



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety Administration**

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

JAN 25 2007

Mr. Tom Joos
Broco, Inc.
10868 Bell Court
Rancho Cucamonga, CA 91730

Ref. No.: 06-0257

Dear Mr. Joos:

This is in response to your November 9, 2006 letter regarding the classification and packaging of "Dangerous Goods in Machinery" or "Dangerous Goods in Apparatus" under the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). Your questions are paraphrased and answered as follows:

- Q1. May a device classified and described as "Dangerous goods in apparatus, UN3363" be transported via aircraft?
- A1. Yes. Provided the requirements specified in § 173.222 are met, all applicable requirements specific to aircraft transportation are met, and the device does not contain any materials forbidden for transportation via passenger or cargo aircraft (as applicable), a device described as "Dangerous goods in apparatus, 9, UN3363" may be transported aboard aircraft.
- Q2. When shipped in accordance with Special provision 136, are there any other markings required for Dangerous goods in apparatus other than "Dangerous goods in apparatus" and "UN3363"?
- A2. All applicable marking requirements specified in Part 172, Subpart D must be met.
- Q3. When shipped under the terms of an approval issued by the Associate Administrator, are there any other markings required for Dangerous goods in apparatus other than "Dangerous goods in apparatus" and "UN3363"?
- A3. See A2. In addition, the approval may contain additional marking requirements.
- Q4. Are there any additional requirements when shipping multiple packages (e.g., the shipment of five steel pails)?
- A4. Each package must meet all applicable packaging, marking, and labeling requirements. In addition, requirements specific to overpacks are in § 173.25.



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173.222

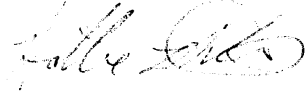
Q5. Provided the specification packaging requirements are met, may we classify a device as Class 9, "Dangerous goods in apparatus, UN3363" when transported internationally by vessel?

A5. Yes. The description "Dangerous goods in apparatus, UN3363" appears in the International Maritime Dangerous Goods (IMDG) Code and may be used for international cargo vessel transportation.

For consideration to modify your approval (EX2006050157), you must send a formal request, with written documentation demonstrating that the proposed packaging alteration will achieve a level of safety that is at least equal to your current approval, to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 400 7th Street, S.W., Washington, DC 20590-0001, Attention: PPH-32, Room 8102.

I hope this information is helpful. If you have further questions, please do not hesitate to contact this office.

Sincerely,



Hattie L. Mitchell
Chief, Regulatory Review and Reinvention
Office of Hazardous Materials Standards

*Pollack
§173.222
Dangerous Goods
06-0257*

Drakeford, Carolyn <PHMSA>

From: Mazzullo, Ed <FHMSA>
Sent: Monday, November 13, 2006 9:26 AM
To: Drakeford, Carolyn <PHMSA>
Cc: Betts, Charles <PHMSA>; Gale, John <PHMSA>; Gorsky, Susan <PHMSA>; Mazzullo, Ed <PHMSA>; Mitchell, Hattie <PHMSA>
Subject: FW: EX2006050157, BROCO RAPIDFIRE CUTTING ROD IGNITER

Carolyn

Please assign for response and request specialist notify Mr. Joos we are in receipt of his request.

Ed

From: Watson, Spencer <PHMSA>
Sent: Thursday, November 09, 2006 2:57 PM
To: 'Tom Joos'
Cc: Monroe, Carol <PHMSA>
Subject: RE: EX2006050157, BROCO RAPIDFIRE CUTTING ROD IGNITER

We will reconsider your packaging note as you requested. Your separate questions on the interpretations regarding 49 CFR Section 173.222 should be addressed to Mr. Ed Mazzullo, Director of Hazardous Materials Standards in writing.

