20.09.2018	Kit components	
Product code	Description	
MZ300085	SQ 300 Customer Performance Test Kit	
Components:		
MZ301174	NITROPHENOL - 2 pg/ul	
MZ301175	RESERPINE - 100 pg/μL	
MZ301177	DILUTION SOLVENT	



Printing date 20.09.2018 Revision: 20.09.2018

Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

- · Product identifier
- · Trade name: NITROPHENOL 2 pg/ul
- · Article number: MZ301174
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

PerkinElmer, Inc. 710 Bridgeport Avenue Shelton, Connecticut 06484 USA CustomerCareUS@perkinelmer.com 203-925-4600

Supplier/Local:

PerkinElmer Australia Lvl 2, Bldg 5, Brandon Office Park

530-540 Springvale Road

Glen Waverley

Melbourne

VIC 3150

Australia

1-800-033-391

ausales@perkinelmer.com

· Emergency telephone number:

CHEMTREC (within US) 800-424-9300

CHEMTREC (from outside US) +1 703-527-3887 (call collect)

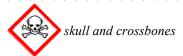
CHEMTREC (within AU) +(61)-290372994

2 Hazard(s) Identification

Classification of the substance or mixture



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



Acute Tox. 3 H331 Toxic if inhaled.

(Contd. on page 2)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: NITROPHENOL - 2 pg/ul

(Contd. of page 1)



STOT SE 1 H370 Causes damage to organs.

- · Label elements
- GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms GHS02, GHS06, GHS08
- · Signal word Danger
- · Hazard-determining components of labelling:

methanol

· Hazard statements

H225 Highly flammable liquid and vapour.

H331 Toxic if inhaled.

H370 Causes damage to organs.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting equipment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Other hazards

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

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition and Information on Ingredients

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

· Dangero	ous components:		
67-56-1	methanol	© Flam. Liq. 2, H225 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT SE 1, H370	74.99%
· Addition	al Components		
100-02-	-7 4-nitrophenol	STOT RE 2, H373 Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	0.01%
7732-18-	-5 Water		25.0%

Additional information: For the wording of the listed hazard phrases refer to section 16.

AU -



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: NITROPHENOL - 2 pg/ul

(Contd. of page 2)

4 First Aid Measures

· Description of 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: Do not induce vomiting; call for medical help immediately.
- · 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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

Inform respective authorities in case of seepage into water course or sewage system.

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.

· 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.

ΑU



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: NITROPHENOL - 2 pg/ul

(Contd. of page 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 fire - and explosion protection:

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 container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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

8 Exposure controls and personal protection

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

· Ingredients with limit values that require monitoring at the workplace:

67-56-1 methanol

NES | Short-term value: 328 mg/m³, 250 ppm | Long-term value: 262 mg/m³, 200 ppm | Sk

WES Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Sk

- · Additional information: The lists valid during the making 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.

· 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.

(Contd. on page 5)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: NITROPHENOL - 2 pg/ul

(Contd. of page 4)

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Information on basic physical and chemical properties		
· General Information		
Appearance:		
Form:	Liquid	
Colour:	Light yellow	
Odour:	Alcohol-like	
Odour threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling r	range: 64 °C	
Flash point:	< 23 °C	
Flammability (solid, gas):	Not applicable.	
Ignition temperature:	455 °C	
Decomposition temperature:	Not determined.	
Auto-ignition temperature:	Product is not selfigniting.	
Explosive properties:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
Explosion limits:		
Lower:	5.5 Vol %	

(Contd. on page 6)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: NITROPHENOL - 2 pg/ul

	(Contd. of page
Upper:	44 Vol %
· Vapour pressure at 20 °C:	128 hPa
· Density at 20 °C:	0.94748 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.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	75.0 %
Water:	25.0 %
· 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/LC5	· LD/LC50 values relevant for classification:		
67-56-1	metha	nol	
Oral	LD50	5,628 mg/kg (rat)	
Dermal	LD50	15,800 mg/kg (rabbit)	

- · Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin 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:

(Contd. on page 7)



Revision: 20.09.2018 *Printing date 20.09.2018*

Trade name: NITROPHENOL - 2 pg/ul

Toxic

(Contd. of page 6)

12 Ecological Information

- · Toxicity
- · 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.
- · Mobility in soil 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.

