

# APPLICATION FOR APPROVAL OF PRESSURE RELIEF DEVICE

## APPROVAL REQUESTED OF AAR TANK CAR COMMITTEE

AAR NO. **PRD-022003**

Applicant's No. \_\_\_\_\_

Date **3-7-02**

Device identification No. \_\_\_\_\_

**A-1477-\*\* & A-14167-\*\***

Applicant **Midland Manufacturing Corp.**

**\*\* the last 2 letters indicate the plastic material (see Revisions)**

1. Manufacturer **Midland Manufacturing Corp.**

Address **7733 Gross Point Road, Skokie, IL 60077**

2. Test facility **Colorado Engineering Experiment Station, Inc. (CEESI)** 3. Location **Nunn, Colorado**

4. Test date **11/29/01** 5. Observer **Russ Germick**

6. Device Number	7. Start-to-discharge		8. Flow rating		9. Vapor-tight		10. Flow Capacity	
	psi	kPa	psi	kPa	psi	kPa	SCFM	std.m <sup>3</sup> /s
A-1477-**	75	-----	85	-----	60	-----	2027	-----
A-14167-**	165	-----	181	-----	132	-----	3612	-----

11. Official flow capacity (air) **2027** scfm (  std.m<sup>3</sup>/s) at flow rating pressure **85** psi (  kPa)

Test medium **Air**

11. Official flow capacity (air) **3612** scfm (  std.m<sup>3</sup>/s) at flow rating pressure **181** psi (  kPa)

Test medium **Air**

12. Commodities **Hydrochloric Acid**

The following drawings apply		Precedent	
		Drawing Number	Application/Certificate
13. Valve Assembly.....	Drawing number <b>Latest revision</b> <b>A-1477-**, Rev. F</b>	<b>A-1479</b>	<b>SRD 989064</b>
14. Valve Assembly.....	<b>A-14167-**, Rev. F</b>	<b>A-14169</b>	<b>SRD 989064</b>
*15. Valve Mounting Nozzle.....	<b>None</b>		

**REVISIONS:** **\*\*RY** – Ryton, **KY** – Kynar, **UL** – Ultem, **PK** – Peek; to designate plastic pressure retaining parts.

**CERTIFICATION:** The above data is correct. The capacity test complies with AAR Specifications for Tank Cars, Appendix A and the devices test conform with the drawings listed above.

By: **Robert H. Dean, PE** *Robert H. Dean* Title **Director of Engineering**

**APPROVAL AAR Tank Car Committee**

Date Approved **\*\*** **APR 18 2002**

*R. H. Dean*  
(Signature) on behalf of Tank Car Committee

\* When the design of a pressure relief device is such that the spring follower is guided by the mounting nozzle, the mounting nozzle shall be considered as a required part of the application and a drawing of the nozzle in sufficient detail to show critical dimensions shall be included. When the pressure relief device design does not require the mounting nozzle to act as a guide for the spring follower the word "None" can be used in the space for this item.

**\*\* SUBJECT TO AAR SERVICE TRIAL NO. 402.**