

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)



Revision date: 07-Mar-2019

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Version: 1.0

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PanTum Detect Kit

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

1.1 Product identifier

Trade name/designation:

PanTum Detect Kit

Additional information:

The kit consists of the following components:

Surface Mix CD14 PerCP / CD16 APC, 1 mL

Intracellular Mix Apo10 FITC / TKTL1 PE, 1 mL

Fixation Reagent (Solution 1), 11 mL

Permeabilization and Lysis Reagent (Solution 2), 11 mL

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture:

Cell biology reagents.

For professional use only.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Zyagnum AG

Reißstr. 1

64319 Pfungstadt

GERMANY

Telephone: +49 (0) 6151 365 31 0

Telefax: +49 (0) 6151 365 31 10

E-mail: info@zyagnum.com

Website: <http://www.zyagnum.com/>

E-mail (competent person): info@zyagnum.com

1.4 Emergency phone number

24h: +49 (0) 551 19240 (german and english)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation (<i>Skin Sens. 1</i>)	H317: May cause an allergic skin reaction.	Calculation
Germ cell mutagenicity (<i>Muta. 2</i>)	H341: Suspected of causing genetic defects.	Calculation
Carcinogenicity (<i>Carc. 1B</i>)	H350: May cause cancer.	Calculation
STOT-single exposure (<i>STOT SE 2</i>)	H371: May cause damage to organs.	Calculation

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:



GHS08

Health hazard



GHS07

Exclamation mark

Signal word: Warning

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Hazard components for labelling:

Formaldehyde; Methanol

Hazard statements for health hazards

H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H371	May cause damage to organs.

Precautionary statements - Prevention

P280	Wear protective gloves/protective clothing/eye protection/face protection.
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Precautionary statements - Response

P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P308+P313	IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards

Adverse human health effects and symptoms:

May cause eye irritation. May cause skin irritation.

Adverse environmental effects:

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Description:

Phosphate buffered saline (PBS) and additives

Ingredients:

Product identifiers	Substance name Classification according to Regulation (EC) No. 1272/2008 [CLP]	Content
CAS No.: 67-56-1 EC No.: 200-659-6 REACH No.: 01-2119433307-44	Methanol Acute Tox. 3, Flam. Liq. 2, STOT SE 1 Danger H225-H301-H311-H331-H370	≤ 8 Wt %
CAS No.: 8047-15-2 EC No.: 232-462-6 REACH No.: 01-2120078922-48	Saponins Eye Irrit. 2, STOT SE 3 Warning H319-H335	≤ 6 Wt %
CAS No.: 50-00-0 EC No.: 200-001-8 REACH No.: 01-2119513723-45	Formaldehyde Acute Tox. 3, Carc. 1B, Muta. 2, Skin Corr. 1B, Skin Sens. 1 Danger H301-H311-H314-H317-H331-H341-H350	< 5 Wt %
CAS No.: 26628-22-8 EC No.: 247-852-1 REACH No.: 01-2119457019-37	Sodium azide Acute Tox. 2, Aquatic Acute 1, Aquatic Chronic 1 Danger H300-H400-H410-EUH032	< 0.09 Wt %

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:

Provide fresh air.

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In case of skin contact:

Wash with plenty of water.

After eye contact:

In case of contact with eyes, rinse thoroughly with water. In case of eye irritation consult an ophthalmologist.

After ingestion:

If swallowed, rinse mouth with water (only if the person is conscious). Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

May cause eye irritation. May cause skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water spray jet, alcohol resistant foam, extinguishing powder, carbon dioxide (CO₂).

Coordinate fire-fighting measures to the fire surroundings.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:

In case of fire may be liberated: Gases/vapours, toxic (possible in traces)

5.3 Advice for firefighters

Use suitable breathing apparatus.

5.4 Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Personal precautions:

Avoid contact with skin, eyes and clothes. Safe handling: see section 7.

Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection. Personal protection equipment: see section 8.

