



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

AUG 14 2017

Stan Harrison  
Team Leader  
Williams International  
280 E. West Maple Road  
Commerce Township, MI 48390

Reference No. 17-0039

Dear Mr. Harrison:

This letter is in response to your April 5, 2017, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the classification of an internal combustion engine with installed Class 1 components. Specifically, you ask if your company is still permitted to ship engines domestically using the shipping description "UN3166, Engines, internal combustion, flammable liquid powered, Class 9" now that the UN3166 identification number has been designated for "vehicles only" as listed in the Hazardous Materials Table (HMT) in § 172.101.

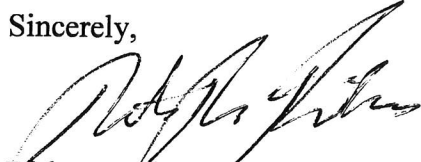
The answer is yes until January 1, 2018. The Pipeline and Hazardous Materials Safety Administration (PHMSA) published a final rule on March 30, 2017 [(HM-215N); 82 FR 15796] that amended the HMT entry for UN3166 by limiting its applicability to vehicles only. The final rule added three new HMT entries to communicate the type and quantity of fuel present within an engine: UN3528, engines and machinery powered by a flammable liquid; UN3529, engines and machinery powered by flammable gas; and UN3530, Class 9 hazardous materials. The final rule went into effect March 30, 2017, with a delayed compliance date of January 1, 2018. Beginning January 1, 2018, engines powered by a flammable liquid will no longer be eligible for description and classification under "UN3166, Class 9" but must be described and classed as "UN3528, Engine, internal combustion, flammable liquid powered, Class 3." However, note that PHMSA has maintained the existing transportation requirements and exceptions for engines and machinery found in § 173.220 for all modes of transportation, other than vessel, regardless of the description and classification changes.

Therefore, based on the information you have provided and in accordance with the changes adopted in the HMR under the HM-215N final rule, your company is still permitted to ship engines under the shipping description "UN3166, Engines, internal combustion, flammable

liquid powered, Class 9" until the delayed compliance date. After the compliance date has passed, it will be the shipper's responsibility to properly classify and describe material based on the new entries in the HMT for internal combustion engines. Items containing other hazardous materials that are integral components of an internal combustion engine may be excepted from the regulations provided the provisions in § 173.220(f)(1) are met.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read 'Dirk Der Kinderen', written in a cursive style.

Dirk Der Kinderen  
Chief, Standards Development Branch  
Standards and Rulemaking Division

**Goodall, Shante CTR (PHMSA)**

Baker  
173.220  
Class  
17-0039

**From:** INFOCNTR (PHMSA)  
**Sent:** Wednesday, April 05, 2017 2:30 PM  
**To:** Hazmat Interps  
**Subject:** FW: Hazmat Inquiry  
**Attachments:** Ref No. 16-0024 .pdf; Ref No. 16-0023.pdf; Request for a Formal Letter of Interpretation with this configuration

**Categories:** Charles

Hi Shante/Alice,

Please submit this as a letter of interpretation. Mr. Harrison spoke with Eamonn.

Please let me know if you have any questions.

Thanks,  
Jordan

**From:** SHarrison@williams-int.com [mailto:SHarrison@williams-int.com]  
**Sent:** Wednesday, April 05, 2017 11:40 AM  
**To:** INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>  
**Subject:** Hazmat Inquiry

Good Morning,

This is an request for two new Letters of Interpretation (LOI). On received September 2016 Williams International (WI) received two LOI please see attachments for the original request and LOI.

WI will provide engines UN3166 Engine, Internal Combustion, Flammable liquid Powered Class 9 with two UN0325 1.4G Igniter and a UN0275 1.3C Cartridge, Power Device installed for domestic shipments.

Based on the information in the IATA 58<sup>th</sup> edition of Dangerous Goods Regulations at the end of March 2017 all entries of "engines" were deleted from UN 3166 in Class 9 and now only applies to the proper shipping name "vehicles." Engines are now assigned to UN 3528 – UN 3530 in Division 2.1, Class 3 or Class 9, based on the classification of the fuel that powers the engine.

