

# CGA

Compressed Gas Association

The Standard For Safety Since 1913

## **CGA P-85—2020 GUIDELINE FOR USE OF CGA-341 AND TC-341 CRYOGENIC TRAILERS IN THE UNITED STATES AND CANADA**

**FIRST EDITION**

**PLEASE NOTE:**

The information contained in this document was obtained from sources believed to be reliable and is based on technical information and experience currently available from members of the Compressed Gas Association, Inc. and others. However, the Association or its members, jointly or severally, make no guarantee of the results and assume no liability or responsibility in connection with the information or suggestions herein contained. Moreover, it should not be assumed that every acceptable commodity grade, test or safety procedure or method, precaution, equipment or device is contained within, or that abnormal or unusual circumstances may not warrant or suggest further requirements or additional procedure.

This document is subject to periodic review, and users are cautioned to obtain the latest edition. The Association invites comments and suggestions for consideration. In connection with such review, any such comments or suggestions will be fully reviewed by the Association after giving the party, upon request, a reasonable opportunity to be heard. Proposed changes may be submitted via the Internet at our web site, [www.cganet.com](http://www.cganet.com).

This document should not be confused with federal, state, provincial, or municipal specifications or regulations; insurance requirements; or national safety codes. While the Association recommends reference to or use of this document by government agencies and others, this document is purely voluntary and not binding unless adopted by reference in regulations.

A listing of all publications, audiovisual programs, safety and technical bulletins, and safety posters is available via the Internet at our website at [www.cganet.com](http://www.cganet.com). For more information contact CGA at Phone: 703-788-2700, ext. 799. E-mail: [customerservice@cganet.com](mailto:customerservice@cganet.com).

Work Item 10-122  
Distribution and Fleet Safety Committee

---

FIRST EDITION: 2020

© 2020 The Compressed Gas Association, Inc. All rights reserved.

All materials contained in this work are protected by United States and international copyright laws. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopying, recording, or any information storage and retrieval system without permission in writing from The Compressed Gas Association, Inc. All requests for permission to reproduce material from this work should be directed to The Compressed Gas Association, Inc., 8484 Westpark Drive, Suite 220, McLean, VA 22102. You may not alter or remove any trademark, copyright or other notice from this work.

<b>Contents</b>	<b>Page</b>
1 Scope and purpose .....	1
1.1 Scope .....	1
1.2 Purpose .....	1
2 Definitions.....	1
3 Trailer types.....	2
3.1 CGA-341.....	2
3.2 TC-341.....	2
4 Trailer specification types for cross-border use.....	2
4.1 Acceptable trailers .....	2
4.2 Unacceptable trailers.....	2
5 Inspection requirements for CGA-341 and TC-341 cryogenic trailers.....	3
5.1 Fill in the United States and deliver in Canada.....	4
5.2 Fill and deliver in Canada .....	5
5.3 Fill in Canada and deliver in United States .....	5
5.4 Fill and deliver in United States .....	5
6 References .....	5

**Table**

Table 1—Inspection requirements for CGA-341 and TC-341 cryogenic trailers .....	4
---	---

This page is intentionally blank.

## 1 Scope and purpose

### 1.1 Scope

This publication contains guidelines for the use of CGA-341 and TC-341 cryogenic trailers when moved in either direction between the United States and Canada. These trailers are typically used to transport the following cryogenic liquids at pressures less than 25.3 psi (174.4 kPa) although the maximum allowable working pressures of CGA-341 and TC-341 trailers are between 25.3 psi and 150 psi (174.4 kPa and 1034.2 kPa):<sup>1, 2</sup>

- oxygen;
- helium;
- nitrogen; and
- argon.

Noncryogenic trailers such as gas tube trailers are not covered in this publication.

### 1.2 Purpose

This publication also provides guidance on determining if the trailers conform to U.S. and Canadian regulatory requirements [2, 3, 4, 5]. These requirements include trailer design, year of manufacture, requalification, and maintenance.

This publication provides guidance for the following fill and deliver scenarios:

- trailer is filled in the United States and delivers cryogenic liquid to a customer in the United States;
- trailer is filled in the United States and delivers cryogenic liquid to a customer in Canada;
- trailer is filled in Canada and delivers cryogenic liquid to a customer in Canada; and
- trailer is filled in Canada and delivers cryogenic liquid to a customer in the United States.

## 2 Definitions

For the purpose of this publication, the following definitions apply.

### 2.1 Publication terminology

#### 2.1.1 Shall

Indicates that the procedure is mandatory. It is used wherever the criterion for conformance to specific recommendations allows no deviation.

#### 2.1.2 Should

Indicates that a procedure is recommended.

#### 2.1.3 May

Indicates that the procedure is optional.

#### 2.1.4 Will

Is used only to indicate the future, not a degree of requirement.

---

<sup>1</sup> kPa shall indicate gauge pressure unless otherwise noted a (kPa, abs) for absolute pressure or (kPa, differential) for differential pressure. All kPa values are rounded off per CGA P-11, *Guideline for Metric Practice in the Compressed Gas Industry* [1].

<sup>2</sup> References are shown by bracketed numbers and are listed in order of appearance in the reference section.