

Hazardous according to criteria of Australian Safety and Compensation Council

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** *Altus™ RI Detector OQ Solution*
- **Article number:** *N2972054*
- **Application of the substance / the mixture** *Laboratory chemicals*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**

PerkinElmer Environmental Health
710 Bridgeport Avenue
Shelton, Connecticut 06484 USA
CustomerCareUS@perkinelmer.com

- **Emergency telephone number:**
CHEMTREC (within US) 800-424-9300
CHEMTREC (from outside US) +1 703-527-3887 (call collect)
- **Local Emergency Number** CHEMTREC - (Within Australia) +(61)-290372994

2 Composition/information on ingredients

- **Chemical characterisation:** *Mixtures*
- **Description:** *Mixture of substances listed below with nonhazardous additions.*

· **Dangerous components:**

CAS: 67-56-1 EINECS: 200-659-6	methanol	20-<25%
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· **Additional Components**

CAS: 58-08-2 EINECS: 200-362-1	caffeine	< 0.01%
CAS: 7732-18-5 EINECS: 231-791-2	Water	92.5-95%

- **Additional information:** *For the wording of the listed risk phrases refer to section 16.*

3 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Toxic

Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.



Highly flammable

Highly flammable.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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Trade name: Altus™ RI Detector OQ Solution

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· **Label elements**

· **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

· **Code letter and hazard designation of product:**

Toxic

Highly flammable

· **Hazard-determining components of labelling:**

methanol

· **Risk phrases:**

Highly flammable.

Toxic by inhalation, in contact with skin and if swallowed.

Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

· **Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

4 First aid measures

· **General information:**

Immediately remove any clothing soiled by the product.

Remove breathing equipment 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.

5 Firefighting measures

· **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· **Special hazards arising from the substance or mixture** No further relevant information available.

· **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

· **Environmental precautions:** Prevent seepage into sewage system, workpits and cellars.

· **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.

Do not flush with water or aqueous cleansing agents

· **Reference to other sections**

See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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 fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.
- **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 container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

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

- **Ingredients with limit values that require monitoring at the workplace:**

67-56-1 methanol

NES (Australia)	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Sk
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- **Additional information:** The lists valid during the making were used as basis.
- **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.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **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

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· **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.

· **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

· **General Information**

· **Appearance:**

Form:	Liquid
Colour:	Clear
Odour:	Alcohol-like
Odour threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	64 °C

· **Flash point:** ≤ 21 °C

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 455 °C

· **Decomposition temperature:** Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

Lower:	5.5 Vol %
Upper:	44.0 Vol %

· **Vapour pressure at 20 °C:** 128 hPa

Density at 20 °C:	0.9517 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.

· **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic:	Not determined.
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Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	23.0 %
Water:	77.0 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

67-56-1 methanol

Dermal	LD50	15800 mg/kg (rabbit)
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- **Primary irritant effect:**

- **on the skin:** No irritant effect.

- **on the eye:** No irritating effect.

- **Sensitisation:** No sensitising effects known.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Toxic

12 Ecological information

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13 Disposal considerations



- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· UN-Number	UN1987
· ADG, IMDG, IATA	
· UN proper shipping name	ALCOHOLS, N.O.S. (METHANOL)
· ADG, IMDG, IATA	
· Transport hazard class(es)	
· ADG	
	
· Class	3 (F1) Flammable liquids.
· Label	3
· IMDG, IATA	
	
· Class	3 Flammable liquids.
· Label	3
· Packing group	
· ADG, IMDG, IATA	II
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids.
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADG	
· 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
· Transport category	2
· Tunnel restriction code	D/E
· 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":	UN1987, ALCOHOLS, N.O.S. (METHANOL), 3, II

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15 Regulatory information

· Australian Inventory of Chemical Substances

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

67-56-1 methanol

S5, S6

· Labelling according to EU guidelines:

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· Code letter and hazard designation of product:

Toxic

Highly flammable

· Hazard-determining components of labelling:

methanol

· Risk phrases:

Highly flammable.

Toxic by inhalation, in contact with skin and if swallowed.

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· Safety phrases:

Keep away from living quarters.

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

Keep away from sources of ignition - No smoking.

Wear suitable protective clothing, gloves and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

This material and its container must be disposed of as hazardous waste.

· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

· Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information

Disclaimer

The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer Life and Analytical Sciences shall not be held liable for any damage resulting from handling or from contact with the product.

· Classification of the substance or mixture



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

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GHS08 health hazard

STOT SE 1 H370 Causes damage to organs.

· **Department issuing MSDS:**

*PerkinElmer
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530-540 Springvale Road
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FAX : +61 3-9212-8595*

· **Contact:**

*With in the USA: 1-(800)-762-4000
Out side the USA: 1-(203)-712-8488*

· **Abbreviations and acronyms**

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 2: Flammable liquids, Hazard Category 2
STOT SE 1: Specific target organ toxicity - Single exposure, Hazard Category 1*

· *** Data compared to the previous version altered.**