

Material Safty Data Sheet

Issue: 02.23.2018

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8克壓縮二氧化碳充填鋼瓶 8 g compressed gas Carbon Dioxide (CO2) filled charger

技術資料(TECHNICAL DATA)

化學文摘社登記號碼(CAS number): 124-38-9

外觀表面(External surface): 金色(Color-Gold)

密封方式(Sealing method): 焊接(Welding)

鋼瓶材料(Material of body): 深抽引鋼(special deep drawing steel)

公制單位(METRIC UNITS)

英制單位(US / IMPERIAL UNITS)

總長(Overall Length (approx)):	65.8 mm	2.59 in
瓶身外徑(Body Diameter):	18.2 mm	0.717 in
頸部外徑(Neck Diameter):	8.5 mm	0.335 in
內容積(Internal Volume (approx)):	10.2 ml	0.62 in ³
CO2淨重(Net weight of CO2 (approx)):	8 g	0.28 oz
空瓶重量(Tare wt. of charger (approx)):	21 g	0.74 oz
總重(Gross wt. of charger (approx)):	29g	1.02 oz
爆破壓(Bursting pressure):	>500 bar	>7250 lbf/in ²

壓力/溫度 在充填密度為0.78kg/liter的 狀況下(Pressure / Temperature Characteristics at filling density of 0.78 kg/liter):	52 bar at 20 °C	750 lbf/in ² at 68 °F
	185 bar at 50 °C	2680 lbf/in ² at 122 °F
	290 bar at 70 °C	4200 lbf/in ² at 158 °F
	425 bar at 100 °C	6160 lbf/in ² at 212 °F
	470 bar at 110 °C	6815 lbf/in ² at 230 °F

二氧化碳(CARBON DIOXIDE):

氣體供應商為元翎精密工業股份有限公司，63247台灣雲林縣虎尾鎮科虎三路18號(Gas supplied in accordance with Mosa Industrial Corp. 18, Kehu 3Rd. Huwei, Yunlin 63247, Taiwan spec. E290 (99% CO2))

1 atm下的氣體壓力 (Gas density at 1 atm):	1.836 kg/m ³ at 20°C	0.115 lb/ft ³ at 68° F
比重(Relative density (air=1)):	1.53 at 20°C	1.53 at 68° F
臨界溫度(Critical Temperature):	36.5° C	98° F
分子重量(Molecular weight):	44	
特徵(Appearance):	氣態(vapor)	無色(colorless)
	液態(liquid)	透明(clear)
	固態(solid)	無色針狀結晶(colorless acicular crystals)

二氧化碳(CARBON DIOXIDE) :

毒性(Odor):	無毒(odorless)
閃火點(Fire Hazard):	不可燃(non-flammable)
急毒性(Toxicity):	無毒性，假如在連續工作的情況下吸入CO2的濃度最高達0.01% v/v會產生麻醉效果。(non-toxic, anaesthetic effect if inhaled recommended maximum 0.01% v/v for continuous working conditions)
暴露限制(Exposure Limits):	八小時日時量平均容許濃度/短時間時量平均容許濃度/最高容許濃度：TWA=50ppm；生物指標：LC50:160mg/m ³ /6H(老鼠) (The recommended airborne expsoure limit TWA = 5000 ppm molar averaged over an 8-hour workshift. LC50 =2.80-9.16 mg/l/96H (with mouse)).
非煙霧劑(Non aerosol)	

注意事項(CAUTION):

使用小鋼瓶請參照使用說明書的指示操作。
 (Use chargers and dispensers only in accordance with instructions.)
 請務加熱.使用時最高環境溫度請勿超過50°C (122°F)
 (Do not heat. Maximum environmental temperature in use not to exceed 50°C (122°F).)
 請勿使用於其他不相關用途。
 (Do not use for any other purpose.)
 請勿吸食. 濫用會危害您的健康。
 (Do not inhale. Misuse can be physically harmful and dangerous to your health.)

搬運及儲存(HANDLING AND STORAGE):

保持低溫及乾燥，並遠離陽光直射及熱源。(Keep cool and dry, keep away from direct sunlight and heat.)
 不可丟棄未使用之小鋼瓶。不要使用蠻力開啟。(Never dispose of full chargers. Never force open.)
 遠離小孩及未成年人(Keep out of reach of children and minors.)
 可回收鋼(Recyclable steel)
 儲存溫度限制(Storage temperature lirr 50°C 122°F

運送(TRANSPORTATION):

無危險性(Non hazardous)
 危險等級(Class) 2.2
 聯合國編號(UN No.) UN1013
 特別條款191(Special Provision 191)
 標示(Title): 小型氣體容器(Receptacles, small, containing gas (gas cartridges))
 小型容器，僅裝有無毒性成份且容量不超過50 毫升的容器，不受IMDGC規章限制(Receptacles with capacity not exceeding 50 ml containing only non-toxic constituents, are not subject to provisions of IMDGC)

包裝(PACKAGING):

大尺寸(Large case) :	鋼瓶24入裝25盒(25 boxes of 24 charger	每箱共600支鋼瓶 (600 total chargers per case)
小尺寸(Small case) :	鋼瓶10入裝36盒(36 boxes of 10 charger;	每箱共360支鋼瓶 (360 total chargers per case)
	鋼瓶10入裝40盒(40 boxes of 10 charger;	每箱共400支鋼瓶 (400 total chargers per case)