

METHYL BLUE ACC. MALLORY Nuclear stain

Safety Data Sheet dated 18/4/2018, version 5



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

- 1.1. Product identifier
 - Mixture identification:
 - Trade name: METHYL BLUE ACC. MALLORY Nuclear stain
 - trade code: C0131-2-3-C013AA-C013BB-C013AC
 - CAS number: 0
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
 - Recommended use:
 - Reagent for Anatomy Pathology
 - Uses advised against:
 - not any
- 1.3. Details of the supplier of the safety data sheet
 - Company:
 - DIAPATH SpA - Via Savoldini , 71 - 24057 Martinengo (BG) -ITALY
 - DIAPATH SpA - phone +(39) 0363/986411 (8.30-17.30)
 - Competent person responsible for the safety data sheet:
 - msds@diapath.com
- 1.4. Emergency telephone number
 - Centro Antiveleni - Ospedale di Niguarda - Milano - Tel. +39 02/66101029
 - Centro Antiveleni - Osp. Maggiore - Unità operativa di Tossicologia - Bologna - Tel. +39 051/382984235
 - Centro Antiveleni - Università di Roma, Policlinico Umberto I - Tel.+39 06/490663
 - Centro Antiveleno - Università di Torino - Tel. +39 011/637637
 - Centro Antiveleni - Ospedali Riuniti Cardarelli (c/o Usl 40) - Napoli - Tel. +39 081/5453333
 - Centro Antiveleni - Unità degli Studi di Messina (c/o Facoltà di Farmacia) - Tel. 090/6764059
 - Centro Antiveleni - Centro di Rianimazione e Terapia Intensiva, Osp. Generale Regionale
 - Centro Antiveleni - Istituto per l'Infanzia - Trieste - Tel. +39 040/3785373

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
 - EC regulation criteria 1272/2008 (CLP):
 - Flam. Liq. 2, H225 Highly flammable liquid and vapour.
 - Adverse physicochemical, human health and environmental effects:
 - No other hazards
- 2.2. Label elements
 - Hazard pictograms:



Danger

Hazard statements:

H225 Highly flammable liquid and vapour.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

METHYL BLUE ACC. MALLORY Nuclear stain

P370+P378 In case of fire: Use ... to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 7% - < 10% ethanol; ethyl alcohol

Index number: 603-002-00-5, CAS: 64-17-5, EC: 200-578-6

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

Eye Irrit. 2 H319 Causes serious eye irritation.

>= 0.1% - < 0.25% methanol

Index number: 603-001-00-X, CAS: 67-56-1, EC: 200-659-6

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

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.

Acute Tox. 3 H301 Toxic if swallowed.

STOT SE 1 H370 Causes damage to organs.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:

None

METHYL BLUE ACC. MALLORY Nuclear stain**SECTION 5: Firefighting measures**

- 5.1. Extinguishing media
 - Suitable extinguishing media:
 - In case of fire: Use ... to extinguish.
 - Extinguishing media which must not be used for safety reasons:
 - None in particular.
 - 5.2. Special hazards arising from the substance or mixture
 - Do not inhale explosion and combustion gases.
 - Burning produces heavy smoke.
 - 5.3. Advice for firefighters
 - Use suitable breathing apparatus .
 - Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
 - Move undamaged containers from immediate hazard area if it can be done safely.
-

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
 - Wear personal protection equipment.
 - Remove all sources of ignition.
 - Remove persons to safety.
 - See protective measures under point 7 and 8.
 - 6.2. Environmental precautions
 - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
 - Retain contaminated washing water and dispose it.
 - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
 - Suitable material for taking up: absorbing material, organic, sand
 - 6.3. Methods and material for containment and cleaning up
 - Wash with plenty of water.
 - 6.4. Reference to other sections
 - See also section 8 and 13
-

