



**STANDARD FIRE SAFETY REQUIREMENTS FOR VEHICLES USED
FOR CONVEYANCE OF CATEGORY 2 DANGEROUS GOODS
(CRYOGENIC GASES)**

運送第2類危險品（深度寒化氣體）的車輛的標準消防安全規定

ENGINE (引擎)

1. The engine of the vehicle shall be the type of compression ignition (Diesel).
車輛的引擎須為壓縮點火式(油渣)。
2. The exhaust system of the engine shall be situated wholly in front of the fire resisting shield and the discharge shall be arranged to offside of the vehicle.
引擎的排氣系統須全部位於防火板前及須由車旁右面排氣。
3. Any fuel pipe which form a part of a gravity feed system, a quick action cut-off valve shall be fitted to the fuel feed pipe in an easily accessible and clearly marked position.
任何成為重力供應系統部分的燃料管須安裝一個快速切斷掣，其位置須方便接近及清楚標明。

FUEL TANK (油箱)

4. The fuel tank shall be:-
油箱須 :-
 - i) complied with a double cases construction;
符合雙重包箱構造；
 - ii) screened from the body by a fire resisting shield;
加裝防火板使其與車身隔離；
 - iii) protected from blows by strong steel guards or by the frame of the chassis of the vehicle; and
以堅固鋼板或車身底盤架作保護以抵擋碰撞；及
 - iv) fitted with a lock to the fuel tank lid.
在入油箱蓋處加鎖。

CARGO TANK (氣缸)

5. The overall weight of the cargo tank and the loading content shall not exceed the designed load capacity of the vehicle.
氣缸及所載貨物的全部重量不得超過該車輛的限載量。
6. The cargo tank shall be secured on the vehicle.
氣缸須穩固地裝在車輛上。
7. The rear end of the cargo tank shall be protected by a robust steel bumper which is situated at least 75 mm away from the rear of the nearest part of the tank; and extended on each side of the vehicle to at least the maximum width of the cargo tank and tank fittings.
距離氣缸後端至少75毫米處須安裝一堅固鋼鐵保險桿作保護，其長度至少須與該氣缸及其裝置的最大闊度相等。
8. The cargo tank feed pipes shall be fitted with a quick action shut off valve in a position easily accessible and clearly marked in English and Chinese characters.
在氣缸輸氣喉管容易接近的地方，須安裝一個快速關閉活門，並以中英文顯著標明。
9. Vehicle shall be equipped with an earth cable. Such cable shall be connected to the earth terminal of the receiving equipment during cryogenic gases transferring.
氣缸車須配備地線。在輸送深寒氣體時，該地線須與接收裝備的地線端連接。
10. Power-driven pumps for product off-loading shall be fitted with clearly marked and easily accessible emergency controls forward of the fire resisting shield.
卸貨用電動泵的緊急掣須安裝在防火板前容易接近的地方，並以明顯的標記標明。
11. Pressure relief valves shall be equipped with spring loading device and fitted to the tank connected to the vapour space, and the discharge arranged shall be vented away from the tank upwards and unobstructed to the open air, so as to avoid any impingement of the escape vapour on the tank. A loose fitting rain cap shall be used.
壓力釋放活門須配有彈簧裝置及須安裝於氣缸上的散氣處連接的，使氣體可經由氣缸向上順利排出空氣中及防止漏氣溢入缸中。此外並應使用一鬆動的雨罩。

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12. The pressure and liquid level gauges shall be placed in a position that they shall be read from ground level without climbing the tank.
壓力及液體計須置於一個不需攀爬氣缸而能於地面閱讀的位置。
13. Cargo tank shall be designed, fabricated and tested in accordance with a recognised code or by a person approved by the Director of Fire Services for the purpose.
氣缸須根據認可的標準規定設計、製造及檢驗，或由消防處處長認可的人士所設計，製造及檢驗。
14. Piping and/or fittings shall not be projected beyond any sides of the vehicle. All piping, equipment, hoses, valves, accessories and outlet valves shall be adequately protected against accidental damage or interference. Outlet valves shall be projected by (a) the bumper if the valves are located at the rear of the vehicle; (b) a substantial protective metal bar if located at the side.
所有喉管及/或裝置不得伸延出油缸車的四周。所有喉管、裝備、捲喉、活門、附件及輸出活門須妥為保護以防意外損毀或阻礙。輸出活門如（甲）位於車尾則須以保險桿加以保護；（乙）如位於車旁則須以堅硬金屬條加以保護。
15. The chassis, cargo tank, piping and associated equipment shall be adequately bonded.
車身底盤、氣缸、喉管及有關裝置須緊密連接。
16. The body chassis, tanks and fittings shall be strongly constructed of non-combustible materials.
車身底盤，油箱及裝置須用堅固的不可燃物質建造。

FIRE RESISTING SHIELD (防火板)

17. The engine, fuel tank, electrical generator, batteries switch gear, fuses and exhaust system of the vehicle shall be situated in front of a fire resisting shield and effectively screened from the cargo tank by the fire resisting shield.
車輛的引擎、油箱、發電機、電池開關掣、保險絲及排氣系統須位於防火板前並有效地與該氣缸隔離。
18. The installation of fire resisting shield shall be projected upwards to a point above the topmost level of the cargo tank, and downwards to a point not more than 300 mm from the ground. (The steel cab can be deemed to constitute part of the shield).
防火板的安裝須伸延稍高於氣缸頂及向下離地不超過 300 毫米。（鋼鐵製駕駛室可視作防火板的一部份）。