Using IATA UN3528 will not allow for the shipment of this engine with any explosive's. At this point 49 CFR has not harmonized with IATA. January 2018 when 49 CFR harmonize with IATA and all engines are deleted from UN3166 in Class 9 will WI based on the LOI attached be allowed to complete our contractual obligation shipping these engines using UN3166 Class 9? Please provide TWO NEW LOI regarding this issue.

Respectfully,

Stan Harrison  
Team Leader  
Walled Lake Warehousing\Transportation

**Williams International**  
**2280 E. West Maple Road**  
**Commerce Township, MI 48390**  
**Phone: (248)960-2472**  
**E-mail: [sharrison@williams-int.com](mailto:sharrison@williams-int.com)**

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U.S. Department  
of Transportation

Pipeline and Hazardous  
Materials Safety  
Administration

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

SEP 27 2016

Mr. Stan Harrison  
Team Leader  
Williams International  
Walled Lake Warehousing/Transportation  
2280 East West Maple Road  
Commerce Township, MI 48390

Reference No. 16-0024

Dear Mr. Harrison:

This letter is in response to your January 18, 2016, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the classification of an internal combustion engine with installed Class 1 components. Specifically, you state that the installed components are classed as "UN0325, Igniter, 1.4G" and "UN0275, Cartridge, Power Device Installed" and assigned the Department of Transportation (DOT) approval number EX-2005010294 and EX-2008010116, respectively. Your questions have been paraphrased and answered as follows:

- Q1. You ask if the basic description "UN3166, Engine, internal combustion, flammable liquid powered, Class 9" is appropriate and for confirmation that the engine with an installed igniter and a cartridge, power device would be eligible for the provisions of § 173.220(f)(1), as they are both an integral component of the engine and required for its operation.
- A1. Under § 173.56(i), the Associate Administrator for Hazardous Materials Safety may specify a classification or except an explosive material from the requirements of the HMR. In the scenario you described, the Associate Administrator has determined that a 1.4G igniter and a cartridge, power device that are integral parts of the combustion engine do not pose a hazard requiring an approval and may be excepted if the requirements of § 173.220(f)(1) are met. Provided the 1.4G igniter and cartridge, power device are integral and necessary for the operation of the engine in accordance with § 173.220(f)(1), the basic description "UN3166, Engine, internal combustion, flammable liquid powered, Class 9" would be appropriate. Please note that this opinion is limited to the facts you presented in your letter.
- Q2. You note that § 173.220(h)(1) exempts engines from placarding requirements when transported domestically by ground, and you request clarification on the required hazard communication for international air transport of this engine.

A2. The requirements for the transportation of engines can vary by mode. The modal exceptions are provided in § 173.220(b)(4).

Please note that this letter of interpretation is based on the information provided specific to the scenario in question and should not be construed as generally applicable.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in cursive script, reading "T. Glenn Foster". The signature is written in dark ink and is positioned above the printed name and title.

T. Glenn Foster  
Chief, Regulatory Review and Reinvention Branch  
Standard and Rulemaking Division

**Goodall, Shante CTR (PHMSA)**

Andrews  
173.220  
Class 9  
16-0024

**From:** Geller, Shelby CTR (PHMSA)  
**Sent:** Thursday, January 28, 2016 12:15 PM  
**To:** Hazmat Interps  
**Subject:** FW: Request for a Formal Letter of Interpretation  
**Attachments:** U.S DOT Letter of Interpretation.pdf; EX2008010116 FOR PN 72062.pdf; EX2005010294 FOR PN 77803.pdf

Attached is the second request.

**From:** [SHarrison@williams-int.com](mailto:SHarrison@williams-int.com) [<mailto:SHarrison@williams-int.com>]  
**Sent:** Monday, January 18, 2016 9:43 AM  
**To:** INFOCNTR (PHMSA)  
**Cc:** [SHarrison@williams-int.com](mailto:SHarrison@williams-int.com)  
**Subject:** Request for a Formal Letter of Interpretation

Hello,

This is to obtain a Formal Letter of Interpretation for the classification of a shipment of a UN3166 Engine, Internal Combustion, Flammable liquid Powered with one UN0325 1.4G Igniter and one UN0275 1.3C Cartridge, Power Device installed.

Please help with providing information for this domestic shipment.