- · 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 together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN-Number

· ADG, IMDG, IATA UN1992

· UN proper shipping name

 \cdot ADG

1992 FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOL)

· IMDG, IATA FLAMMABLE LIQUID, TOXIC, N.O.S. (METHANOL)

- · Transport hazard class(es)
- \cdot ADG





Class 3 (FT1) Flammable liquids.

(Contd. on page 8)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: NITROPHENOL - 2 pg/ul

	(Contd. of page
Label	3+6.1
IMDG	
Class	3 Flammable liquids.
Label	3/6.1
IATA	
Class	2 Elammahla liquida
Label	3 Flammable liquids. 3 (6.1)
Packing group	, /
ADG, IMDG, IATA	II
Environmental hazards:	
Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler): EMS Number:	336 F-E,S-D
Stowage Category	В
Stowage Code	SW2 Clear of living quarters.
Transport in bulk according to Annex L	
and the IBC Code	Not applicable.
Transport/Additional information:	
ADG	
Limited quantities (LQ)	
Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per unter packaging: 50 ml Maximum net quantity per outer packaging: 500 ml
Transport category	2
Tunnel restriction code	D/E
IMDG	11
Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2
Excepted quantities (EQ)	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1992 FLAMMABLE LIQUID, TOXIC, N.O.
G	(METHANOL), 3 (6.1), II



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: NITROPHENOL - 2 pg/ul

(Contd. of page 8)

15 Regulato	15 Regulatory information Safety, health and environmental regulations/legislation specific for the substance or mixture		
· Safety, hea			
67-56-1	methanol	 ♦ Flam. Liq. 2, H225 ♦ Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 ♦ STOT SE 1, H370 	74.99%
7732-18-5	Water		25.0%
100-02-7	4-nitrophenol	 ♦ STOT RE 2, H373 ↑ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332 	0.01%

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category

H2 ACUTE TOXIC

P5c FLAMMABLE LIOUIDS

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · 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.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Relevant phrases

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H331 Toxic if inhaled.

H332 Harmful if inhaled.

H370 Causes damage to organs.

H373 May cause damage to organs through prolonged or repeated exposure.

· Department issuing SDS: Environmental, Health and Safety

(Contd. on page 10)



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Trade name: NITROPHENOL - 2 pg/ul

(Contd. of page 9)

· Contact:

Within the USA: 1-(800)-762-4000 Outside the USA: 1-(203)-712-8488

· Abbreviations and acronyms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity – Category 3

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

* * Data compared to the previous version altered.

AU -



Printing date 20.09.2018 Revision: 20.09.2018

Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

- · Product identifier
- · Trade name: RESERPINE 100 pg/μL
- · Article number: MZ301175
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

PerkinElmer, Inc. 710 Bridgeport Avenue Shelton, Connecticut 06484 USA CustomerCareUS@perkinelmer.com 203-925-4600

Supplier/Local:

PerkinElmer Australia Lvl 2, Bldg 5, Brandon Office Park

530-540 Springvale Road

Glen Waverley

Melbourne

VIC 3150

Australia

1-800-033-391

ausales@perkinelmer.com

· Emergency telephone number:

CHEMTREC (within US) 800-424-9300

CHEMTREC (from outside US) +1 703-527-3887 (call collect)

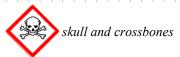
CHEMTREC (within AU) +(61)-290372994

2 Hazard(s) Identification

Classification of the substance or mixture



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



Acute Tox. 3 H331 Toxic if inhaled.

(Contd. on page 2)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: RESERPINE - 100 pg/µL

(Contd. of page 1)



STOT SE 1 H370 Causes damage to organs.