6.1.2 For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

For containment:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up:

Water (with cleaning agent)

6.4 Reference to other sections

Safe handling: see section 7.

Personal protection equipment: see section 8.

Disposal: see section 13.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Advices on safe handling:

Avoid contact with skin, eyes and clothes. Keep container tightly closed. Remove contaminated, saturated clothing. Wash contaminated clothing prior to re-use. Wear personal protection equipment (refer to section 8).

Environmental precautions:

Discharge into the environment must be avoided.

Advices on general occupational hygiene

When using do not eat, drink or smoke. Wash hands before breaks and after work. Take off contaminated clothing and wash it before reuse. Apply skin care products after work.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Store in a closed container. Keep in a cool place. Protect against direct sunlight.

Requirements for storage rooms and vessels:

Keep only in the original container.

Hints on storage assembly:

Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

Recommendation:

Specific analysis.

SECTION 8: Exposure controls / Personal protection

8.1 Control parameters

8.1.1 Occupational exposure limit values

Limit value type (country)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
IOELV (EU)	Methanol CAS No.: 67-56-1	① 200 ppm (260 mg/m ³) ⑤ (may be absorbed through the skin)
WEL (GB)	Methanol CAS No.: 67-56-1	① 200 ppm (266 mg/m ³) ② 250 ppm (333 mg/m ³)
WEL (GB)	Formaldehyde CAS No.: 50-00-0	① 2 ppm (2.5 mg/m ³) ② 2 ppm (2.5 mg/m ³)
WEL (GB)	Sodium azide CAS No.: 26628-22-8	① 0.1 mg/m ³ ② 0.3 mg/m ³
IOELV (EU)	Sodium azide CAS No.: 26628-22-8	① 0.1 mg/m ³ ② 0.3 mg/m ³ ⑤ (may be absorbed through the skin)

8.1.2 Biological limit values

No data available.

8.1.3 DNEL-/PNEC-values

No data available.

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8.2 Exposure controls

8.2.1 Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide adequate ventilation as well as local exhaustion at critical locations.

8.2.2 Personal protection equipment



Eye/face protection:

Eye glasses with side protection (EN 166)

Skin protection:

Tested protective gloves must be worn (EN ISO 374).

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: $\geq 0,11$ mm

Breakthrough time (maximum wearing time): ≥ 480 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Respiratory protection:

Usually no personal respirative protection necessary. Provide adequate ventilation. Wear breathing apparatus if exposed to vapours/dusts/aerosols. Combination filtering device (EN 14387), Filter type A-P2/P3

Other protection measures:

Wear suitable protective clothing (EN 340).

8.2.3 Environmental exposure controls

Do not empty into drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: liquid, clear

Colour: colourless - light yellow

Odour: not determined

Safety relevant basic data

Parameter		at	Method	Remark
pH	7 - 8	20 °C		
Melting point	≈ 0 °C			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	≥ 100 °C			
Decomposition temperature	<i>not determined</i>			
Flash point	<i>not applicable</i>			
Evaporation rate	<i>not applicable</i>			
Auto-ignition temperature	<i>not determined</i>			
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	23 hPa	20 °C		
Vapour density	<i>not applicable</i>			
Density	<i>not determined</i>			
Bulk density	<i>not determined</i>			
Water solubility	easily soluble			
Partition coefficient: n-octanol/water	<i>not determined</i>			
Dynamic viscosity	<i>not applicable</i>			

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Parameter		at	Method	Remark
Kinematic viscosity	<i>not applicable</i>			

9.2 Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Heat, Light.

10.5 Incompatible materials

Oxidising agent, Acids.

10.6 Hazardous decomposition products

No known hazardous decomposition products.