Shipment:

UN3166 Class 9 Engine, internal combustion, flammable liquid powered. On this engine is fixed and installed, grounded and shielded one UN0325, Igniter 1.4G (REFERENCE NUMBER EX2005010294) and one UN0275, Cartridge, Power Device (REFERENCE NUMBER EX2008010116) these are fixed components required for the operation of the engine.

Per **49 CFR 173.220(h)(1)**, Internal Combustion Engines are not subject to the Hazardous Materials Regulations, including placarding rules, when shipped by ground in the US and prepared in accordance with 49 CFR 173.220.

With respect to the Igniter and Cartridge, Power Device, see **49 CFR 173.220(f)(1)**:

"Items containing hazardous materials... that are integral components of the motor vehicle, engine, or mechanical equipment and are necessary for the operation of the vehicle, engine, or mechanical equipment.. must be securely installed in the motor vehicle, engine, or mechanical equipment. **Such items are not otherwise subject to the requirements of this subchapter.**"

The Igniter and Cartridge, Power Device will be securely installed to the engine. The one Igniter will have a Protective Fraday Cap-Shorting Device installed to provide a ground path from all connector contacts to ground to prevent actuation from High Energy Frequency Fields and Electrostatic Discharge while in storage or transporting. The Cartridge will have a Shunt between the wires preventing any connections and a Shielding Cap attached for storage or transporting these protective devices will not be removed until the engine is installed on vehicle.

Per IATA UN3166 Packing instruction 950(d)(1)(2): Other operational equipment

These dangerous good UN0325, Igniter 1.4G and UN0275, Cartridge, Power Device would not be required to be reported on the Dangerous Goods Documents and this shipment would be shipped as a UN3166 Class 9 Engine, Internal Combustion, Flammable Liquid Powered.

In light of the above information please advise if this shipment can be made using UN3166 Engine, Internal Combustion, Flammable Liquid Powered,9? Please see attachments for additional information.

Thank you in advance for help!!!!

Stan Harrison  
Team Leader  
Walled Lake Warehousing\Transportation  
Williams International  
Phone: (248)960-2472  
E-mail: [sharrison@williams-int.com](mailto:sharrison@williams-int.com)

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U.S. Department  
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Pipeline and Hazardous  
Materials Safety  
Administration

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

NOV 13 2014

Stan Harrison  
Team Leader  
Williams International  
Walled Lake Warehousing/Transportation  
2280 E. West Maple Road  
Commerce Township, MI 48390

Ref. No.: 14-0071

Dear Mr. Harrison:

This is in response to your letter dated April 2, 2014 requesting clarification of the Hazardous Material Regulations (HMR; 49 CFR Parts 171-180) applicable to the classification of an engine with an installed Class 1 component. The installed component is classed as "UN0325, Igniter, 1.4G" and assigned the Department of Transportation (DOT) approval number EX-2005010294. Specifically, you ask if the basic description "UN3166, Engine, internal combustion, flammable liquid powered, Class 9" is appropriate and ask for confirmation that the engine with installed igniter would be eligible for the provisions of § 173.220(f)(1) as the igniter is both an integral component of the engine and required for operation of the engine. In addition, you note that § 173.220(h)(1) exempts engines from placarding requirements when transported domestically by ground and request clarification on the required hazard communication for international air transport of this engine.

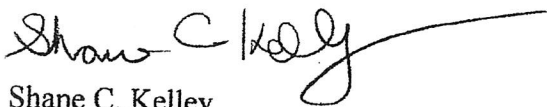
Under § 173.56(i) of the HMR, the Associate Administrator for Hazardous Materials Safety may specify a classification or except an explosive material from the requirements of the HMR. In the scenario described, the AA has determined that a 1.4G igniter that is an integral part of the combustion engine does not pose a hazard requiring an approval and may be excepted if the requirements of § 173.220(f)(1) are met. Provided the 1.4G igniter is an integral component of the engine and necessary for the operation of the engine in accordance with § 173.220(f)(1), the basic description "UN3166, Engine, internal combustion, flammable liquid powered, Class 9" would be appropriate. This decision is limited to the facts you presented in your letter.