- · Label elements
- GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms GHS02, GHS06, GHS08
- · Signal word Danger
- · Hazard-determining components of labelling:

methanol

· Hazard statements

H225 Highly flammable liquid and vapour.

H331 Toxic if inhaled.

H370 Causes damage to organs.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting equipment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Other hazards

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

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

7732-18-5 Water

3 Composition and Information on Ingredients

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

· Dangerous components:		
67-56-1 methanol	♦ Flam. Liq. 2, H225	74.99%
	Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT SE 1, H370	
· Additional Components		
50-55-5 reserpine	♠ Acute Tox 3 H301	0.01%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

AU -

25.0%



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: RESERPINE - 100 pg/µL

(Contd. of page 2)

4 First Aid Measures

· Description of 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: Do not induce vomiting; call for medical help immediately.
- · 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, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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

Inform respective authorities in case of seepage into water course or sewage system.

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.

· 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.

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Printing date 20.09.2018 Revision: 20.09.2018

Trade name: RESERPINE - 100 pg/µL

(Contd. of page 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 fire - and explosion protection:

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 container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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

8 Exposure controls and personal protection

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

· Ingredients with limit values that require monitoring at the workplace:

67-56-1 methanol

NES Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm

Sh

WES Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm

Sk

- · Additional information: The lists valid during the making 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.

· 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.

(Contd. on page 5)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: RESERPINE - 100 pg/µL

(Contd. of page 4)

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Information on basic physical and chemical properties · General Information		
Form:	Liquid	
Colour:	Transparent	
Odour:	Alcohol-like	
Odour threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition Melting point/freezing point:	Undetermined.	
Initial boiling point and boiling ra	nge: 64 °C	
Flash point:	< 23 °C	
Flammability (solid, gas):	Not applicable.	
Ignition temperature:	455 °C	
Decomposition temperature:	Not determined.	
Auto-ignition temperature:	Product is not selfigniting.	
Explosive properties:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
Explosion limits:		

- AU

(Contd. on page 6)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: RESERPINE - 100 pg/µL

	(Contd. of page
Upper:	44 Vol %
· Vapour pressure at 20 °C:	128 hPa
Density:	Not determined.
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.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	75.0 %
Water:	25.0 %
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/LC5	· LD/LC50 values relevant for classification:			
67-56-1	67-56-1 methanol			
Oral	LD50	5,628 mg/kg (rat)		
Dermal	LD50	15,800 mg/kg (rabbit)		

- · Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin 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:

(Contd. on page 7)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: RESERPINE - 100 pg/µL

Toxic

(Contd. of page 6)

12 Ecological Information

- · Toxicity
- · 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.
- · Mobility in soil 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.

- · 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 together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

14 Transport information

- · UN-Number
- · ADG, IMDG, IATA UN1230
- · UN proper shipping name
- \cdot ADG

1230 METHANOL solution

· IMDG, IATA

METHANOL solution

- · Transport hazard class(es)
- · *ADG*





· Class

3 (FT1) Flammable liquids.

(Contd. on page 8)



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Trade name: RESERPINE - 100 pg/µL

	(Contd. of pa
Label	3+6.1
IMDG	
Class	3 Flammable liquids.
Label	3/6.1
IATA	
Class	3 Flammable liquids.
Label	3 (6.1)
Packing group	
ADG, IMDG, IATA	II
Environmental hazards: Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler):	336
EMS Number:	F- E , S - D
Stowage Category	B
Stowage Code	SW2 Clear of living quarters.
Transport in bulk according to Annex I and the IBC Code	I of Marpol Not applicable.
Transport/Additional information:	
ADG	
ADG Limited quantities (LQ)	IL
Excepted quantities (EQ)	Code: E2
encepieu quummes (LQ)	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per inner packaging: 50 ml Maximum net quantity per outer packaging: 500 ml
Transport category	2
Tunnel restriction code	D/E
	<i>υ</i> /μ
IMDG	17
Limited quantities (LQ)	
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 1230 METHANOL SOLUTION, 3 (6.1), II



