



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

August 26, 2021

Ms. Kirsten Pink
Momentive Performance Materials
260 Hudson River Road
Waterford, NY 12188

Reference No. 21-0038

Dear Ms. Pink:

This letter is in response to your April 9, 2021, email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to pressure relief devices for MC 331 cargo tanks. Specifically, you ask for clarification of the requirements for pressure relief devices when a MC 331 cargo tank is used to transport “UN2988, Chlorosilanes, water-reactive, flammable, corrosive, n.o.s., 4.3, Packing Group (PG) I.”

We have paraphrased and answered your questions as follows:

- Q1. You ask whether § 178.337-9(a)(1)—which reads “See § 173.315(i) of this subchapter.”—would apply to a MC 331 cargo tank transporting “UN2988, Chlorosilanes, water-reactive, flammable, corrosive, n.o.s., 4.3, PG I.”
- A1. The answer is yes. Section 178.337-9 is part of the design specification requirements for MC 331 cargo tanks. Therefore, to be in compliance with the design specification requirements for a MC 331 cargo tank, the requirements of § 178.337-9(a)(1) must be met, which include the requirements of § 173.315(i).
- Q2. You ask what the set-to-discharge pressure is for a pressure relief valve installed in a MC 331 cargo tank with a maximum allowable working pressure (MAWP) of 250 psi, and used in “UN2988, Chlorosilanes, water-reactive, flammable, corrosive, n.o.s., 4.3, PG I” service.
- A2. As explained in PHMSA’s response to a previous request for Letter of Interpretation (LOI) 16-0090, § 173.315(i)(3) was amended in 2001 to add new requirements for UN portable tanks. In doing so, the term “tank” was modified to “portable tank, other than a UN portable tank,” thereby omitting cargo tanks from the specifications of the paragraph.

However, pressure relief setting requirements for cargo tanks are found in § 180.407(j). Section 180.407(j)(1)(iv) specifies that pressure relief valves for MC 330 and MC 331 cargo tanks must open at not less than the required set pressure and not more than 110% of the required set pressure. The valves must also reseal to a leak-tight condition at no less than 90% of the required set pressure. Therefore, the allowable start-to-discharge pressure range for a pressure relief device installed in a MC 331 cargo tank with an MAWP of 250 psi is from 250 psi to 275 psi.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,



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

Wolcott

From: [INFOCNTR \(PHMSA\)](#)
To: [Hazmat Interps](#)
Subject: FW: Momentive - LOI 49CFR Part 178.337
Date: Friday, April 9, 2021 4:35:32 PM
Attachments: [2021-04-09 Momentive 49 CFR Part 178 LOI.docx](#)

21-0038

Hello Alice,

Attached is a request for letter of interpretation.

Thanks,

Jonathon, HMIC

From: Pink, Kirsten [mailto:kirsten.pink@momentive.com]
Sent: Friday, April 9, 2021 3:25 PM
To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>
Subject: Momentive - LOI 49CFR Part 178.337

CAUTION: This email originated from outside of the Department of Transportation (DOT). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Dear Sir or Madam,

Please find the attached request for regulatory clarification.
Please fee free to contact me should you require any additional information.

Best Regards,

Kirsten Pink
AMR Supply Chain Regulatory Leader
Momentive
Kirsten.pink@momentive.com
(m) 518-441-8998

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Momentive Performance Materials Inc.
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April 9, 2021

Associate Administrator for Hazardous Materials Safety
Pipeline and Hazardous Materials Safety Administration
US Department of Transportation, East Building
1200 New Jersey Avenue SE
Washington, DC 20590-0001

Attn: Standards and Rulemaking [PHH-10]

Subject: Request for interpretation 49 CFR Part 178.337-9 and 173.315

Dear Sir or Madam:

We request clarification (via a letter of interpretation) relating to the pressure relief valve setpoint for a MC 331 cargo tank. It is our understanding that 49 CFR Part 178.337-9 is the regulation that addresses this requirement for a MC 331 cargo tank, however we are uncertain if 49 CFR Part 173.315 is also applicable.

For this specific case, the MC 331 is utilized for chlorosilane transport, specifically UN 2988 Chlorosilanes, water-reactive, flammable, corrosive.

Based upon our review of the regulation 49 CFR Part 178.337-9(3), for a MC 331 in the above service, the pressure relief valve for this tank *"must be designed, constructed, and marked for a rated pressure not less than the cargo tank design pressure at the temperature expected to be encountered"*. It is unclear however as to whether 49 CFR Part 178.337-9(a) would apply for a MC 331 in this service. This regulation references 49 CFR Part 178.315(i).

We would appreciate guidance for what the acceptable relief valve setpoint would be for a MC 331, with a MAWP of 250 psi, in this chlorosilane service.

Please feel free to contact me if you have any questions or need clarification to respond to this inquiry.

Best Regards,

Kirsten Pink

Kirsten Pink
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