The requirements of the HMR apply to all modes of transportation. For domestic transportation to the airport of departure by motor vehicle or rail car, provided the fuel tank is securely closed, the engine is not subject to any other requirements under the HMR (e.g., shipping papers, labeling, marking, placarding, or emergency response information). Subpart C of Part 171, authorizes the use of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (TI) if any portion of the transportation is by aircraft. Under the ICAO TI, Packing Instruction 950 provides that dangerous goods required for the operation

of the vehicle, machine, or equipment must be securely mounted to the vehicle, machine, or equipment, and in addition requires that dangerous goods identified in Table 3-1 as forbidden on passenger aircraft, only be transported on cargo aircraft. Special Provision A87 excepts articles, which are not fully enclosed by packaging, crates or other means that prevent ready identification, from the marking requirements of 5;2 and the labeling requirements of 5;3.

Please note that this letter of interpretation is based on the information provided specific to the scenario in question and should not be construed to be generally applicable. I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read "Shane C. Kelley", with a long horizontal flourish extending to the right.

Shane C. Kelley  
Acting International Standards Coordinator  
Standards and Rulemaking Division



U.S. Department  
of Transportation

Pipeline and Hazardous  
Materials Safety Administration

The US Department of Transportation  
Competent Authority for the United States

East Building, PHH - 32  
1200 New Jersey Avenue, Southeast  
Washington, D.C. 20590

### CLASSIFICATION OF EXPLOSIVES

Based upon a request by Pacific Scientific, 3601 Union Road, Hollister, CA, 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:**

Cartridges, power device, UN0275

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

**REFERENCE NUMBER**  
EX2008010116

**PRODUCT DESIGNATION/PART NUMBER**  
P/N 829000-01

**DATED:** February 15, 2008

Approved by:

*Theodore L. Willke*  
for Theodore L. Willke  
Associate Administrator  
for Hazardous Materials Safety



U.S. Department  
of Transportation

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

**Research and  
Special Programs  
Administration**

The US Department of Transportation  
Competent Authority for the United States

**CLASSIFICATION OF EXPLOSIVES**

Based upon a request by Pacific Scientific, 3601 Union Road, Hollister, CA, 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, UN0325

**U.N. CLASSIFICATION CODE:** 1.4G

**REFERENCE NUMBER**

EX2005010294

**PRODUCT DESIGNATION/PART NUMBER**

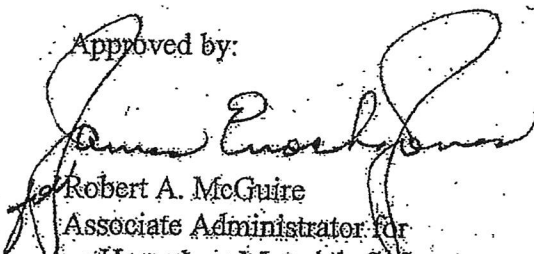
15936-05

**NOTES:**

The following packaging method is assigned: Inner Packaging - Bag, foil, each containing one igniter pre-wrapped in plastic bubble wrap. Outer Packaging - UN 4G fiberboard box, each containing not more than fifty (50) inner packagings.

**DATED:** January 26, 2005

Approved by:

  
Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety





U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

SEP 27 2016

Mr. Stan Harrison  
Team Leader  
Williams International  
Walled Lake Warehousing/Transportation  
2280 East West Maple Road  
Commerce Township, MI 48390

Reference No. 16-0023

Dear Mr. Harrison:

This letter is in response to your January 18, 2016, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the classification of an internal combustion engine with installed Class 1 components. Specifically, you state that the installed components are classed as two "UN0325, Igniter, 1.4G" and one "UN0275, Cartridge, Power Device Installed" and assigned the Department of Transportation (DOT) approval number EX-2005010294 and EX-2008010116, respectively. Your questions have been paraphrased and answered as follows:

