

Transportation of Dangerous Goods Directorate L'Esplanade Laurier 300 Laurier Avenue West Ottawa, Ontario K1A 0N5 Direction générale du transport des marchandises dangereuses L'Esplanade Laurier 300, avenue Laurier Ouest Ottawa (Ontario) K1A 0N5



Equivalency Certificate (Approval issued by the competent authority of Canada)

Certificate No.: SU 13945

Template Number: 59

Certificate Holder: CO2 Exchange LLC

Mode of Transport: Road, Rail, Marine

Effective Date: March 23, 2023

Expiry Date: March 31, 2028

LEGEND

For the purposes of this equivalency certificate, documents referred to by an abbreviation have the following meaning:

TDG Act: Transportation of Dangerous Goods Act, 1992

TDG Regulations: Transportation of Dangerous Goods Regulations

UN Recommendations: "Recommendations on the Transport of Dangerous Goods", published by the United Nations (UN), as amended from time to time

NOTES

Note 1: Subsection 31(4) of the *TDG Act* stipulates that any non-compliance with the conditions of this equivalency certificate causes the provisions of the *TDG Act* and *TDG Regulations* to apply as though this equivalency certificate did not exist.

Note 2: This equivalency certificate provides no regulatory relief other than specifically stated herein. Therefore, all other requirements of the *TDG Act* and the *TDG Regulations* apply.



PURPOSE

(The following is for information purposes only and is not part of the certificate.)

This equivalency certificate authorizes the certificate holder to handle, offer for transport or transport the dangerous goods UN1013, CARBON DIOXIDE, class 2.2 as a limited quantity in accordance with section 1.17 of the *TDG Regulations* for surface transport only (Road, Rail and Marine).

In December 2022, the UN Sub Committee of Experts on the Transportation of Dangerous Goods agreed to increase the limited quantity index for Carbon Dioxide from 0.120 ml to 1000 ml (1 L) in the *UN Recommendations*. This increase will eventually be reflected in the new Special Provision 406 of the *UN Recommendations* and it will eventually be adopted in the *TDG Regulations*. This equivalency certificate is based on the proposed Special Provision 406 of the *UN Recommendations*, shown below.

Special Provision 406: This entry may be transported in accordance with the limited quantity provisions of Chapter 3.4 when transported in pressure receptacles containing not more than 1 000 ml. The pressure receptacles shall meet the requirements of packing instruction P200 of 4.1.4.1 and have a test pressure capacity product not exceeding 15.2 MPa·I (152 bar·I). The pressure receptacles shall not be packed together with other dangerous goods."



RDIMS: 19351679 Page 2 of 5

CONDITIONS

This equivalency certificate authorizes **CO2 Exchange LLC** to handle, offer for transport or transport, and authorizes **any person** to handle or transport, on behalf of the certificate holder, by road vehicle, railway vehicle, or vessel in Canada, dangerous goods that are:

UN Number	Shipping Name and Description	Class	Packing Group
UN1013	CARBON DIOXIDE	2.2	N/A

in a manner that does not comply with:

- Subparagraph 1.17(1)(b)(iii) of the TDG Regulations;
- Schedule 1 of the TDG Regulations, but only as it relates to Column 6(a) -Limited Quantity Index;

if the following conditions are met:

1) General

a) The dangerous goods are transported in accordance with section 1.17 of the *TDG Regulations*, except for subparagraph 1.17(1)(b)(iii).

2) Means of Containment

- a) The dangerous goods are contained in a cylinder that complies with Part 5 of the *TDG Regulations* and has a test pressure capacity product not exceeding 15.2 MPa·I (152 bar·I);
- b) The volumetric capacity of each cylinder is less than or equal to 1 L.

3) Marking

a) The equivalency certificate number "**SU 13945**" must be displayed on the outer means of containment, in characters that are at least 6 mm high, next to the limited quantity mark required by subsection 1.17(5) of the *TDG Regulations*;

RDIMS: 19351679 Page 3 of 5 Canada

b) If an overpack is used and the marks on the small means of containment are not visible through the overpack, the equivalency certificate number "SU 13945" must also be displayed on the overpack, in characters that are at least 12 mm high, next to the limited quantity mark required by subsection 1.17(4) of the TDG Regulations.

Example:

Overpack SU 13945



4) Training

a) The certificate holder and any person using this equivalency certificate on behalf of the certificate holder ensure that the personnel handling, offering for transport or transporting the dangerous goods are trained regarding the conditions of this equivalency certificate that relate directly to the person's duties.

Note: Since the dangerous goods are transported in accordance with section 1.17 of the TDG Regulations, a training certificate as per Part 6 of the TDG Regulations, is not required.

Signature of Issuing Authority

David Lamarche, P. Eng., ing.

David Lamarche, P. Eng., ing.

Manager, Approvals and Special Regulatory Projects



RDIMS: 19351679 Page 4 of 5

(The following is for information purposes only and is not part of the certificate.)

Contact Person: Dean Henrickson

CO2 Exchange LLC

1010 South Mainline Drive Seymour, Wisconsin 54913

USA

Telephone: 833-262-7927

E-mail: dhenrickson@sodasense.com

Legend for Certificate Number

SH - Road, SR - Rail, SA - Air, SM - Marine

SU - More than one Mode of Transport

Ren - Renewal

For more information:

Approvals and Special Regulatory Projects

Transportation of Dangerous Goods,

Transport Canada

300 Laurier Avenue West

Ottawa, Ontario K1A 0N5

E-mail: tdgpermits-permistmd@tc.gc.ca

TDG regional offices:

Atlantic Prairie & Northern

<u>TDG-TMDAtlantic@tc.gc.ca</u> <u>TDG-TMDPNR@tc.gc.ca</u>

Quebec Pacific

TMD-TDG.Quebec@tc.gc.ca TDGPacific-TMDPacifique@tc.gc.ca

Ontario

TDG-TMDOntario@tc.gc.ca



RDIMS: 19351679 Page 5 of 5