In case of fire may be liberated: Gases/vapours, toxic (possible in traces)

Further information

No data available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

CAS No.	Substance name	Toxicological information
50-00-0	Formaldehyde	LD₅₀ oral: 100 mg/kg (Rat) OECD 401 LD₅₀ dermal: 270 mg/kg (Rabbit) LC₅₀ Acute inhalation toxicity (dust/mist): 0.578 mg/L 4 h (Rat)
67-56-1	Methanol	LC₅₀ Acute inhalation toxicity (vapour): 83.9 mg/L 4 h (Rat)

Acute oral toxicity:

Based on available data, the classification criteria are not met.

Acute dermal toxicity:

Based on available data, the classification criteria are not met.

Acute inhalation toxicity:

Based on available data, the classification criteria are not met.

Skin corrosion/irritation:

Based on available data, the classification criteria are not met.

Serious eye damage/irritation:

Based on available data, the classification criteria are not met.

May cause eye irritation.

Respiratory or skin sensitisation:

May cause an allergic skin reaction.

Germ cell mutagenicity:

Suspected of causing genetic defects.

Carcinogenicity:

May cause cancer.

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Reproductive toxicity:

Based on available data, the classification criteria are not met.

STOT-single exposure:

May cause damage to organs.

STOT-repeated exposure:

Based on available data, the classification criteria are not met.

Aspiration hazard:

Based on available data, the classification criteria are not met.

Additional information:

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Biodegradation:

No data available.

12.3 Bioaccumulative potential

Accumulation / Evaluation:

No indication of bioaccumulation potential.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment options

Appropriate disposal / Product:

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal. Do not allow to enter into surface water or drains.

Appropriate disposal / Package:

Completely emptied packages can be recycled.

Other disposal recommendations:

The allocation of waste code numbers / waste names must be carried out in accordance with the European Waste Catalogue (EWC). Collect in closed and suitable containers for disposal.

13.2 Additional information

Waste for disposal is to be classified and labelled.

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI-/IATA-DGR)
14.1 UN-No.			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.

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Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI-/IATA-DGR)
14.2 UN proper shipping name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3 Transport hazard class(es)			
not relevant			
14.4 Packing group			
not relevant			
14.5 Environmental hazards			
not relevant			
14.6 Special precautions for user			
not relevant			

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not relevant

Additional information:

No data available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1 EU legislation

Other EU regulations:

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

15.1.2 National regulations

No data available.

15.2 Chemical Safety Assessment

No data available.

SECTION 16: Other information

16.1 Indication of changes

No data available.

16.2 Abbreviations and acronyms

See overview table at www.euphrac.eu

16.3 Key literature references and sources for data

European Chemicals Agency (ECHA): <http://www.echa.europa.eu>

ECHA, C&L Inventory: <http://echa.europa.eu/information-on-chemicals/cl-inventory-database>

ECHA, Registered substances: <http://echa.europa.eu/information-on-chemicals/registered-substances>

GESTIS (Gefahrstoffinformationssystem der DGUV): <http://www.dguv.de/ifa/GESTIS/index.jsp>

Hörath Gefährliche Stoffe und Gemische, 8. Auflage, Dr. Angela Schulz

Safety data sheets of the manufacturers

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16.4 Classification for mixtures and used evaluation method according to regulation (EC) No. 1272/2008 [CLP]

Classification according to Regulation (EC) No. 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation (<i>Skin Sens. 1</i>)	H317: May cause an allergic skin reaction.	Calculation
Germ cell mutagenicity (<i>Muta. 2</i>)	H341: Suspected of causing genetic defects.	Calculation
Carcinogenicity (<i>Carc. 1B</i>)	H350: May cause cancer.	Calculation
STOT-single exposure (<i>STOT SE 2</i>)	H371: May cause damage to organs.	Calculation

16.5 Relevant H- and EUH-phrases

Hazard statements	
H225	Highly flammable liquid and vapour.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H370	Causes damage to organs.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Supplemental hazard information (EU)	
EUH032	Contact with acids liberates very toxic gas.

16.6 Training advice

No data available.

16.7 Additional information

The information in this safety data sheet has been established to our best knowledge and was up-to-date at time of revision. The information is intended to give you advice about the safe handling of the product for storage, processing, transport and disposal. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.