



Airborne Labs International

22C World's Fair Drive Somerset, NJ 08873 +1-732-302-1950
Sales@airbornelabs.com www.airbornelabs.com

Dry Ice (SCO₂) Analysis Food-Grade Program[®]

Customer

Phone:

Attn.:

E-Mail:

Sample ID.: Dry Ice Pellets - SCO₂

Sample ID.: Received in a Customer Owned Solid CO₂ Preparedness Kit

ALI Track No.:

Received On:

Report Date:

Payment Mode: PO

Sample Date:

Process Stage: Final

Test Description/Units

CO₂ Identification (% v/v [GC/TCD], {ZN}): _____

Comments: Major GC/TCD peak t, match vs pure CO₂ std = Positive ID.

CO₂ Purity (% v/v, ISBT 2.0 [GC/DID]): _____

Comments: Obtained by difference method

Oxygen (O₂, ppm v/v, ISBT 4.0 [GC]): _____

Result represents total O₂ + Ar ppm v/v.

Carbon Monoxide (CO, ppm v/v by ISBT 5.0 [GC]): _____

Comments:

Oxides of Nitrogen (NO_x, ppm v/v, ISBT 7.0 [DT]): _____

Comment: 2.5 ppm v/v each max. of NO or NO₂ allowed or 5.0 ppm v/v Total (NO+NO₂) max.

Nitric Oxide (NO, ppm v/v, ISBT 7.1 [DT]): _____

Nitrogen Dioxide (NO₂, ppm v/v, ISBT 7.2 [DT]): _____

Non-Volatile Residue (NVR, ppm w/w, ISBT 8.0 [Grav]): _____

Comments:

Total Hydrocarbons (THC, ppm v/v as Methane, ISBT 10.0): _____

Comments:

Acetaldehyde (AA, ppm v/v, ISBT 11.0 [GC]): _____

Aromatic Hydrocarbon Content (ppb v/v as Benzene, ISBT 12.0 [GC]): _____

Comments: No target BTEX impurities detected.

Total Sulfur Content (ppm v/v, by ISBT 14.0 [GC]): _____

Comments: Total sulfur including SO₂. VSC speciation required if TSC exceeds 0.5 ppm v/v

Speciated Volatile Sulfur Compounds (VSC, ppm v/v by ISBT 14.0)

Hydrogen Sulfide (H₂S): _____

Carbonyl Sulfide (COS): _____

Sulfur Dioxide (SO₂): _____

Comments:

Sensory Tests

Odor & Taste in Water (Pass/Fail): _____

pass none

LOQ = Limit of Quantitation (lowest amount of analyte quantitatively determined with suitable precision and accuracy) MDL = method detection limit (lowest amount of analyte detected). trace = unquantified amount observed between MDL and LOQ. nd = indicates the impurity was not detected (below MDL). -- = test not performed. na = not available. LT = less than the amount specified. GT = greater than the amount specified. % = percent. ppm = parts per million. ppb = parts per billion. v/v = volume analyte/volume sample. w/w = weight analyte/weight sample. [result] indicates the result was obtained by the method listed within brackets. TSC* = ISBT Total Sulfur Content excluding SO₂. Unit Conversions: 1ppm v/v = 1µL/L = 1000 ppb = 0.0001% v/v. Date format: MM/DD/YY.

Result

LOQ

Food Grade Spec Limits

Result	LOQ	Food Grade Spec Limits
5	5	na
5	5	99.5 min
1	1	50 max
1	1	10 max
0.5	0.5	5.0 max total
0.5	0.5	2.5 max
0.5	0.5	2.5 max
2	2	10 max
0.1	0.1	50 max
0.05	0.05	0.5 max
2	2	na
0.01	0.01	0.5 max
0.01	0.01	0.5 max
0.01	0.01	5.0 max

Report Summary: Customer requested a food-grade SCO₂ test program. This CO₂ sample meets the requirements of CGA-6.2-2011: Commodity Specification for Carbon Dioxide Quality Verification Level H-Food Grade.

Reviewed By / Date:

Laboratory Manager mm/dd/yy

Laboratory Manager

Attachments: none

Addendum: Signatures, Instrument & Notebook data on-file

ISO Statement

Statements of conformity (pass or fail) resulting from the test/analysis performed on the above sample will not take into account the reported measurement uncertainty unless otherwise specified. This is a shared risk decision rule in which the customer also has responsibility for determining acceptance of the results. The methods Airborne Labs International uses are developed by Airborne Labs International and are based on the current revisions of international, national, or industry standards unless otherwise specified. The acceptance criteria of the above item are based on ISBT specifications, NFPA, CGA, USP, or other industry specifications unless otherwise specified on the contract.

F-21.1.1v5 (02/23)



Accreditation # 68099