



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

The following smokeless powders  
are distributed by  
IMR Legendary Powders

IMR Target ® (***EX-2016050098***)

***1.4C EX Approvals in bold parenthesis***

## SAFETY DATA SHEET

Date: January, 2020

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

#### **1.1 Product identifier**

Product name : XPR09G0, AS30, AS50 ET AP70

Synonyms : Double base, propellant powder

File : SDS-18E003

#### **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 SIMDUT 2015**

Explosive Division 1.3

Acute oral toxicity-Category 3

Skin sensitization-Category 1B

Specific target organ toxicity (single exposure) -Category 1

Specific target organ toxicity (repeated exposure) -Category 1

Carcinogenicity-Category 1A

Oxidizing solid – Category 3

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

H272 – May intensify fire; oxidizer

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.

P210 – Keep away from heat, hot surfaces, sparks, open flame and other ignition sources. No smoking.

P234 – Keep only in original container.

P250 – Do not subject to grinding/shock/.../friction.

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.

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.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2 Mixtures**

Chemical name	CAS number	Classification of the substance	XPR09G O %wt	AS30 %wt	AS50 %wt	AP70 %wt
Nitrocellulose	9004-70-0	Expl. 1.1 Flammable solid	60-80	60-80	60-80	60-80
Nitroglycerin	55-63-0	Expl. 1.1 Acute oral toxicity- Category 3 Skin sensitization- Category 1B Specific target organ toxicity (single exposure) -Category 1 Specific target organ toxicity (repeated exposure) -Category 1	15-40	10-30	10-30	10-30
Ethyle 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	0.5-1.5
Calcium Strearate	1592-23-0	This product isn't a hazardous product according to classification criteria.	0.1-1	0.1-1	0.1-1	0.1-1
Potassium Nitrate	7757-79-1	Oxidizing solid – Category 3	0.1-1	0.5-1.5	0.5-1.5	0.5-1.5
Graphite	7782-42-5	Carcinogenic- Catégorie 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.

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### 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 (P302+P352)	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 (P301- P310)	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

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

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

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### 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.

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### **6.2 Environmental precaution**

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	Numéro CAS	Limit value CAN	Limit value US
Nitrocellulose	9004-70-0	Not available	Not available
Nitroglycerin	55-63-0	0.2 ppm	0.2 ppm
Ethyl Centalite	77-89-4	Not available	Not available

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Calcium Strearate	1592-23-0	Not available	Not available
Potassium Nitrate	7757-79-1	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.dgouv.de/>

**Biological limit values**

No biological exposure limits noted for the ingredients

**8.2 Exposure controls**

**Engineering measures** Local exhaust ventilation is recommended if significant dusting occurs. Otherwise, use general exhaust ventilation. Eye wash fountain and emergency showers are recommended.

**Eye/face protection** Wear safety glasses with side shields or goggles.

**Skin protection** Wear appropriate chemical resistant, flame retardant clothing. Change frequently

**Hand protection** Nitrile gloves

**Respiratory protection** If ventilation is insufficient, use a dust mask or cartridge respirator.

**General hygiene consideration** 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.



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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Appearance	Black granular solid
Physical state	Solid
Form	Granular
Color	Black
Odor	Not applicable
PH	Not applicable
Melting point/freezing point	Not applicable
Initial boiling point/boiling range	Not applicable
Flash point	Not available
Evaporation rate	Not applicable
Flammability	Flammable solid
Upper/lower flammability or explosive limits	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	1.6g/cm <sup>3</sup>
Solubility(ies)	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	170°C(338°F)
Decomposition temperature	Not applicable
Viscosity	Not applicable

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### 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

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>) and carbon oxides (CO, CO<sub>2</sub>)

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

<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.

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<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
<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**

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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. 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

UN0160

#### 14.2 UN proper shipping name

Powder smokeless

#### 14.3 Transport hazard class(es)

1.1C

#### 14.4 Packing group

II

#### 14.5 Environment hazards

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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

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

Not available

### 15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

Revision date : 2020-01-28

Revision No. : 1

### **General information:**

This classification has been derived in accordance with SIMDUT 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

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TWA	Time Weighted Average
US	United States
vPvB	Very Persistent and Very Bioaccumulative
%wt	Percentage weight

### 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.