U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue SE
Washington, DC 20590

JUN 10 2015

Mr. Robert Richard
Vice President Labelmaster Services
5724 N. Pulaski Road
Chicago, IL 60646

Reference No. 15-0081

Dear Mr. Richard:

This is in response to your April 23, 2015 letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to test methods for corrosion to metals. In your letter, you state it is your understanding that a solid material which is not likely to become liquid during transportation and has a melting point greater than 55°C need not be tested for corrosivity to metals per § 173.137(c)(2). You further state that the solid material is not classified as a Class 8 corrosive substance, unless it causes full thickness destruction of human skin at the site of contact within a specified period of time. You ask whether your understanding is correct.

Provided the material meets the definition of a solid in § 171.8, your understanding is correct. The definition of a corrosive material in § 173.136(a) states, "For the purpose of this subchapter, 'corrosive material' (Class 8) means a liquid or solid that causes full thickness destruction of human skin at the site of contact within a specified period of time. A liquid, or a solid which may become liquid during transportation, that has a severe corrosion rate on steel or aluminum based on the criteria in § 173.137(c)(2) is also a corrosive material." While both solids and liquids are subject to the criteria for skin destruction in §173.136(b), only liquids and solids which may become liquid during transportation should be tested in accordance with § 173.137(c)(2).

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

Sincerely,

T. Glenn Foster

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

Lehman
§ 173.136 Class 8 Definitions

15-0081

LABELMASTER SERVICES

April 23, 2015

Charles Betts, Director Standards and Rulemaking Division
Pipeline and Hazardous Materials Safety Administration
Attn: Standards and Rulemaking Division, PHH-10
U.S. Department of Transportation
1200 New Jersey Avenue, S.E.
East Building, Floor 2
Washington, DC 20590-0001

Subject: Request for Interpretation; Corrosion to Metals Testing for Solid Materials

Dear Mr. Betts:

I am writing to confirm my understanding of the requirements for testing solid materials according to §173.136 of the US Hazardous Materials Regulations (HMR) and Section 37.4 of the United Nations Manual of Tests and Criteria for corrosion to metals. The corrosivity to metals test is required to determine if a material meets the criteria for a Class 8, Packing Group III hazardous material. In previous correspondence with Duane Pfund, Director International Standards for the Office of Hazardous Materials Safety, Mr. Pfund agreed with my understanding that only solids that may become liquid during transport need to be tested. Nevertheless, I am requesting confirmation in writing from PHMSA that my understanding is correct and consistent with the HMR, UN Manual of Tests and Criteria and international regulations including the International Maritime Dangerous Goods (IMDG) Code.

The UN Manual of Tests and Criteria specifically states:

37.4 Test methods for corrosion to metals

37.4.1 Introduction

37.4.1.1 Test C.1: Test for determining the corrosive properties of liquids ***and solids that may become liquid during transport*** as dangerous goods of Class 8, packing group III.

The HMR states:

§173.136 Class 8-Definitions.
(a) For the purpose of this subchapter, "corrosive material" (Class 8) means a liquid or solid that causes full thickness destruction of human skin at the site of contact within a specified period of time. A liquid, ***or a solid which may become liquid during transportation***, that has a severe corrosion rate on steel or aluminum based on the criteria in § 173.137(c)(2) is also a corrosive material.

It is my understanding based on the text in paragraph 37.4.1.1 and §173.136 that only solids which may become liquid in transport need be tested. A solid material that has a melting point greater than 55 ^{0}C need not be tested for corrosivity to metals and need not be classified as a Class 8 corrosive substance unless it causes full

thickness destruction of human skin at the site of contact within a specified period of time since it is not likely of becoming liquid in transport.

Please provide confirmation that your office agrees with my understanding and interpretation of the applicable regulations.

Respectfully,

Robert A Richard

Robert Richard
Vice President Labelmaster Services
5724 N. Pulaski Rd
Chicago, Illinois 60646