



U.S. Department  
of Transportation

400 Seventh Street, S.W.  
Washington, D.C. 20590

**Pipeline and  
Hazardous Materials Safety  
Administration**

**The US Department of Transportation  
Competent Authority for the United States**

**CLASSIFICATION OF EXPLOSIVES**

Based upon a request by Diamondback Industries, P.O. Box 281, 3824 Williamson Road, Crowley, TX, the following items are classed in accordance with Section 173.56, Title 49, Code of Federal Regulations (49 CFR). A copy of your application, all supporting documentation and a copy of this approval must be retained and made available to DOT upon request.

**U.N. PROPER SHIPPING NAME AND NUMBER:**

Propellant, solid, UN0499

**U.N. CLASSIFICATION CODE:** 1.3C

**REFERENCE NUMBER**

EX2006050012

**PRODUCT DESIGNATION/PART NUMBER**

Secondary Igniter, (P/N DET-2700-076)

**NOTES:**

Except when transported by passenger aircraft, the solid propellant grains may be reclassified as UN3178, Flammable solid, inorganic, n.o.s., PG II when are packaged by the method described as follows: Inner Packaging - Bags, heat-sealed foil/plastic laminate, each containing one grain weighing not more than six (6) grams. Outer Packaging - UN 4G fiberboard box with subdividers, each containing not more than twenty (20) inner packagings.

**DATED:** May 17, 2006

Approved by:

Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety



# MATERIAL SAFETY DATA SHEET SECONDARY IGNITER 4.1

PRODUCT IDENTIFICATION	
PRODUCT NAME	SECONDARY IGNITER
TRADE NAMES AND SYNONYMS	PROPELLANT, SOLID
MANUFACTURER	DIAMONDBACK INDUSTRIES, INC.
TRANSPORTATION EMERGENCY	1-800-255-3924 (24 HOURS – CHEM-TEL)

## PREVENTION OF ACCIDENTS IN THE USE OF EXPLOSIVES

THE PREVENTION OF ACCIDENTS IN THE USE OF EXPLOSIVES IS A RESULT OF CAREFUL PLANNING AND OBSERVANCE OF THE BEST KNOWN PRACTICES. THE EXPLOSIVES USER MUST REMEMBER THAT HE IS DEALING WITH A POWERFUL FORCE AND THAT VARIOUS DEVICES AND METHODS HAVE BEEN DEVELOPED TO ASSIST HIM IN DIRECTING THIS FORCE. HE SHOULD REALIZE THAT THIS FORCE, IF MISDIRECTED, MAY EITHER KILL OR INJURE BOTH HIM AND HIS FELLOW WORKERS.

### WARNING

**ALL EXPLOSIVES ARE DANGEROUS** AND MUST BE CAREFULLY HANDLED AND USED FOLLOWING APPROVED SAFETY PROCEDURES EITHER BY OR UNDER THE DIRECTION OF COMPETENT, EXPERIENCED PERSONS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, OR ORDINANCES. IF YOU HAVE ANY QUESTIONS OR DOUBTS AS HOW TO USE ANY EXPLOSIVE PRODUCT, **DO NOT USE IT** BEFORE CONSULTING WITH YOUR SUPERVISOR, OR THE MANUFACTURER, IF YOU DO NOT HAVE A SUPERVISOR. IF YOUR SUPERVISOR HAS ANY QUESTIONS OR DOUBTS, HE SHOULD CONSULT WITH THE MANUFACTURER BEFORE USING THE EXPLOSIVE RELATED PRODUCT.

## HAZARDOUS COMPONENTS

MATERIAL OR COMPONENT	CAS No.	TLV	PEL
RS GRADE PYRODEX	N/A	NE	NE
GRAPHITE	N/A	NE	NE
CARBON BLACK	N/A	NE	NE
POTASSIUM NITRATE	N/A	NE	NE
BINDER	N/A	NE	NE
N/A = NOT ASSIGNED    NE = NOT ESTABLISHED			

## PHYSICAL DATA

DARK GRAY SOLID WITH AN AROMATIC ODOR.

<b>HAZARDOUS REACTIVITY</b>	
<b>INSTABILITY</b>	MAY LIBERATE HYDROGEN GAS CREATING AN EXPLOSIVE HAZARD.
<b>INCOMPATIBILITY</b>	ACIDS AND ALKALIS
<b>HAZARDOUS DECOMPOSITION</b>	DETONATION PRODUCES HAZARDOUS FRAGMENTS. GASES PRODUCED MAY CONTAIN CARBON MONOXIDE AND NITROGEN OXIDE.
<b>POLYMERIZATION</b>	POLYMERIZATION WILL NOT OCCUR.

<b>FIRE AND EXPLOSION DATA</b>	
<b>FLASHPOINT</b>	NOT APPLICABLE
<b>EXTINGUISHING MEDIA</b>	NONE. CONTAINS BOTH OXIDIZER AND FUEL AND CANNOT BE READILY EXTINGUISHED. FIRE FIGHTING SHOULD BE LIMITED TO PREVENTING SPREAD OF OTHER FIRES.
<b>SPECIAL FIRE FIGHTING PROCEDURES</b>	DO NOT FIGHT EXPLOSIVE FIRES. TRY TO KEEP FIRE FROM REACHING EXPLOSIVES. ISOLATE AREA. GUARD AREA. DIVISION 4.1 EXPLOSIVES: EVACUATE AREA FOR 1500 FEET
<b>UNUSUAL FIRE AND EXPLOSION HAZARDS</b>	MAY DETONATE WITH IMPACT OR HEATING.