- Q1. You ask if the basic description "UN3166, Engine, internal combustion, flammable liquid powered, Class 9" is appropriate and for confirmation that the engine with two installed igniters and one cartridge, power device would be eligible for the provisions of § 173.220(f)(1), as they are integral components of the engine and required for its operation.
- A1. Under § 173.56(i), the Associate Administrator for Hazardous Materials Safety may specify a classification or except an explosive material from the requirements of the HMR. In the scenario you described, the Associate Administrator has determined that a 1.4G igniter and a cartridge, power device that are integral parts of the combustion engine do not pose a hazard requiring an approval and may be excepted if the requirements of § 173.220(f)(1) are met. Provided the two 1.4G igniters and one cartridge, power device are integral and necessary for the operation of the engine in accordance with § 173.220(f)(1), the basic description "UN3166, Engine, internal combustion, flammable liquid powered, Class 9" would be appropriate. Please note that this opinion is limited to the facts you presented in your letter.
- Q2. You note that § 173.220(h)(1) exempts engines from placarding requirements when transported domestically by ground, and you request clarification on the required hazard communication for international air transport of this engine.

A2. The requirements for the transportation of engines can vary by mode. The modal exceptions are provided in § 173.220(b)(4).

Please note that this letter of interpretation is based on the information provided specific to the scenario in question and should not be construed as generally applicable.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in cursive script, reading "T. Glenn Foster". The signature is written in dark ink and is positioned to the left of the typed name.

T. Glenn Foster  
Chief, Regulatory Review and Reinvention Branch  
Standard and Rulemaking Division

Andrews  
173-220  
Class 9  
16-0023

**Goodall, Shante CTR (PHMSA)**

**From:** Geller, Shelby CTR (PHMSA)  
**Sent:** Thursday, January 28, 2016 12:14 PM  
**To:** Hazmat Interps  
**Subject:** FW: Request for a Formal Letter of Interpretation with this configuration  
**Attachments:** U.S DOT Letter of Interpretation.pdf; EX2008010116 FOR PN 72062.pdf; EX2005010294 FOR PN 77803.pdf

Dear Shante and Alice,

Forwarded is a request for a formal letter of interpretation. I spoke with Mr. Harrison about his request. There is a second interpretation request which only varies slightly from this request, which I will forward next. I spoke with Aaron and he mentioned that they can probably be written in the same letter.

Mr. Harrison's address is:  
2280 East West Maple Road  
Walled Lake Michigan, MI 48390

Thanks,  
Shelby

**From:** [SHarrison@williams-int.com](mailto:SHarrison@williams-int.com) [mailto:SHarrison@williams-int.com]  
**Sent:** Monday, January 18, 2016 10:20 AM  
**To:** INFOCNTR (PHMSA)  
**Cc:** [SHarrison@williams-int.com](mailto:SHarrison@williams-int.com)  
**Subject:** Request for a Formal Letter of Interpretation with this configuration

Hello,

This is to obtain a Formal Letter of Interpretation for the classification of a shipment of a UN3166 Engine, Internal Combustion, Flammable liquid Powered with **two UN0325 1.4G Igniter** and a UN0275 1.3C Cartridge, Power Device installed.

Please help with providing information for this domestic shipment.

**Shipment:**

UN3166 Class 9 Engine, internal combustion, flammable liquid powered. On this engine is fixed and installed, grounded and shielded **two UN0325, Igniter 1.4G** (REFERENCE NUMBER EX2005010294) and a UN0275, Cartridge, Power Device (REFERENCE NUMBER EX2008010116) these are fixed components required for the operation of the engine.

Per **49 CFR 173.220(h)(1)**, Internal Combustion Engines are not subject to the Hazardous Materials Regulations, including placarding rules, when shipped by ground in the US and prepared in accordance with 49 CFR 173.220.

With respect to the Igniter and Cartridge, Power Device, see **49 CFR 173.220(f)(1)**:

"Items containing hazardous materials... that are integral components of the motor vehicle, engine, or mechanical equipment and are necessary for the operation of the vehicle, engine, or mechanical equipment.. must be securely installed in the motor vehicle, engine, or mechanical equipment. **Such items are not otherwise subject to the requirements of this subchapter.**"

The Two Igniter and One Cartridge, Power Device will be securely installed to the engine. The two Igniters will have Protective Faraday Cap-Shorting Device installed to provide a ground path from all connector contacts to ground to prevent actuation from High Energy Frequency Fields and Electrostatic Discharge while in storage or transporting. The Cartridge will have a Shunt between the wires preventing any connections and a Shielding Cap attached for storage or transporting, these protective devices will not be removed until the engine is installed on vehicle.

