



U.S. Department
of Transportation

East Building, PHH – 32
1200 New Jersey Avenue, Southeast
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, 3824 Williamson Road, Crowley, TX 76036, United States 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:

Igniters, UN0454

U.N. CLASSIFICATION CODE: 1.4S

REFERENCE NUMBER

EX2013050733

PRODUCT DESIGNATION/PART NUMBER

#DET-2700-074 (GO Style Igniter F/ All Style Setting Tools), # DET-2700-075-(4) (BP-4 Primary Igniter F/ Baker Setting Tools), # DET -2700-075-(3) (BP-3 Primary Igniter F/ Baker Setting Tools)

NOTES: This classification is only valid when the igniters are packaged as follows:
Inner Packaging - Bags, heat sealed foil, each containing a single unit. Intermediate Packaging - Dividers, prefabricated fiberboard, such as to hold no more than twenty (20) inner packagings in up to a 2x10 array. Outer Packaging - UN 4G fiberboard box, each containing a single intermediate packaging with double layer corrugated fiberboard pads on top and bottom.

DATED: 08/23/2013


For Dr. Magdy El-Sibaie
Associate Administrator for Hazardous Materials Safety

SECTION I: CERTIFICATION

**Design Qualification of the Diamondback Industries
20 x Igniter Packaging (12-7/8" x 11-3/4" x 6-3/8")**

TEN-E Packaging Services, Inc. is a current DOT UN Third-Party Certification Agency under §107.403 and certifies that the **Diamondback Industries** packaging referenced above has passed the standards of the DEPARTMENT OF TRANSPORTATION'S TITLE 49 CFR; Performance Oriented Packaging Standards, Section 178. This package is also certified under IMDG and the UN Recommendations on the Transport of Dangerous Goods. It is the responsibility of the end user to determine authorization for use under these regulations. The use of other packaging methods or components other than those documented in this report may render this certification invalid.

SUMMARY OF PERFORMANCE TESTS

UN / DOT TEST	CFR REFERENCE	TEST LEVEL	TEST CONTENTS	TEST COMPLETED	TEST RESULTS
Drop	178.603	1.2 m	Simulated Article	November 14, 2014	PASS
Stacking	178.606	45.4 Kg – 24 Hours	Simulated Article	November 17, 2014	PASS
Vibration	178.608	4.3 Hz – 1 Hour	Simulated Article	November 14, 2014	PASS
Cobb	178.516	30 Minutes	---	November 14, 2014	PASS
TEST REPORT NUMBER:			14-2744		
UN MARKING: (CFR 49 – 178.503)			 4G / Y2.3 / S / ** USA / +AA8291		
PACKAGING IDENTIFICATION CODE:			4G - Fiberboard Box (178.516)		
PERFORMANCE STANDARD:			Y (Packaging meets Packing Group II and III tests)		
AUTHORIZED GROSS MASS:			2.3 Kg (5.0 Lbs.)		
"S" DESIGNATION:			Denotes Inner Packagings		
YEAR OF MANUFACTURE:			** Insert year the packaging is manufactured		
STATE AUTHORIZING THE MARK			USA		
PACKAGING CERTIFICATION AGENCY:			(+AA) TEN-E Packaging Services, Inc. (Newport CA #2006030022)		
THIRD PARTY PACKAGING IDENTIFICATION:			+AA8291		
PERIODIC RETEST DATE:			November 17, 2016		

ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY THAT THE PACKAGING TESTED IS MERCHANTABLE OR FIT FOR A PARTICULAR PURPOSE, ARE DISCLAIMED. In no event shall TEN-E Packaging Services, Inc. liability exceed the total amount paid by **Diamondback Industries** for services rendered. In the event of future changes to the above referenced test standards, it is the responsibility of **Diamondback Industries** to determine whether additional testing or updating of past testing is necessary to verify that the packaging we have tested remains in compliance with those standards.

MANUFACTURER:

Diamondback Industries
3824 Williamson Road
Crowley, TX 76036



Steve M. Brion
Project Manager
TEN-E Packaging Services, Inc.
1666 County Road 74
Newport, MN 55055

1. IDENTIFICATION

PRODUCT IDENTIFIER

TRADE NAME: IGNITERS, Division 1.4
ARTICLE NUMBERS: DET-2700-074 GO STYLE IGNITER
 DET-2700-075-3 BP-3 IGNITER
 DET-2700-075-4 BP-4 IGNITER
MANUFACTURER: Diamondback Industries, Inc.
 3824 Williamson Road
 Crowley, TX 76036 USA
EMERGENCY TELEPHONE NUMBER: 1-800-424-9311 (24-HOURS – CHEMTREC) CCN62142

2. HAZARD IDENTIFICATION

HAZARD CLASSIFICATION: Explosive, Division 1.4
SIGNAL WORD: **Warning**
HAZARD STATEMENT: Flammable solid, may ignite under adverse conditions. Oxidizer. May ignite combustibles. May cause eye, skin, and respiratory irritation. May affect the blood’s ability to carry oxygen. May cause allergic skin reaction. May be harmful if swallowed.



PICTOGRAMS:

PRECAUTIONARY STATEMENTS: Keep away from friction, heat, sparks, open flames, hot surfaces, and impact. In case of major fire and large quantities: isolate area and evacuate personnel to a safe area, guard against intruders, and fight fire remotely. Store away from combustibles in accordance with all applicable local, regional, national, and international regulations.