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: RESERPINE - 100 pg/µL

(Contd. of page 8)

15 Regulatory information					
· Safety, health and environmental regulations/legislation specific for the substance or mixture					
67-56-1	methanol	 Flam. Liq. 2, H225 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT SE 1, H370 	74.99%		
7732-18-5	Water		25.0%		
50-55-5	reserpine	♦ Acute Tox. 3, H301	0.01%		

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category

H2 ACUTE TOXIC

P5c FLAMMABLE LIQUIDS

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- *Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t*
- · 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.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

Relevant phrases

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

- · Department issuing SDS: Environmental, Health and Safety
- · Contact:

Within the USA: 1-(800)-762-4000 Outside the USA: 1-(203)-712-8488

· Abbreviations and acronvms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

(Contd. on page 10)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: RESERPINE - 100 pg/µL

(Contd. of page 9)

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

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

* * Data compared to the previous version altered.



Printing date 20.09.2018 Revision: 20.09.2018

Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

- · Product identifier MZ301177
- · Trade name: DILUTION SOLVENT
- · Article number: MZ301177
- · Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

PerkinElmer, Inc. 710 Bridgeport Avenue Shelton, Connecticut 06484 USA CustomerCareUS@perkinelmer.com 203-925-4600

Supplier/Local:

PerkinElmer Australia Lvl 2, Bldg 5, Brandon Office Park

530-540 Springvale Road

Glen Waverley

Melbourne

VIC 3150

Australia

1-800-033-391

ausales@perkinelmer.com

Emergency telephone number:

CHEMTREC (within US) 800-424-9300

CHEMTREC (from outside US) +1 703-527-3887 (call collect)

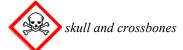
CHEMTREC (within AU) +(61)-290372994

2 Hazard(s) Identification

Classification of the substance or mixture



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



Acute Tox. 3 H331 Toxic if inhaled.

(Contd. on page 2)



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Trade name: DILUTION SOLVENT

(Contd. of page 1)



STOT SE 1 H370 Causes damage to organs.

- · Label elements
- GHS label elements The product is classified and labelled according to the Globally Harmonised System (GHS).
- · Hazard pictograms GHS02, GHS06, GHS08
- · **Signal word** Danger
- · Hazard-determining components of labelling:

methanol

· Hazard statements

H225 Highly flammable liquid and vapour.

H331 Toxic if inhaled.

H370 Causes damage to organs.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P241 Use explosion-proof electrical/ventilating/lighting equipment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Other hazards

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

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB:** Not applicable.

7732-18-5 Water

3 Composition and Information on Ingredients

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

	· Dangerous components:				
	67-56-1	methanol	© Flam. Liq. 2, H225 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT SE 1, H370	74.99%	
	· Addition	nal Components			
Г	540-69	-2 ammonium formate		0.01%	

· Additional information: For the wording of the listed hazard phrases refer to section 16.

AU

25.0%



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Trade name: DILUTION SOLVENT

(Contd. of page 2)

4 First Aid Measures

Description of 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: Do not induce vomiting; call for medical help immediately.
- · 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, 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:

Inform respective authorities in case of seepage into water course or sewage system.

Prevent seepage into sewage system, workpits and cellars.

Dilute with plenty of 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.

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Printing date 20.09.2018 Revision: 20.09.2018

Trade name: DILUTION SOLVENT

(Contd. of page 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 fire - and explosion protection:

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 container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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

8 Exposure controls and personal protection

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

· Ingredients with limit values that require monitoring at the workplace:

67-56-1 methanol

NES Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Sk

WES Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Sk

- · Additional information: The lists valid during the making 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.

· 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.