Spence Watson
Work Phone: 202-366-8830
Work Fax: 202-366-3650

-----Original Message-----

From: Tom Joos [mailto:tjoos@brocoinc.com]
Sent: Wednesday, November 08, 2006 3:28 PM
To: Watson, Spencer <PHMSA>
Cc: Monroe, Carol <PHMSA>
Subject: EX2006050157, BROCO RAPIDFIRE CUTTING ROD IGNITER

Dear Dr. Watson:

Per the instructions of Ms. Carol Monroe I am writing to you with Broco's request for modification to the packaging notes for the above EX classification and to request shipping instructions for devices shipped under that classification.

When notice of the Class 9 designation was received by Broco I had questions concerning domestic and foreign shipping by air, truck or vessel and so contacted your offices and ended up corresponding with Mr. Duane Cassidy. (Copies of said correspondence follows)

Objectives as per my letter of 23 June:

1. Amend packaging notes to allow 20 foil pouch inner packaging per UN 1A2 steel pail;

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and 6 foil inner packaging per UN 4G fiberboard box.

2. Agreement that under the Class 9, UN 3363 shipment by air is permitted for this device.

Other questions for clarification were:

“ 1. IF THE QUANTITIES WITHIN THE OUTER PACKAGING ARE AS STATED IN THE CLASSIFICATION OR LESS, IS THE ONLY REQUIREMENT FOR LABELING/MARKING BEING IDENTIFICATION OF THE MATERIAL CONTAINER AS “DANGEROUS GOODS IN APPARATUS, UN3363”, WHEN TRANSPORTING BY GROUND, AS IS MY INTERPRETATION OF SPECIAL PROVISION 136?

2. IF TRANSPORTATION BY AIRCRAFT IS ALLOWED BY THE ASSOCIATE ADMINISTRATOR AND THE QUANTITIES WITHIN THE OUTER PACKAGING ARE AS STATED IN THE CLASSIFICATION OR LESS IS THE ONLY REQUIREMENT FOR LABELING/MARKING THE IDENTIFICATION OF THE MATERIAL AS “DANGEROUS GOODS IN APPARATUS, UN3363”, AS IS MY INTERPRETATION OF SPECIAL PROVISION 136?

3. ARE THERE OTHER ADDITIONAL RESTRICTIONS/REQUIREMENTS IF A SINGLE SHIPMENT SHOULD COMPRISE MULTIPLE OUTER PACKAGES (I.E. A SHIPMENT OF 5 STEEL PAILS, THE QUANTITIES WITHIN EACH OUTER PACKAGING BEING AS STATED IN THE CLASSIFICATION OR LESS)?

4. CAN WE USE CLASSIFICATION OF CLASS 9, UN3363 FOR INTERNATIONAL SHIPMENTS BY OCEAN FREIGHT PROVIDED THE SPECIFIED PACKAGING REQUIREMENTS HAVE BEEN MET?”

Mr. Cassidy provided an informal opinion to these questions which Broco found favorable. However as stated to him in my note of 6 July, we continue to ship material under Class 4.2 until we obtain a formal reply from your office.

I appreciate your earlier review and decision concerning our December 8, 2005 request for approval. Broco is seeking to resolve these outstanding matters formally so that we may take advantage of the reclassification in a safe and responsible manner, while staying in full compliance with the laws concerning hazardous materials transportation.

Thank you for giving this your consideration. I will be away from the office until Monday 13 November. I can be reached by mobile phone 909 519 9232 should you have any questions.

Sincerely,
Broco, Inc.

Tom Joos

PRIOR
CORRESPONDENCE _____

Mr. Joos,

I have forwarded your request for modification to your recent EX classification to Carol Monroe in our Explosives department. She will process the modification and Dr. Watson will review it.

Best Regards,

Duane M. Cassidy

11/13/2006

U.S. DOT/PHMSA
Office of Hazardous Materials Safety
Special Permits and Approvals
400 7th St. SW
Washington D.C. 20590
Phone: (202) 366-5794
Fax: (202) 366-3308

-----Original Message-----

From: Tom Joos [mailto:tjoos@brocoinc.com]
Sent: Thursday, July 06, 2006 12:30 PM
To: Cassidy, Duane <PHMSA>
Subject: RE: EX2006050157; Tracking No. 2006050960

Dear Mr. Cassidy:

Thank you for your speedy confirmation of receipt of my requests. I appreciate your taking the time to address my questions in this impromptu (unofficial) capacity as it seems things are proceeding in the right direction. At this time I have no other questions. We will continue shipping the material as pyrophoric with appropriate restrictions and packaging until we get the official response containing relevant shipping approvals/instructions from your office.