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists.
 - Don't use empty container before they have been cleaned.
 - Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
 - Contaminated clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
 - See also section 8 for recommended protective equipment.
 - 7.2. Conditions for safe storage, including any incompatibilities
 - Always keep in a well ventilated place.
 - Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
 - Keep away from food, drink and feed.
 - Incompatible materials:
 - None in particular.
 - Instructions as regards storage premises:
 - Cool and adequately ventilated.
 - 7.3. Specific end use(s)
 - None in particular
-

METHYL BLUE ACC. MALLORY Nuclear stain**SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

ethanol; ethyl alcohol - CAS: 64-17-5

TLV/STEL - TWA: 1880 mg/m³, 1000 ppm

ACGIH - STEL: 1000 ppm - Notes: A3 - URT irr

methanol - CAS: 67-56-1

TLV-ACGIH - TWA(8h): 200 ppm - STEL(15min): 250 ppm

OEL - TWA(8h): 260 mg/m³, 200 ppmEU - TWA(8h): 260 mg/m³, 200 ppm - Notes: Skin

ACGIH - TWA(8h): 200 ppm - STEL: 250 ppm - Notes: Skin, BEI - Headache, eye dam, dizziness, nausea

DNEL Exposure Limit Values

ethanol; ethyl alcohol - CAS: 64-17-5

Worker Industry: 1900 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effectsWorker Industry: 950 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 343 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

ethanol; ethyl alcohol - CAS: 64-17-5

Target: Fresh Water - Value: 0.96 mg/l

Target: Marine water - Value: 0.79 mg/l

Target: Freshwater sediments - Value: 3.6 mg/kg

Target: Marine water sediments - Value: 2.9 mg/kg

Target: Soil (agricultural) - Value: 0.63 mg/kg

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	liquid blue	--	--
Odour:	characteristic	--	--
Odour threshold:	N.A.	--	--

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pH:	5.8	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	N.A.	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

METHYL BLUE ACC. MALLORY Nuclear stain**SECTION 10: Stability and reactivity**

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
Avoid contact with combustible materials. The product could catch fire.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the product:
N.A.
Toxicological information of the main substances found in the product:
ethanol; ethyl alcohol - CAS: 64-17-5
 - a) acute toxicity:
 - Test: LD50 - Route: Oral - Species: Rat > 6200 mg/kg
 - Test: LC50 - Route: Inhalation - Species: Rat > 50 mg/m³
 - Test: LD50 - Route: Skin - Species: Rabbit = 20 g/kgmethanol - CAS: 67-56-1
 - a) acute toxicity:
 - Test: LC50 - Route: Inhalation - Species: Rat = 83.2 mg/l - Duration: 4h
 - Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg
 - Test: LD50 - Route: Skin - Species: Rabbit = 15800 mg/kg
- If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:
- a) acute toxicity;
 - b) skin corrosion/irritation;
 - c) serious eye damage/irritation;
 - d) respiratory or skin sensitisation;
 - e) germ cell mutagenicity;
 - f) carcinogenicity;
 - g) reproductive toxicity;
 - h) STOT-single exposure;
 - i) STOT-repeated exposure;
 - j) aspiration hazard.

SECTION 12: Ecological information

- 12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
ethanol; ethyl alcohol - CAS: 64-17-5
 - a) Aquatic acute toxicity:
 - Endpoint: EC10 - Species: chlorella vulgaris = 11.5 mg/l - Duration h: 72
 - Endpoint: EC10 - Species: selenastrum capricornutum = 0.44 g/l - Duration h: 72
 - Endpoint: NOEC - Species: chlamydomonas eugametos = 7.9 g/l - Duration h: 48
 - Endpoint: NOEC - Species: daphnia magna > 10 mg/l
 - Endpoint: NOEC - Species: ceriodaphnia dubia = 9.6 mg/l
 - Endpoint: EC50 - Species: artemia salina = 23.9 g/l - Duration h: 24

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Endpoint: EC50 - Species: artemia salina nauplii = 857 mg/l - Duration h: 48

Endpoint: LC50 - Species: salmo gairdneri = 13 g/l - