



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 Number:	SU 13715 (Ren. 2)
Template Number:	N/A
Certificate Holder:	Canadian Explosives Industry Association (CEAEC) 8 Grove Street Knowlton QC J0E 1V0
Mode of Transport:	Road, Rail, Marine
Effective Date:	August 1, 2024
Expiry Date:	November 30, 2025

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

CGSB-43.146: Canadian General Standards Board, CAN/CGSB-43.146, "Design, manufacture and use of intermediate bulk containers for the transportation of dangerous goods, classes 3, 4, 5, 6.1, 8 and 9", published by the Canadian General Standards Board (CGSB), as amended from time to time

CSA B620: CSA Standard B620, "*Highway tanks and TC portable tanks for the transportation of dangerous goods*", published by the Canadian Standards Association (CSA), as amended from time to time

CSA B621: CSA Standard B621, "Selection and use of highway tanks, TC portable tanks, and other large containers for the transportation of dangerous goods, Classes 3, 4, 5, 6.1, 8, and 9", published by the Canadian Standards Association (CSA), as amended from time to time,



CSA B625: CSA Standard B625, "*Portable tanks for the transport of dangerous goods*", published by the Canadian Standards Association (CSA), as amended from time to time

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

Manual of Tests and Criteria: "*Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria*", 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 will result in 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.

Note 3: This equivalency certificate provides no regulatory relief from the applicable requirements prescribed by the *Explosives Act* and *Explosives Regulations, 2013*, under the jurisdiction of Natural Resources Canada (NRCan).

Note 4: No person shall use or apply this equivalency certificate, including the display of its number, when the equivalency certificate has expired or is otherwise no longer in effect. Any alteration of this equivalency certificate renders it invalid. Visit the Transport Canada website for the latest version of this equivalency certificate.

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 AMMONIUM NITRATE EMULSION or GEL or SUSPENSION, as UN3375, AMMONIUM NITRATE EMULSION or GEL or SUSPENSION, Class 5.1, PG II, despite the word "**FORBIDDEN**" being indicated in Column 3 of Schedule 1 of the *TDG Regulations*.

In most countries, ammonium nitrate emulsion, gel, or suspension, is transported as UN3375 when the substance meets the specific testing criteria found in Section 18 of the *Manual of Tests and Criteria*. This equivalency certificate aligns with international practices and Special Provision 309 of the *UN Recommendations*.



Previously, ammonium nitrate emulsion, gel, or suspension was classified as UN0332, EXPLOSIVE, BLASTING, TYPE E; or AGENT, BLASTING, TYPE E. Following the development of tests and criteria, differentiating between Class 1.5 and Class 5.1 is now feasible.

For greater certainty, this equivalency certificate also specifies that the net explosives quantity limit of 20 000 kg in a road vehicle, as indicated in paragraph 9.5(c) of the *TDG Regulations*, does not apply. This means a road vehicle may transport more than 20 000 kg of UN3375.



CONDITIONS

This equivalency certificate authorizes the **members of the Canadian Explosives Industry Association (CEAEC)** to handle, offer for transport or transport and authorizes **any person** to handle or transport on behalf of the **members of the Canadian Explosives Industry Association (CEAEC)**, by road or railway vehicle, or by vessel in Canada, dangerous goods that are:

UN Number	Shipping Name and Description	Class	Packing Group
UN3375	AMMONIUM NITRATE EMULSION, intermediate for blasting explosives;		
	AMMONIUM NITRATE GEL, intermediate for blasting explosives; or	5.1	II
	AMMONIUM NITRATE SUSPENSION, intermediate for blasting explosives		

in a manner that does not comply with:

- Column 3 of Schedule 1 of the TDG Regulations,
- Column 2 of Schedule 3 of the *TDG Regulations*,
- Subsection 1.5.2(1) of the *TDG Regulations*,
- Paragraphs 5.14(1)(a), 5.14(1)(b), and 5.14(1)(d) of the *TDG Regulations*, and
- Section 9.5(c) of the TDG Regulations,

if the following conditions are met:

1) General

a) The consignor of the dangerous goods is a **member of the Canadian Explosives** Industry Association (CEAEC);

Note: A current list of members is available on the CEAEC website at <u>https://www.ceaec.ca/</u>.

- b) A paper or electronic copy of this equivalency certificate accompanies the dangerous goods during transport and must be provided to an inspector or a peace officer immediately upon request;
- c) The **Canadian Explosives Industry Association (CEAEC)** ensures that a paper or electronic copy of this equivalency certificate is provided to all its members.



d) For greater certainty, the *TDG Act* and *TDG Regulations* apply as if the dangerous goods were not listed as forbidden in column 3 of Schedule 1 of the *TDG Regulations*.

