

1 Identification

- **Product identifier**
- **Trade name:** QCO-001
- **Application of the substance / the mixture** For Laboratory Use Only
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 NSI Lab Solutions
 7212 ACC Blvd.,
 Raleigh, NC 27617
 USA
- **Information department:** Product safety department
- **Emergency telephone number:** During normal opening times: +1 (919) 789-3000

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Toxicity - Inhalation 3

H331 Toxic if inhaled.



GHS08 Health hazard

Specific Target Organ Toxicity - Single Exposure 1 H370 Causes damage to the central nervous system and the visual organs.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02



GHS06



GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labeling:**
methanol
- **Hazard statements**
Highly flammable liquid and vapor.
Toxic if inhaled.
Causes damage to the central nervous system and the visual organs.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.

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Take precautionary measures against static discharge.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF exposed: Call a POISON CENTER or doctor/physician.

Specific treatment (see on this label).

In case of fire: Use CO₂, powder or water spray to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

67-56-1	methanol	99-100%
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· **Non-hazardous components**

1563-66-2	carbofuran (ISO)	0.0046-0.0123%
1646-88-4	aldoxycarb	0.0046-0.0078%
2032-65-7	mercaptodimethur (ISO)	0.0055-0.0077%
16752-77-5	methomyl	0.0044-0.0066%
23135-22-0	N',N'-dimethylcarbamoyl(methylthio)methylenamine N-methylcarbamate	0.0038-0.0064%
63-25-2	carbaryl (ISO)	0.0037-0.0063%
116-06-3	aldicarb (ISO)	0.0031-0.0052%
114-26-1	propoxur (ISO)	0.0033-0.0049%
1646-87-3	Aldicarb sulfoxide	0.0019-0.0033%

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16655-82-6 | 3-Hydroxycarbofuran

0.0026–0.0032%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Remove breathing apparatus only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

67-56-1	methanol	530 ppm
1563-66-2	carbofuran (ISO)	0.3 mg/m ³
2032-65-7	mercaptodimethur (ISO)	1.4 mg/m ³

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16752-77-5	methomyl	0.91 mg/m ³
23135-22-0	N',N'-dimethylcarbamoyl(methylthio)methylenamine N-methylcarbamate	0.15 mg/m ³
63-25-2	carbaryl (ISO)	1.5 mg/m ³
116-06-3	aldicarb (ISO)	0.027 mg/m ³
114-26-1	propoxur (ISO)	1.5 mg/m ³
· PAC-2:		
67-56-1	methanol	2,100 ppm
1563-66-2	carbofuran (ISO)	0.43 mg/m ³
2032-65-7	mercaptodimethur (ISO)	15 mg/m ³
16752-77-5	methomyl	10 mg/m ³
23135-22-0	N',N'-dimethylcarbamoyl(methylthio)methylenamine N-methylcarbamate	1.7 mg/m ³
63-25-2	carbaryl (ISO)	100 mg/m ³
116-06-3	aldicarb (ISO)	0.3 mg/m ³
114-26-1	propoxur (ISO)	6.7 mg/m ³
· PAC-3:		
67-56-1	methanol	7200* ppm
1563-66-2	carbofuran (ISO)	3.7 mg/m ³
2032-65-7	mercaptodimethur (ISO)	90 mg/m ³
16752-77-5	methomyl	23 mg/m ³
23135-22-0	N',N'-dimethylcarbamoyl(methylthio)methylenamine N-methylcarbamate	4.7 mg/m ³
63-25-2	carbaryl (ISO)	600 mg/m ³
116-06-3	aldicarb (ISO)	1.8 mg/m ³
114-26-1	propoxur (ISO)	40 mg/m ³

7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

- **Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:** Store in a cool location.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

- **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-56-1 methanol

PEL Long-term value: 260 mg/m³, 200 ppm

REL Short-term value: 325 mg/m³, 250 ppm

Long-term value: 260 mg/m³, 200 ppm

Skin

TLV Short-term value: 250 ppm

Long-term value: 200 ppm

Skin; BEI

· **Ingredients with biological limit values:**

67-56-1 methanol

BEI 15 mg/L

Medium: urine

Time: end of shift

Parameter: Methanol (background, nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
Form:	Fluid
Color:	According to product specification
· Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	-98 °C (-144.4 °F)
Boiling point/Boiling range:	64.7 °C (148.5 °F)
· Flash point:	11 °C (51.8 °F)
· Flammability (solid, gaseous):	Highly flammable.
· Ignition temperature:	455 °C (851 °F)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	5.5 Vol %
Upper:	44 Vol %
· Vapor pressure at 20 °C (68 °F):	128 hPa (96 mm Hg)
· Density at 20 °C (68 °F):	0.79 g/cm ³ (6.59255 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
Water:	Fully miscible.
· Partition coefficient (n-octanol/water): Not determined.	
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	99–99.9 %
VOC content:	99–99.94 %
	999.4 g/l / 8.34 lb/gal

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Solids content:	0 %
Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimate)		
Inhalative	LC50/4 h	3–3.03 mg/l

67-56-1 methanol		
Oral	LD50	5,628 mg/kg (rat)
Dermal	LD50	15,800 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Toxic
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)		
63-25-2	carbaryl (ISO)	3
116-06-3	aldicarb (ISO)	3

· NTP (National Toxicology Program)		
None of the ingredients is listed.		

· OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

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- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*
- **Recommended cleansing agent:** *Water, if necessary with cleansing agents.*

14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT, IMDG, IATA 	UN3021
<ul style="list-style-type: none"> · UN proper shipping name · DOT · IMDG · IATA 	Pesticides, liquid, flammable, toxic (Methanol) PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S. (METHANOL) Pesticide, liquid, flammable, toxic, n.o.s. (METHANOL)
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT 	<div style="display: flex; justify-content: space-around; align-items: center;">   </div>
<ul style="list-style-type: none"> · Class · Label 	3 Flammable liquids 3, 6.1
<ul style="list-style-type: none"> · IMDG 	<div style="display: flex; justify-content: space-around; align-items: center;">   </div>
<ul style="list-style-type: none"> · Class 	3 Flammable liquids

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· Label	3/6.1
· IATA	
 	
· Class	3 Flammable liquids
· Label	3 (6.1)
· Packing group	II
· DOT, IMDG, IATA	II
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Flammable liquids
· Hazard identification number (Kemler code):	336
· EMS Number:	F-E,S-D
· Stowage Category	B
· Stowage Code	SW2 Clear of living quarters.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 1 L On cargo aircraft only: 60 L
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 3021 PESTICIDE, LIQUID, FLAMMABLE, TOXIC, N.O.S. (METHANOL), 3 (6.1), II

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
- **Sara**

· Section 355 (extremely hazardous substances):	
1563-66-2	carbofuran (ISO)
2032-65-7	mercaptodimethur (ISO)
16752-77-5	methomyl
23135-22-0	N',N'-dimethylcarbamoyl(methylthio)methylenamine N-methylcarbamate
116-06-3	aldicarb (ISO)
· Section 313 (Specific toxic chemical listings):	
67-56-1	methanol
1563-66-2	carbofuran (ISO)

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2032-65-7	mercaptodimethur (ISO)
63-25-2	carbaryl (ISO)
116-06-3	aldicarb (ISO)
114-26-1	propoxur (ISO)

· **TSCA (Toxic Substances Control Act):**

67-56-1	methanol	ACTIVE
1563-66-2	carbofuran (ISO)	ACTIVE
63-25-2	carbaryl (ISO)	ACTIVE
116-06-3	aldicarb (ISO)	ACTIVE

· **Hazardous Air Pollutants**

67-56-1	methanol
63-25-2	carbaryl (ISO)
114-26-1	propoxur (ISO)

· **Proposition 65**

· **Chemicals known to cause cancer:**

63-25-2	carbaryl (ISO)
114-26-1	propoxur (ISO)

· **Chemicals known to cause reproductive toxicity for females:**

63-25-2	carbaryl (ISO)
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· **Chemicals known to cause reproductive toxicity for males:**

63-25-2	carbaryl (ISO)
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· **Chemicals known to cause developmental toxicity:**

67-56-1	methanol
63-25-2	carbaryl (ISO)

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

116-06-3	aldicarb (ISO)	D
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· **TLV (Threshold Limit Value)**

1563-66-2	carbofuran (ISO)	A4
16752-77-5	methomyl	A4
63-25-2	carbaryl (ISO)	A4
114-26-1	propoxur (ISO)	A3

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02 GHS06 GHS08

· **Signal word** Danger

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- **Hazard-determining components of labeling:**
methanol
- **Hazard statements**
Highly flammable liquid and vapor.
Toxic if inhaled.
Causes damage to the central nervous system and the visual organs.
- **Precautionary statements**
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF exposed: Call a POISON CENTER or doctor/physician.
Specific treatment (see on this label).
In case of fire: Use CO₂, powder or water spray to extinguish.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Environment protection department.
- **Contact:** - Department Technical Manager
- **Date of preparation / last revision** 04/02/2024
- **Abbreviations and acronyms:**
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety & Health
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
BEI: Biological Exposure Limit
Flammable Liquids 2: Flammable liquids – Category 2
Acute Toxicity - Inhalation 3: Acute toxicity – Category 3
Specific Target Organ Toxicity - Single Exposure 1: Specific target organ toxicity (single exposure) – Category 1