Per IATA UN3166 Packing instruction 950(d)(1)(2): Other operational equipment  
These dangerous good UN0325, Igniter 1.4G and UN0275, Cartridge, Power Device would not be required to be reported on the Dangerous Goods Documents and this shipment would be shipped as a UN3166 Class 9 Engine, Internal Combustion, Flammable Liquid Powered.

In light of the above information please advise if this shipment can be made using UN3166 Engine, Internal Combustion, Flammable Liquid Powered,9? Please see attachments for additional information.

**Thank you in advance for help!!!!**

**Stan Harrison**  
**Team Leader**  
**Walled Lake Warehousing\Transportation**  
**Williams International**  
**Phone: (248)960-2472**  
**E-mail: [sharrison@williams-int.com](mailto:sharrison@williams-int.com)**

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**CLASSIFICATION OF EXPLOSIVES**

Based upon a request by Pacific Scientific, 3601 Union Road, Hollister, CA, 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:**  
Cartridges, power device, UN0275

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

**REFERENCE NUMBER**  
EX2008010116

**PRODUCT DESIGNATION/PART NUMBER**  
P/N 829000-01

**DATED:** February 15, 2008

Approved by:

*Hasbroet K. Lij*  
for Theodore L. Wilke  
Associate Administrator  
for Hazardous Materials Safety



U.S. Department  
of Transportation

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Materials Safety  
Administration

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

NOV 13 2014

Stan Harrison  
Team Leader  
Williams International  
Walled Lake Warehousing/Transportation  
2280 E. West Maple Road  
Commerce Township, MI 48390

Ref. No.: 14-0071

Dear Mr. Harrison:

This is in response to your letter dated April 2, 2014 requesting clarification of the Hazardous Material Regulations (HMR; 49 CFR Parts 171-180) applicable to the classification of an engine with an installed Class 1 component. The installed component is classed as "UN0325, Igniter, 1.4G" and assigned the Department of Transportation (DOT) approval number EX-2005010294. Specifically, you ask if the basic description "UN3166, Engine, internal combustion, flammable liquid powered, Class 9" is appropriate and ask for confirmation that the engine with installed igniter would be eligible for the provisions of § 173.220(f)(1) as the igniter is both an integral component of the engine and required for operation of the engine. In addition, you note that § 173.220(h)(1) exempts engines from placarding requirements when transported domestically by ground and request clarification on the required hazard communication for international air transport of this engine.

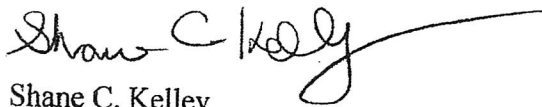
Under § 173.56(i) of the HMR, the Associate Administrator for Hazardous Materials Safety may specify a classification or except an explosive material from the requirements of the HMR. In the scenario described, the AA has determined that a 1.4G igniter that is an integral part of the combustion engine does not pose a hazard requiring an approval and may be excepted if the requirements of § 173.220(f)(1) are met. Provided the 1.4G igniter is an integral component of the engine and necessary for the operation of the engine in accordance with § 173.220(f)(1), the basic description "UN3166, Engine, internal combustion, flammable liquid powered, Class 9" would be appropriate. This decision is limited to the facts you presented in your letter.

The requirements of the HMR apply to all modes of transportation. For domestic transportation to the airport of departure by motor vehicle or rail car, provided the fuel tank is securely closed, the engine is not subject to any other requirements under the HMR (e.g., shipping papers, labeling, marking, placarding, or emergency response information). Subpart C of Part 171, authorizes the use of the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (TI) if any portion of the transportation is by aircraft. Under the ICAO TI, Packing Instruction 950 provides that dangerous goods required for the operation

of the vehicle, machine, or equipment must be securely mounted to the vehicle, machine, or equipment, and in addition requires that dangerous goods identified in Table 3-1 as forbidden on passenger aircraft, only be transported on cargo aircraft. Special Provision A87 excepts articles, which are not fully enclosed by packaging, crates or other means that prevent ready identification, from the marking requirements of 5;2 and the labeling requirements of 5;3.

Please note that this letter of interpretation is based on the information provided specific to the scenario in question and should not be construed to be generally applicable. I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read "Shane C. Kelley", with a long horizontal flourish extending to the right.