(Contd. on page 5)



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Trade name: DILUTION SOLVENT

(Contd. of page 4)

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. 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 trough 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			
· Information on basic physical and o	chemical properties		
· General Information			
· Appearance:			
Form:	Liquid		
Colour:	Transparent		
· Odour:	Alcohol-like		
· Odour threshold:	Not determined.		
· pH-value:	Not determined.		
· Change in condition			
Melting point/freezing point:	Undetermined.		
Initial boiling point and boiling range: 64 °C			
· Flash point:	< 23 °C		
· Flammability (solid, gas):	Not applicable.		
· Ignition temperature:	455 °C		
· Decomposition temperature:	Not determined.		
· Auto-ignition temperature:	Product is not selfigniting.		
Explosive properties:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.		
Explosion limits:			
Lower:	5.5 Vol %		

(Contd. on page 6)



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Trade name: DILUTION SOLVENT

	(Contd. of page
Upper:	44 Vol %
Vapour pressure at 20 °C:	128 hPa
Density at 20 °C:	0.8425 g/cm³
Relative density	Not determined.
· Vapour 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:	75.0 %
Water:	25.0 %
· 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/LC5	· LD/LC50 values relevant for classification:			
67-56-1	67-56-1 methanol			
Oral	LD50	5,628 mg/kg (rat)		
Dermal	LD50	15,800 mg/kg (rabbit)		

- · Primary irritant effect:
- · Skin corrosion/irritation No irritant effect.
- · Serious eye damage/irritation No irritating effect.
- · Respiratory or skin 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:

(Contd. on page 7)



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Trade name: DILUTION SOLVENT

Toxic

(Contd. of page 6)

12 Ecological Information

- · Toxicity
- · 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.
- · Mobility in soil 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.

- · 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 together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- **Recommendation:** Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information

- · UN-Number
- · ADG, IMDG, IATA

UN1230

- · UN proper shipping name
 - ADG

1230 METHANOL solution

· IMDG, IATA

METHANOL solution

- · Transport hazard class(es)
- \cdot ADG





· Class

3 (FT1) Flammable liquids.

(Contd. on page 8)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: DILUTION SOLVENT

	(Contd. of pa
Label	3+6.1
<i>IMDG</i>	
Class	3 Flammable liquids.
Label	3/6.1
IATA	
Class	2 Elammahla liguida
Class Label	3 Flammable liquids. 3 (6.1)
	5 (0.1)
Packing group	11
ADG, IMDG, IATA	II
Environmental hazards: Marine pollutant:	No
Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler):	336
EMS Number:	F-E,S-D
Stowage Category	B
Stowage Code	SW2 Clear of living quarters.
Transport in bulk according to Annex I.	I of Marpol
and the IBC Code	Not applicable.
Transport/Additional information:	
ADG	
Limited quantities (LQ)	IL
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
<i>IMDG</i>	
Limited quantities (LQ)	IL
Excepted quantities (EQ)	Code: E2
····· 1······· (-2)	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1230 METHANOL SOLUTION, 3 (6.1), II



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: DILUTION SOLVENT

(Contd. of page 8)

-	15 Regulatory information			
Safety, health and environmental regulations/legislation specific for the substance or mixture				
		methanol Flam. Liq. 2, H225 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT SE 1, H370	74.99%	
	7732-18-5	Water	25.0%	
	540-69-2	ammonium formate	0.01%	

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category

H2 ACUTE TOXIC

P5c FLAMMABLE LIOUIDS

- · Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · 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.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

Disclaimer

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· Relevant phrases

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H311 Toxic in contact with skin.

H331 Toxic if inhaled.

H370 Causes damage to organs.

- · **Department issuing SDS:** Environmental, Health and Safety
- · Contact:

Within the USA: 1-(800)-762-4000 Outside the USA: 1-(203)-712-8488

Abbreviations and acronyms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

(Contd. on page 10)



Printing date 20.09.2018 Revision: 20.09.2018

Trade name: DILUTION SOLVENT

(Contd. of page 9)

ICAO: International Civil Aviation Organisation

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Acute Tox. 3: Acute toxicity – Category 3

STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

* Data compared to the previous version altered.

AII -