



U.S. Department
of Transportation

1200 New Jersey Avenue SE
Washington, DC 20590

**Pipeline and Hazardous
Materials Safety
Administration**

SEP 22 2011

Mr. Neil Washburn
Riceland Foods, Inc.
709 East 22nd Street
Stuttgart, AR 72160

Ref. No. 11-0188

Dear Mr. Washburn:

This responds to your August 11, 2011 request for clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180). In your email, you describe a material that is a mixture of soybean oil and diatomaceous earth that is classed and described as "UN3088, Self-heating solid, organic, n.o.s., 4.2, PG II." Specifically, you ask if the material in question may be transported in closed, sift-proof, bulk bins in accordance with the packaging authorization of § 173.240.

The answer is yes. The bulk packaging section referenced in column 8 of the table in § 172.101 for "UN3088, Self-heating solid, organic, n.o.s., 4.2, PG II" is § 173.241, however, § 172.101(i)(4) permits the use of packagings authorized for solids in § 173.240 when the material is in the solid form. Section 173.240(c) authorizes the use of sift-proof closed bulk bins. It is your responsibility to ensure that, in accordance with § 173.24(b), the package is designed, constructed, maintained, filled, its contents so limited, and closed to prevent release of the material.

I hope this answers your inquiry. If you need additional assistance, please contact this office at (202) 366-8553.

Sincerely,

Ben Supko
Acting Chief, Standards Development
Standards and Rulemaking Division

Eichenlaub
§172.101
§173.241

Drakeford, Carolyn (PHMSA)

From: INFOCNTR (PHMSA)
Sent: Thursday, August 11, 2011 3:14 PM
To: Drakeford, Carolyn (PHMSA)
Subject: FW: Hazmat Information Center Feedback: Highway (Sections 177.800 – 177.870)

Applicability
11-0188

Hi Carolyn,

This caller requested we forward this e-mail as a formal request for a letter of interpretation.

Thanks,
Victoria

Victoria Lehman
Hazmat Information Center (HMIC)
<http://phmsa.dot.gov/hazmat/info-center>
(202) 366-1035

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

From: PHMSA-Feedback [mailto:PHMSA-Feedback]
Sent: Thursday, August 11, 2011 10:25 AM
To: PHMSA HM InfoCenter; PHMSA Webmaster
Subject: Hazmat Information Center Feedback: Highway (Sections 177.800 – 177.870)

Riceland Foods is a soybean oil processor. One of the steps in the refinement of soybean oil is bleaching. In the bleaching process, soybean oil is mixed with a diatomaceous earth. The diatomaceous earth, or what we call bleaching clay, removes the undesirable pigments from the oil rendering it clear - like you see on a grocery store shelf.

The bleaching clay is removed by pushing the oil/clay mix through a filter press. The resulting filter cake is bleaching clay with soybean oil residue. That filter cake is the source of this problem. Any further references to bleaching clay will be the oily filter cake.

Because of the oil residue, bleaching clay is self ignitable. It has been tested and is classified as a DOT material. Its shipping description is

Self-heating solid, organic, n.o.s., 4.2, PG II
UN3088

For bulk shipments of this material, the HM Table at 172.101 references 173.241 as the packaging requirements. The problem is, there are no containers specified at 173.241 that are suitable for this solid material. 173.241 appears to be primarily for liquids.

I have contacted the HMIC and consulted with Mr. Mike Stevens on this issue. He has agreed that 173.241 does not offer any practical packaging solutions for the bleaching clay.

There is a Table at 172.101(i)(4) that shows equivalent packaging standards for solids and liquids. This Table indicates that 173.241 is suitable for liquids and the corresponding requirement for solids would be 173.240.

The packaging at 173.240 makes more sense for our material because it would allow us to ship in closed, sift proof, bulk bins. It also makes sense because this mode of shipping is currently authorized by DOT SP-12134.

However, I have been informed that the 172.101(i)(4) Table only works in one direction. That is, if you have a liquid that has packaging specs at 173.240 then you would be allowed to use 173.241 as an equivalent, but, if you have a solid with packaging specs at 173.241 you can't use 173.240 as an equivalent.

I would like to stress that the bleaching clay is a somewhat sticky material, it has the consistency of moist dirt, it can not be put into any cargo tank, portable tank or IBC that I have found so far, nor could it be gotten out. A bulk bin such as a rolloff is the only practical means of hauling this material. A bulk bin can be easily loaded with a screw conveyor, can be closed with a lid to eliminate any hazard, and can be easily emptied at a landfill.

Mr. Stevens suggested I submit this question and request an interpretation on the use of the 172.101(i)(4) Table. I would like to know if Riceland would be correct in shipping its bleaching clay in accordance with 173.240 in the place of 173.241 due to the nature of the material. Please do not hesitate to call me if this request needs further clarification.

thanks
Neil Washburn

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