U.S. Department
of Transportation

Pipeline and Hazardous Materials
Safety Administration

1200 New Jersey Ave., SE
Washington, DC 20590

SEP 2 1 2009

Ms. Claire Matlon
Leader, Transportation Regulatory Compliance
Honeywell
101 Columbia Road
Morristown, NJ 07962-1057

Ref. No.: 09-0046

Dear Ms. Matlon:

This responds to your February 12, 2009 letter requesting clarification of the packaging requirements for a shipment of UN 1790, Hydrofluoric acid with more than 60% strength in an unlined class DOT 111 tank car in accordance with 49 CFR 173.243, and Special provisions B15 and B23 in §172.102. Your questions are paraphrased and answered below:

Q1. If a pressure DOT 112S340W tank car tank is re-rated to a non-pressure DOT 111A100W2 tank car, may the tank car be used to transport Hydrofluoric acid with more than 60% strength?

A1. Yes. Section 173.243(a) authorizes class DOT 111 tanks for Hydrofluoric acid with more than 60% strength. Special provision B15 requires an unlined tank used to transport this material to have a suitable corrosion allowance. The determination of whether the DOT 112S340W tank will provide suitable corrosion allowance must be made using the requirements of § 180.509.

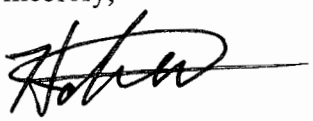
Q2. May a 70% concentration by weight of hydrofluoric acid that does not exceed the corrosion rate of hydrofluoric acid of 65% concentration, be shipped in the described class DOT 111 tank?

A2. Yes, as stated above. Special provision B23 requires the lading in an unlined tank to be inhibited so that the corrosive effect on steel is not greater than that of a 65 percent concentration of hydrofluoric acid. Therefore, if, as you state, the corrosive effect on steel of your 70% concentration of hydrofluoric acid is not greater than that of a 65% concentration of

hydrofluoric acid, the lading may be transported in the unlined class DOT 111 tank. Note that Special provision B23 requires an unlined tank to be passivated before being placed in service and re-passivated each time after being washed out with water.

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

Honeywell

Honeywell International Inc.
P.O. Box 1057
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Andrews
§172.101
§172.102
§173.243
Packaging
09-0046

Date: February 12, 2009

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

Subject: Request for interpretation of Special Provisions B15 and B23

Dear Sir or Madam,

Honeywell International requests clarification of the HMR packaging requirements for shipping UN 1790, Hydrofluoric acid *with more than 60% strength* (specifically minimum 70% HF by weight) in unlined tank cars. As specified in 49CFR173.243, DOT class 111 and DOT class 112 cars are acceptable for use provided they meet the special provision requirements B15 and B23.

Special provision B15 requires that unlined cars have a "suitable corrosion allowance". In order to achieve this, Honeywell intends to re-rate current DOT112S340W pressure cars to non-pressure DOT111A100W2 cars. The extra steel in the former DOT112S340W pressure car would accomplish this. Honeywell will monitor the re-rated cars through visual and ultrasonic testing on a regular basis to ensure suitable corrosion allowance. The cars will be removed from service once they reach the minimum 7/16" wall thickness allowed for DOT 111 tank cars as specified in 49CFR 170.201-1.

Special provision B23 states "lading in unlined tanks must be inhibited so that the corrsive effect on steel is not greater than that of the corrosion rate of hydrofluoric acid of 65% concentration. Published corrosion data found in the attached document (Section 3.2.1) indicates that the corrosion rate on steel is less for 70% solutions than it is for 65% solutions. Based on this data, is it correct to state that 70% HF solution does not exceed the corrosion rate of hydrofluoric acid of 65% concentration thereby allowing use of DOT111A100W2 tank cars for use in this service?

Should you have any questions on the above information, please contact the applicant at the email address of phone number listed below.

Sincerely,

Claire Matlon

Claire Matlon
Leader, Transportation Regulatory Compliance
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973-455-3879

Enclosure: Materials of Construction Guideline for Hydrofluoric Acid Solution (Aqueous)