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19. Any aperture made to allow any piping to pass through the fire resisting shield (i.e. air brake tubing) shall be so sealed as to prevent the passage of inflammable vapour through the shield.
任何穿過防火板的管孔(如空氣制動掣管)須密封以防易燃氣體通過該防火板。
20. Any windows in the fire resisting shield shall be wire glazed in fixed metal frame and not capable of being opened.
防火板的任何窗戶須為不可開啓的金屬線玻璃窗外包固定金屬框。
21. A clear space shall be maintained at least 150 mm between the back of the fire resisting shield and the front of the cargo tank.
防火板與氣缸之間至少須有 150 毫米的空隙距離。

ELECTRICAL SYSTEM (電力系統)

22. All electric wiring shall be heavily insulated and resistant to abrasion and chemical action. The wiring fixed at positions behind the fire resisting shield shall be run in flexible metal conduit.
所有電線須高度絕緣且有耐損及抗化性能。位於防火板後的電線須套以金屬軟管。
23. A safety cut-off switch shall be fitted in the driver's cab to isolate the electrical system from the battery.
安全斷流掣須安裝於駕駛室內以便切斷電力系統與電池間的電流。
24. Only electric lights shall be used on the vehicle. No fire, artificial light or article capable of causing fire or explosion shall be carried on the vehicle.
車輛內只可使用電燈。可引致火警或爆炸的火焰、人造燈光或物件則不得裝載在車輛。
25. The voltage of the electric current shall not exceed sixty volts.
電流的電壓不得超過六十伏特。

IDENTIFICATION (識別)

26. "NO SMOKING", "不准吸煙" notice of not less than 120 mm in height shall be prominently displayed and this instruction shall be complied with at all times by the driver and attendants on the vehicle. (This requirement shall not apply to a vehicle carrying carbon dioxide).
須在明顯位置懸掛 "NO SMOKING", "不准吸煙" 告示牌一個，字體高度須不少於120毫米。司機及跟車須任何時間遵守此項規定。(此項規定對於運送二氧化碳的車輛不適用。)

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27. Portable “NO SMOKING”, “不准吸煙” notices of not less than 120 mm in height shall be carried on the vehicle for display when filling or discharging process.

車上須備有 “NO SMOKING”, “不准吸煙” 手提告示牌，字體高度須不少於120毫米正楷，以便在注入或卸下程序時掛出。

28. A notice of not less than 120 mm in height in English capitals and Chinese characters shall be displayed at the front and rear of the vehicle as appropriate:-
車輛前及車後須懸掛適當的中英文告示牌，字體高度須不少於120毫米:-

Front : CAUTION LIQUID (CHEMICAL SYMBOL) GAS

前：液體(化學方程式)氣，危險勿近。

Rear : CAUTION LIQUID (CHEMICAL SYMBOL) GAS

後：液體(化學方程式)氣，危險勿近。

29. All gas inlets and outlets except safety relief valves, pressure and liquid level gauge connections, shall be clearly marked in English capitals and Chinese characters to prevent incorrect operation by the operator of the vehicle.

除安全活門、壓力計及液體計連接器外，所有氣體入口及出口均須用中英文顯著標明，以防車輛工作人員誤用。

EQUIPMENTS ATTACHED (附加工具)

30. 2 nos. of 2 kg dry powder fire extinguishers shall be provided one on each side of the vehicle and accessible from outside the cab. The fire extinguishers shall be kept in efficient working order at all times and be inspected by a registered Fire Service Installation Contractor at least once in every 12 months.

車輛須設置2具2公斤乾粉滅火筒，每邊車身各一具，並可由駕駛室外輕易取得。該等滅火筒任何時間須保持性能良好，及每十二個月最少由註冊消防裝置承辦商檢查一次。

31. At least one set of protective goggles and gloves shall be provided for each person employed on the vehicle.

車上每一名工作人員最少須配備一副護目鏡及手套。

GENERAL OBSERVATION (一般情況)

32. Only one category of dangerous goods shall be conveyed by the vehicle at any one time.

無論在任何時間，該車每次只准運送一種類別的危險品。

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33. Tyres shall be the 'anti-static' type, the electrical resistance of which shall be in accordance with BS 2050 or equivalent.
車胎須為“抗靜電”式，其電阻須符合英國標準 BS 2050 或同等規格。
34. The vehicle carrying liquefied gases in Category 2 dangerous goods (excluding chlorine) shall be attended by at least one person having reasonable experience in the handling of such dangerous goods.
車輛運送第2類危險品的液化氣體時(氯氣除外)，須有一人看管該車輛並且該人須對處理該種危險品有相當經驗。

N.B.

附註

Notices referred to at paragraphs 26, 27 and 28 above shall be made of reflective white or silver letters and characters on a red background. English letters with height and width in the proportion of 2 : 1 (e.g. 120 mm letters with 60 mm width, 75 mm letters with 36 mm width). Each letter shall be reasonably spaced, a 6 mm spacing is recommended for 120 mm letters and 3 mm spacing for 75 mm letters;

以上第 26, 27 及 28 段所述的‘告示’須用反光的白色或銀色中英文字寫在紅底板上。英文字母的高度和闊度的比例須為 2 : 1 (120 毫米的字體須為 60 毫米闊；75 毫米的字體須 36 毫米闊)字母間須有適當的距離。120 毫米的字體其字母須相距 6 毫米，而 75 毫米的字體則須相距 3 毫米。

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