<b>HEALTH HAZARDS</b>	
<b>GENERAL</b>	AMMONIUM PERCHLORATE DOES NOT PRESENT HEALTH HAZARDS IN NORMAL HANDLING AND USE, HOWEVER, THE PRODUCTS ARE DIVISION 4.1 EXPLOSIVES, AND DETONATION MAY CAUSE SEVERE PHYSICAL INJURY, INCLUDING DEATH. ALL EXPLOSIVES ARE DANGEROUS AND MUST BE HANDLED CAREFULLY AND USED FOLLOWING APPROVED SAFETY PROCEDURES UNDER THE DIRECTION OF COMPETENT, EXPERIENCED PERSONS IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, AND ORDINANCES.
<b>CARCINOGENICITY</b>	NONE OF THE COMPONENTS OF AMMONIUM PERCHLORATE ARE LISTED AS A CARCINOGEN BY NTP, IARC, OR OSHA.

<b>FIRST AID</b>	
<b>INHALATION</b>	NOT A LIKELY ROUTE OF EXPOSURE. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. SEEK PROMPT MEDICAL ATTENTION.
<b>EYE AND SKIN CONTACT</b>	NOT A LIKELY ROUTE OF EXPOSURE
<b>INGESTION</b>	NOT A LIKELY ROUTE OF EXPOSURE
<b>INJURY FROM DETONATION</b>	SEEK PROMPT MEDICAL ATTENTION

<b>SPILL OR LEAK PROCEDURES</b>	
<b>SPILL/LEAK RESPONSE</b>	USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. ISOLATE AREA AND REMOVE SOURCES OF FRICTION, IMPACT, HEAT, LOW LEVEL ELECTRICAL CURRENT, ELECTROSTATIC OR RF ENERGY. SWEEP UP WITH NON-SPARKING TOOLS AND REMOVE FROM THE AREA.
<b>WASTE DISPOSAL</b>	DISPOSE OF IN COMPLIANCE WITH FEDERAL REGULATIONS UNDER THE AUTHORITY OF THE RESOURCE CONSERVATION AND RECOVERY ACT.

<b>SPECIAL PRECAUTIONS</b>	
KEEP AWAY FROM FRICTION, IMPACT, AND HEAT. DO NOT CONSUME FOOD, DRINK, OR TOBACCO IN AREAS WHERE THEY MAY BECOME CONTAMINATED WITH THESE MATERIALS.	

## SPECIAL PROTECTION INFORMATION

<b>VENTILATION</b>	USE ONLY WITH ADEQUATE VENTILATION
<b>RESPIRATORY</b>	NIOSH APPROVED PARTICLE MASKS FOR DUST AND MIST
<b>EYE</b>	SAFETY GLASSES OR GOGGLES
<b>GLOVES</b>	IMPERVIOUS RUBBER GLOVES
<b>OTHER</b>	COTTON OVERALLS, UNDERGARMENTS, AND SOCKS. CONDUCTIVE SOLED SHOES.

## STORAGE CONDITIONS

STORE IN ACCORDANCE WITH THE REQUIREMENTS OF SUBPART K, ATF: EXPLOSIVES LAW AND REGULATIONS

## SHIPPING INFORMATION

<b>PROPER SHIPPING NAME</b>	FLAMMABLE SOLID, INORGANIC, N.O.S.
<b>HAZARD CLASS</b>	4.1
<b>UN NUMBER</b>	4.1 UN3178
<b>DOT LABEL &amp; PLACARD</b>	DOT LABEL EXPLOSIVE 4.1 DOT PLACARD EXPLOSIVE 4.1

THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET IS BASED UPON AVAILABLE DATA AND BELIEVED TO BE CORRECT, HOWEVER, AS SUCH HAS BEEN OBTAINED FROM VARIOUS SOURCES, INCLUDING THE MANUFACTURER AND INDEPENDENT LABORATORIES, IT IS GIVEN WITHOUT WARRANTY OR REPRESENTATION THAT IT IS COMPLETE, ACCURATE, AND CAN BE RELIED UPON. DIAMONDBACK INDUSTRIES, INC. HAS NOT ATTEMPTED TO CONCEAL IN ANY MANNER THE DELETERIOUS ASPECTS OF THE PRODUCT LISTED HEREIN, BUT MAKES NO WARRANTY AS TO SUCH. FURTHER, DIAMONDBACK INDUSTRIES, INC. CANNOT ANTICIPATE NOR CONTROL THE MANY SITUATIONS IN WHICH THE PRODUCT OR THIS INFORMATION MAY BE USED. THERE IS NO GUARANTEE THAT THE HEALTH AND SAFETY PRECAUTIONS SUGGESTED WILL BE PROPER UNDER ALL CONDITIONS. IT IS THE SOLE RESPONSIBILITY OF EACH USER OF THE PRODUCT TO DETERMINE AND COMPLY WITH THE REQUIREMENTS OF ALL APPLICABLE LAWS AND REGULATIONS REGARDING ITS USE. THIS INFORMATION IS GIVEN SOLELY FOR THE PURPOSES OF SAFETY TO PERSONS AND PROPERTY. ANY OTHER USE OF THIS INFORMATION IS EXPRESSLY PROHIBITED.

### FOR FURTHER INFORMATION CONTACT:

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