OTHER HAZARDS:

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.

3. COMPOSITION / INGREDIENTS

MIXTURE OF SUBSTANCES LISTED BELOW WITH NONHAZARDOUS ADDITIONS:

Material/Component	CAS No.	EINECS No.	TLV	PEL
Sodium Nitrate	7631-99-4	231-554-3	NE	NE
Aluminum	7429-90-5	231-072-3	NE	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)

NE= Not Established

4. FIRST AID MEASURES

INHALATION:	Not a likely route of exposure. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen. Seek prompt medical attention.
EYE AND SKIN CONTACT:	Not a likely route of exposure.
INGESTION:	Not a likely route of exposure.
INJURY FROM FIRE:	Seek prompt medical attention.

5. FIREFIGHTING MEASURES

EXTINGUISHING MEDIA: Flood area with water. If no water is available, carbon dioxide, dry chemical or earth may be used. In the event that fire reaches cargo, withdraw and let the fire burn. There are no known unsuitable extinguishing agents for this product. In the event of a major fire involving large quantities, evacuate the area for 1,500 feet, fight fire remotely and eliminate all ignition sources if safe to do so. Firefighters should wear full protective suit with self-contained respiratory protective device.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

- Use respiratory protective device if fumes or dust are present.
- Keep away from all ignition sources.
- Ensure adequate ventilation, protect from heat.
- Isolate area and prevent access.
- Wear protective equipment and keep unprotected persons away.

ENVIRONMENT PRECAUTIONS AND METHODS FOR CLEANING UP:

- Do not allow to enter sewers, surface or ground water.
- Inform authorities in case of seepage into water course or sewer system.
- Pick up mechanically.
- Send for recovery or disposal in suitable containers
- Dispose contaminated material in compliance with federal regulations.

7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING:

- Keep away from heat and direct sunlight.
- Handle with care. Avoid jolting, friction and impact.
- Protect product from excessive heat.
- Keep all ignition sources away – do not smoke within 50 feet.

CONDITIONS FOR SAFE STORAGE:

- Store in a cool dry location.

Avoid storage near extreme heat, ignition sources or open flame.
Store away from other oxidizing agents.
Store away from foodstuffs.
Protect product from heat and direct sunlight.
Store in accordance with ATF explosives laws and regulations (subpart k).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

CONTROL PARAMETERS:

None of the components or ingredients of igniters are listed as a carcinogen by NTP, IARC OR OSHA.

EXPOSURE CONTROLS:

Do not inhale dust, smoke or fumes from burning.
Keep away from foodstuffs, beverages and feed.

PERSONAL PROTECTION:

Wash hands thoroughly before breaks and at the end of work.
Avoid contact with the eyes.
Wear dust mask, safety glasses, and protective gloves for manufacturing.

9. PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: Brass or steel housing containing dark gray flammable mixture.
ODOR: None.
MELT POINT: Not determined.
FLASH POINT: Not applicable.
AUTO IGNITION: >625 degrees F.
DECOMPOSITION: Decomposition will not occur.
SELF IGNITING: Product is not self-igniting.
IGNITION WARNING: Risk of ignition by shock, friction, impact, fire, or other sources of heat.

10. STABILITY AND REACTIVITY

STABILITY:

No decomposition will occur with this product.

POSSIBILITY OF HAZARDOUS REACTIONS:

Product can react violently with oxygen rich (oxidizing) material.
Exothermic reaction with certain types of acids.
Danger of explosion if product is heavily confined.

CONDITIONS TO AVOID:

Keep all ignition sources away. Do not smoke within 50 feet.
Store away from oxidizing agents.
Keep away from heat sources and out of direct sunlight.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide and carbon dioxide.
Nitrogen oxides.
Irritant gases / vapors.

11. TOXICOLOGICAL INFORMATION

PRIMARY IRRITANT EFFECT:

On the skin: No irritant effect.
On the eyes: Slight irritant effect on eyes.
Sensitization: No sensitizing effect known.

ADDITIONAL TOXICOLOGICAL INFORMATION:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

Normal handling of the undeployed product poses little or no health hazards. This product is a powdered material which contains the various components within a brass or steel shell.

Therefore, under normal handling of this product, no exposure to any harmful materials will occur. When product is used under normal conditions, gases may be generated which may be irritating to the eyes and respiratory tract.

12. ECOLOGICAL INFORMATION

TOXICITY:

Aquatic toxicity: None
Degradability: No relevant information available
Bioaccumulative: No relevant information available
Soil mobility: No relevant information available

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations.

14. TRANSPORT INFORMATION

UN NUMBERS:

UN0454

PROPER SHIPPING NAME:

IGNITERS

CLASS AND LABELING:

EXPLOSIVE 1.4S
SHIPPABLE BY PASSENGER AND CARGO AIRCRAFT



PHMSA EXPLOSIVES EX-NUMBERS:

EX2013050733

15. REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENT REGULATIONS:

This product has been classified in accordance with hazard criteria of the controlled products regulations and the SDS contains all of the information required by the controlled products regulations.

CHEMICAL SAFETY ASSESSMENT:

A chemical safety assessment has not been carried out.

16. OTHER INFORMATION

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.

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