Shane C. Kelley  
Acting International Standards Coordinator  
Standards and Rulemaking Division



U.S. Department  
of Transportation

400 Seventh Street, S.W.  
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Competent Authority for the United States

**CLASSIFICATION OF EXPLOSIVES**

Based upon a request by Pacific Scientific, 3601 Union Road, Hollister, CA, 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, UN0325

**U.N. CLASSIFICATION CODE:** 1.4G

**REFERENCE NUMBER**  
EX2005010294

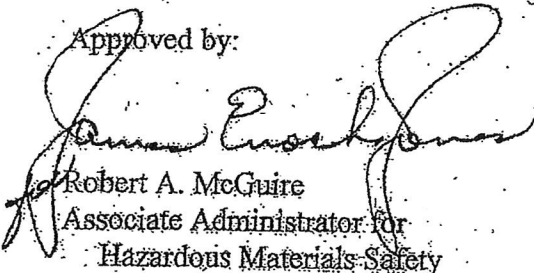
**PRODUCT DESIGNATION/PART NUMBER**  
15936-05

**NOTES:**

The following packaging method is assigned: Inner Packaging - Bag, foil, each containing one igniter pre-wrapped in plastic bubble wrap. Outer Packaging - UN 4G fiberboard box, each containing not more than fifty (50) inner packagings.

**DATED:** January 26, 2005

Approved by:

  
Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety



## Goodall, Shante CTR (PHMSA)

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**From:** SHarrison@williams-int.com  
**Sent:** Monday, January 18, 2016 10:20 AM  
**To:** INFOCNTR (PHMSA)  
**Cc:** SHarrison@williams-int.com  
**Subject:** Request for a Formal Letter of Interpretation with this configuration  
**Attachments:** U.S DOT Letter of Interpretation.pdf; EX2008010116 FOR PN 72062.pdf; EX2005010294 FOR PN 77803.pdf

Hello,

This is to obtain a Formal Letter of Interpretation for the classification of a shipment of a UN3166 Engine, Internal Combustion, Flammable liquid Powered with two UN0325 1.4G Igniter and a UN0275 1.3C Cartridge, Power Device installed.

Please help with providing information for this domestic shipment.

Shipment:

UN3166 Class 9 Engine, internal combustion, flammable liquid powered. On this engine is fixed and installed, grounded and shielded two UN0325, Igniter 1.4G (REFERENCE NUMBER EX2005010294) and a UN0275, Cartridge, Power Device (REFERENCE NUMBER EX2008010116) these are fixed components required for the operation of the engine.

Per **49 CFR 173.220(h)(1)**, Internal Combustion Engines are not subject to the Hazardous Materials Regulations, including placarding rules, when shipped by ground in the US and prepared in accordance with 49 CFR 173.220.

With respect to the Igniter and Cartridge, Power Device, see **49 CFR 173.220(f)(1)**:

"Items containing hazardous materials... that are integral components of the motor vehicle, engine, or mechanical equipment and are necessary for the operation of the vehicle, engine, or mechanical equipment.. must be securely installed in the motor vehicle, engine, or mechanical equipment. **Such items are not otherwise subject to the requirements of this subchapter.**"

The Two Igniter and One Cartridge, Power Device will be securely installed to the engine. The two Igniters will have Protective Fraday Cap-Shorting Device installed to provide a ground path from all connector contacts to ground to prevent actuation from High Energy Frequency Fields and Electrostatic Discharge while in storage or transporting. The Cartridge will have a Shunt between the wires preventing any connections and a Shielding Cap attached for storage or transporting, these protective devices will not be removed until the engine is installed on vehicle.

Per IATA UN3166 Packing instruction 950(d)(1)(2): Other operational equipment

These dangerous good UN0325, Igniter 1.4G and UN0275, Cartridge, Power Device would not be required to be reported on the Dangerous Goods Documents and this shipment would be shipped as a UN3166 Class 9 Engine, Internal Combustion, Flammable Liquid Powered.

In light of the above information please advise if this shipment can be made using UN3166 Engine, Internal Combustion, Flammable Liquid Powered,9? Please see attachments for additional information.

Thank you in advance for help!!!!

Stan Harrison  
Team Leader

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Williams International  
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