I look forward to hearing from you in the near future.

Sincerely,
Broco, Inc.

Thomas Joos

From: Duane.Cassidy@dot.gov [mailto:Duane.Cassidy@dot.gov]
Sent: Thursday, July 06, 2006 5:09 AM
To: Tom Joos
Subject: RE: EX2006050157; Tracking No. 2006050960

Mr. Joos,

I can confirm receipt of the email sent Friday June 23, 2006 in regards to the BROCO EX approval. In regards to your updated request, your original request that was reviewed by our technical department was approved, however, the approval granted authorizes specific packaging and quantities. I will have to speak with Spender Watson in our technical department to determine his rationale for putting those requirements in the approval prior to authorizing the new amounts and packaging. It will indeed require a new approval.

As for your questions, if you require an official response, please forward your questions to our Office of Hazardous Materials Standards and they will be able to provide you an official interpretation of our regulations.

Unofficially, and to the best of my knowledge, the answers to your questions are as follows:

1.) You are correct. If the quantities shipped under UN3363 are equal or lesser than that authorized in the 49 CFR you are required, under Special Provision 136, to only mark/label the package with "UN3363" and with the proper shipping name "Dangerous

Goods in Apparatus". However the packaging must meet the requirements of 49 CFR 173.222, or as approved by our office.

2.) See 1.) above, however, when shipping by aircraft orientation markings are required when the material being shipped is a liquid or has liquid properties.

3.) I don't believe that there are any additional requirements other than needing to stay below the maximum gross weight requirements for air shipments.

4.) Yes, provided you meet the requirements of the affected mode (i.e. The IMDG Code for cargo vessel, and ICAO TI for shipments by air), and you may also require the permission of the Competent Authority of each country you will be shipping into (Most countries, however, will accept the U.S. classification). For shipments by cargo vessel you must meet the requirements of packing instruction P907, and also meet the requirements of Special Provision 301.

Again, this email is an unofficial response to your questions, and may not be used to accompany shipment of hazardous materials. You may contact our Office of Hazardous Materials Standards for an official interpretation of the regulations included in the 49 CFR.

I will continue to process your request, and will keep you informed of its progress.

Best Regards.

Duane M. Cassidy
U.S. DOT/PHMSA
Office of Hazardous Materials Safety
Special Permits and Approvals
400 7th St. SW
Washington D.C. 20590
Phone: (202) 366-5794
Fax; (202) 366-3308
-----Original Message-----

From: Tom Joos [mailto:tjoos@brocoinc.com]
Sent: Wednesday, July 05, 2006 7:18 PM
To: Cassidy, Duane <PHMSA>
Subject: EX2C06050157; Tracking No. 2006050960

Dear Mr. Cassidy:

Further to my letter of 23 June requesting shipping approvals for the Broco RapidFire cutting rod igniter (Dangerous Goods in Apparatus) and not made clear in my earlier correspondence of 23 June 2006 or 8 December 2005, the reason Broco feels justified in requesting approval to ship limited quantities by air is the Class 4.2 material contained within the device (activated iron foil) exhibits the characteristics of a self-heating solid in the form in which we use it (solid foil strip). And self heating solid, inorganic, n.o.s., UN3190 is approved for shipping by air on both cargo and passenger aircraft.

Please confirm receipt of this note and the earlier letter of 23 June.

Thank you and regards,
Broco, Inc.

11/13/2006

Thomas Joos
V.P.