Note: This means that all other requirements of the TDG Act and the TDG Regulations apply, except where exempted by this equivalency certificate.

e) For greater certainty, the net explosives quantity limit of 20 000 kg in a road vehicle, as specified in paragraph 9.5(c) of the *TDG Regulations*, does not apply.

Note: This means a road vehicle may transport more than 20 000 kg of UN3375.

2) Classification

- a) The dangerous goods meet the requirements of Special Provision 309 of the UN *Recommendations*;
- b) The consignor receives written confirmation from the Chief Inspector of Explosives of Natural Resources Canada, that the ammonium nitrate emulsion, gel, or suspension meets the requirements of Special Provision 309 of the UN Recommendations;
- c) A copy of the test results and of the written confirmation in condition 2)b) above must be provided, within 15 days of a request, to the Chief, Approvals and Special Regulatory Projects Division, Transportation of Dangerous Goods Directorate, Transport Canada, or to an inspector.

3) Means of Containment

General Requirements

- a) Thermal insulation, if installed, shall be made of non-combustible inorganic material;
- b) All pumping (i.e. transferring, loading and offloading) activities shall be in accordance with NRCan *Guideline G05-06: Pumping of Water-Based Explosives*;

Highway Tanks

- c) If the dangerous goods are transported in a highway tank, the following conditions apply:
 - i) The highway tank conforms to the requirements for specification TC 407, TC 412, or TC 423, in accordance with *CSA B620*, or an equivalent DOT or MC highway tank listed in Table 1 under section 5.1.1 of *CSA B621*,
 - ii) The highway tank is selected and used in accordance with the requirements of *CSA B621*, except for Clause 8.4 (Specific Requirement 2), and
 - iii) TC 407, TC 412 and equivalent highway tanks must have a Maximum Allowable Working Pressure (MAWP) equal to or less than 241 kPa (35 psi);

UN portable tanks

- d) If the dangerous goods are transported in a UN Portable Tank, the following conditions apply:
 - i) The UN Portable Tank has stainless steel shell and heads, and is manufactured, selected and used in accordance with the requirements applicable to T1 to T10 portable tanks as set out in CSA B625;

Note: Higher equivalent T code portable tank instructions must not be used.

Intermediate Bulk Containers (IBC)

- e) If the dangerous goods are transported in an Intermediate Bulk Container (IBC), the following conditions apply:
 - i) The IBC is either a code 31A, 31B, 31H1, 31H2 or 31HZ1, except that metal IBCs of code 31A shall not be constructed of mild steel,
 - ii) The IBC must comply with:
 - A) Part I and Part II of CGSB-43.146, or
 - B) the UN Recommendations and the Regulations of the country of origin,
 - iii) A lightweight IBC, as defined in CGSB-43.146, cannot be used.

Note: "Lightweight IBC" means a composite IBC with an outer casing made with light-gauge rigid material and plastic inner receptacle generally made by the blow-molding method.

f) For rail transport, it is prohibited to transport the dangerous goods in highway tanks placed on railway vehicles.



4) Emergency Response Assistance Plan (ERAP)

a) For the purpose of subsection 7.2(2) of the *TDG Regulations*, the ERAP index for UN3375 is 1000 L.

5) Documentation

- a) The shipping document that accompanies the dangerous goods contains the following information legibly and indelibly printed:
 - i) **"Equivalency Certificate SU 13715**", or
 - ii) "Certificat d'équivalence SU 13715".

6) Training

a) In addition to the requirements of Part 6 (Training) of the TDG Regulations, the members of the Canadian Explosives Industry Association (CEAEC) and any person using this equivalency certificate on behalf of the members of the Canadian Explosives Industry Association (CEAEC) must 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.

7) Reporting

- a) In addition to the requirements of Part 8 of the *TDG Regulations*, any release or anticipated release of dangerous goods must be reported to the Chief, Approvals and Special Regulatory Projects Division, Transportation of Dangerous Goods Directorate, Transport Canada, by email:
 - tdgapprovals-approbationstmd@tc.gc.ca

Signature of Issuing Authority

David Lamarche, P. Eng.

David Lamarche, P. Eng. Manager, Approvals and Special Regulatory Projects



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

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 Division Transportation of Dangerous Goods Directorate Transport Canada 300 Laurier Avenue West Ottawa, Ontario K1A 0N5 **E-mail:** tdgpermits-permistmd@tc.gc.ca

TDG regional offices:

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