dust may irritate respiratory system.
<b>Skin contact</b>	May cause skin irritation.
<b>Eyes contact</b>	Cause eye irritation.
<b>Ingestion</b>	Based on available data the classification criteria are not met..

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Toxic to aquatic life with long lasting effects

**12.2 Persistence and degradability**

No data available on product mixture

**12.3 Bio accumulative potential**

No data available on product mixture

**12.4 Mobility in soil**

No data available on product mixture

**12.5 Results of PBT and vPvB assessment**

No data available on product mixture

**12.6 Other adverse effects**

No other adverse environmental effects known.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

If material becomes a waste, it may be treated by controlled burning in small quantities if permissible by relevant regulatory agencies. Material should be spread into thin layers and ignited from a safe distance.

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Dispose of in accordance with applicable federal, state and local regulations. Do not discharge into drains, water courses or onto the ground.

### **Local disposal regulation**

Dispose of in accordance with local regulations.

### **Waste from residues/unused products**

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 regulation.

### **Contaminated packaging**

Emptied containers may contain explosive residues. Do not cut, drill, grind or weld on empty containers. Dispose of in accordance with applicable federal, state and local regulations.

## SECTION 14: TRANSPORT INFORMATION

### **14.1 UN Number**

UN0161

### **14.2 UN proper shipping name**

Powder smokeless

### **14.3 Transport hazard class(es)**

1.3C

### **14.4 Packing group**

II

### **14.5 Environment hazards**

Not available

### **14.6 Special precautions for user**

Not available

### **14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**

Not applicable

## SECTION 15: REGULATORY INFORMATION

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### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**Code of Practice:**

Classification and Labelling of Substances and Preparations Dangerous for Supply.

**Guidance Notes:**

Workplace Exposure Limits SIMDUT 2015

**CAN Legislation:** Bill n. 43 2015, chapter 13, An Act to promote information on the dangerousness of products present in the workplace and to amend the Act respecting occupational health and safety.

### 15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

**Revision date :** 2020-01-28

**Revision No. :** 2

**General information:**

This classification has been derived in accordance with WHMIS 2015

**Note:** The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

**Acronyms and Abbreviations used:**

CAS	Chemical Abstracts Service
CAN	Canada
EC	European Commission
EU	European Union
IBC	Intermediate Bulk Container
IMDG	International Maritime Dangerous Goods
MARPOL	International Convention for the Prevention of Pollution from Ships
PBT	Persistent, Bioaccumulative and Toxic substance
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
STOT	Specific Target Organ Toxicity
TWA	Time Weighted Average
US	United States
vPvB	Very Persistent and Very Bioaccumulative
%wt	Percentage weight

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### Disclaimer

The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The information contained herein was written based on the best knowledge and experience currently available and is believed to be reliable and up to date as of the date of publication, but no warranty is expressed or implied. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and assume liability for loss, injury, damage or expense due to improper use.