From: Tom Joos [mailto:tjoos@brocoinc.com]
Sent: Friday, June 23, 2006 4:17 PM
To: Cassidy, Duane <PHMSA>
Subject: REF: EX2006050157; TRACKING NO.: 2006050960

23 JUNE 2006

MR. DUANE CASSIDY
OFFICE OF HAZARDOUS MATERIALS APPROVALS
U.S. DEPARTMENT OF TRANSPORTATION

DEAR DUANE:

THANKS FOR TAKING THE TIME TO SPEAK WITH ME TODAY CONCERNING THE ABOVE REFERENCED CLASSIFICATION. BROCO APPRECIATES THE ACTIONS OF THE DOT OHM IN RESPONSE TO OUR REQUEST FOR APPROVAL DATED 8 DECEMBER. BROCO, INC. HEREBY REQUESTS SHIPPING APPROVALS FOR THIS ITEM TO INCLUDE CLARIFICATION OF MODES OF SHIPPING, PACKAGING QUANTITIES AND APPROPRIATE LABELING.

WE SEEK THE OFFICE'S AGREEMENT TO THE FOLLOWING ITEMS:

1. SHIPMENT WITHIN THE U.S. BY AIR.
2. INTERNATIONAL SHIPMENT BY AIR;
3. ALLOWABLE QUANTITY OF INNER PACKAGES (AS DEFINED BY THE CLASSIFICATION LETTER AS SEALED BAG CONTAINING 5 DEVICES) SHIPPED WITHIN A UN1A2 STEEL PAIL TO BE TWENTY (20). (THIS COMPRISES 10 UNITS OF SALE AND FITS EASILY WITHIN A 5 GAL SIZE PAIL. TOTAL NET WEIGHT OF HAZARDOUS MATERIAL WITHIN THE PAIL WOULD BE 8 OUNCES OR LESS.)
4. ALLOWABLE QUANTITY OF INNER PACKAGES SHIPPED WITHIN A UN 4G FIBERBOARD BOX TO BE SIX (6). (THIS COMPRISES 3 UNITS OF SALE, THE TOTAL DIMENSIONS OF WHICH IS 9" X 6" X 4", VOLUME OF 0.125 CU FT.)

WE ALSO REQUEST ANSWERS TO THE FOLLOWING:

1. IF THE QUANTITIES WITHIN THE OUTER PACKAGING ARE AS STATED IN THE CLASSIFICATION OR LESS, IS THE ONLY REQUIREMENT FOR LABELING/MARKING BEING IDENTIFICATION OF THE MATERIAL CONTAINER AS "DANGEROUS GOODS IN APPARATUS, UN3363", WHEN TRANSPORTING BY GROUND, AS IS MY INTERPRETATION OF SPECIAL PROVISION 136?
2. IF TRANSPORTATION BY AIRCRAFT IS ALLOWED BY THE ASSOCIATE ADMINISTRATOR AND THE QUANTITIES WITHIN THE OUTER PACKAGING ARE AS STATED IN THE CLASSIFICATION OR LESS IS THE ONLY REQUIREMENT FOR LABELING/MARKING THE IDENTIFICATION OF THE MATERIAL AS "DANGEROUS GOODS IN APPARATUS, UN3363", AS IS MY INTERPRETATION OF SPECIAL PROVISION 136?
3. ARE THERE OTHER ADDITIONAL RESTRICTIONS/REQUIREMENTS IF A SINGLE SHIPMENT SHOULD COMPRISE MULTIPLE OUTER PACKAGES (I.E. A SHIPMENT OF 5 STEEL PAIS, THE QUANTITIES WITHIN EACH OUTER PACKAGING BEING AS STATED IN THE CLASSIFICATION OR LESS)?
4. CAN WE USE CLASSIFICATION OF CLASS 9, UN3363 FOR INTERNATIONAL SHIPMENTS BY OCEAN FREIGHT PROVIDED THE SPECIFIED PACKAGING REQUIREMENTS HAVE BEEN MET?

THANK YOU FOR GIVING THIS YOUR ATTENTION. I LOOK FORWARD TO SPEAKING FURTHER WITH YOU ABOUT THIS.

SINCERELY,
BROCO, INC.

11/13/2006

THOMAS JOOS
VICE PRES DENT
909 483 3222

11/13/2006