



U.S. Department  
of Transportation

1200 New Jersey Avenue SE  
Washington, DC 20590

**Pipeline and Hazardous  
Materials Safety  
Administration**

MAY 27 2015

Mr. Andrew Lynn  
Quality Control Manager  
Dexsil Corporation  
One Hamden Park Dr.  
Hamden, CT 06517

Ref. No.: 15-0075

Dear Mr. Lynn:

This is in response to your letter requesting clarification of the the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) regarding the applicability of certain provisions of Competent Authority Approval CA1996100010. In your letter, you state that your company ships environmental test kits containing small quantities of “UN1391, Alkali metal dispersion, 4.3, PG I” or “UN1404, Calcium hydride mixtures, 4.3, PG I.” Competent Authority Approval CA1996100010 authorizes these kits to be offered for domestic ground transportation in accordance with the provisions for small quantities prescribed in § 173.4. When transported in accordance with the provisions of § 173.4 the kits are not subject to any other requirements of the HMR, including placarding. For air transport the kits are offered as a fully regulated Division 4.3 material aboard cargo aircraft only in accordance with the International Civil Aviation Organization Technical Instructions (ICAO TI). Your questions are paraphrased and answered below:

Q1. You ask whether consignments that are fully marked and labeled accordance with the ICAO TI may be transported without placarding the transport vehicle during the domestic ground segment of transport based on the Competent Authority Approval authorization to use the provisions of § 173.4.

A1. Your understanding is correct. Section 173.4 excepts small quantities of authorized materials from the requirements of the HMR when transported domestically by highway or rail provided all of the requirements prescribed in § 173.4 are met. This means they are not subject to the requirements for shipping papers, markings, labels, or placards when transported by highway or rail including when such transportation is performed prior to or subsequent to transportation by aircraft.

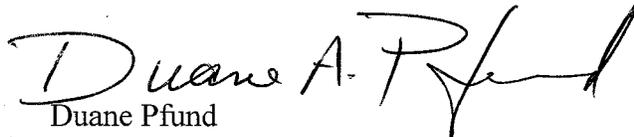
Q2. You seek confirmation of your understanding that your package may be marked with the statement “This package conforms to 49 CFR 173.4 for domestic highway or rail transport only” as required by § 173.4(a)(10) in addition to the markings or labels prescribed by the ICAO TI. You note that under the ICAO TI, markings and labels required by other international or national transport regulations are permitted in addition to markings and

labels required by the ICAO TI, provided that they cannot be confused with or conflict with any markings or labels prescribed by the ICAO TI. In addition, you note that under the HMR, there is no prohibition against marking the package in accordance with the ICAO TI and note that § 172.401(c)(3) permits labeling in conformance with the ICAO TI even when not required by the HMR.

A2. Your understanding is correct. Although your material is excepted from the requirements of the HMR other than those prescribed in CA1996100010 and § 173.4, the package may remain appropriately marked and labeled in accordance with the ICAO TI and transit the United States by highway or rail without placarding.

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 that reads "Duane A. Pfund". The signature is written in a cursive style with a large, prominent "D" at the beginning.

Duane Pfund  
International Standards Coordinator  
Standards and Rulemaking Division

**Goodall, Shante CTR (PHMSA)**

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Wiener  
173.4  
General Requirements  
15-0075

**From:** Geller, Shelby CTR (PHMSA)  
**Sent:** Tuesday, April 14, 2015 3:58 PM  
**To:** Hazmat Interps  
**Subject:** FW: Interpretation of hazardous materials regulations  
**Attachments:** CA1996100010 DOT interpretation revision 1.pdf

Hi Shante and Alice,

Attached is a letter of interpretation request.

Thanks,  
Shelby

**From:** Andrew Lynn [<mailto:alynn@dexsil.com>]  
**Sent:** Tuesday, April 14, 2015 12:07 PM  
**To:** INFOCNTR (PHMSA)  
**Subject:** Interpretation of hazardous materials regulations

US DOT,

Attached is a request for an interpretation on the use of Dexsil's Competent Authority Approval CA1996100010 for the ground transportation portion of an air shipment.

Thank you

Andrew Lynn

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Director of Analytical Services  
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U.S. DOT  
PHMSA Office of Hazardous Materials Standards  
Attn: PHH-10  
East Building  
1200 New Jersey Avenue, SE.  
Washington, DC 20590-0001

Dexsil Corporation began manufacturing and shipping test kits containing Alkali Metal Dispersion, 4.3, UN 1391, PG I, in 1983. Originally they were shipped under 49 CFR 173.4, however, in 1992 Division 4.3 materials were removed from 173.4. As a result, Dexsil applied for and was granted an exemption (DOT-E11199) for shipment of sodium based kits. In 1996, after Division 4.3 materials were put back in 173.4 (with approval), Dexsil Corporation applied for and was issued CA-9610010, an approval to ship Environmental Test Kits pursuant to 49 CFR 173.4, on October 31, 1996. Modes of transportation authorized within CA-9610010 included motor vehicle, rail freight, cargo vessel, cargo only aircraft, and passenger aircraft. CA-9610010 was revised on November 5, 1997 to include Calcium Hydride containing kits, also a 4.3 PG I material. When 49 CFR 173.4 no longer allowed for air transport an application for amendment to CA-9610010 was initiated and a new Competent Authority Approval CA-1996100010 2<sup>nd</sup> revision was issued on June 6, 2012.

Dexsil is currently shipping these environmental test kits containing small quantities of Alkali metal dispersion or small quantities of calcium hydride domestically by ground transportation under the Competent Authority Approval CA1996100010 and 49 CFR 173.4 and therefore do not require placarding. Dexsil was also shipping these same materials domestically by air until the introduction of the operator variation FX-10 in the ICAO Technical Instructions. FX-10 effects ALL domestic air shipments of division 4.3 materials and requires the use of a special permit that does not require placarding for road transportation. Under FX-10 international shipments are not affected, and are shipped as DG as before and do not cause a problem with FedEx. It is our understanding that even goods packaged and labeled for DG shipping by air internationally can be shipped without placarding while on surface roads because of the approval to ship under 173.4.

Under ICAO regulations markings and labels required by other international or national transport regulations are permitted in addition to markings and labels required by the ICAO instructions, provided that they cannot be confused with or conflict with any markings or labels prescribed by these instructions, because of their color, design or shape. Under 49 CFR there are no regulations that prohibit the marking of packages with ICAO required markings, also in 49 CFR 172.401(c)(3) it is acceptable to mark packages according to the ICAO instructions and offer that package for ground transport.

While we believe that our interpretation of the DOT and ICAO regulations is correct, our counterparts at FedEx are not convinced and would like a formal ruling on the matter. To comply with the FX-10 operator variation for domestic air shipments Dexsil would like a ruling/interpretation on the use of the current Competent Authority Approval CA1996100010 to be utilized for the ground transportation portion of an air shipment and therefore not requiring placarding. The packages will be prepared within

the guidelines for air transportation and also within the guidelines of the approval with the addition of hazard labels and UN ID markings which are required for air transport. Thank you for your help in this matter.

Andrew Lynn

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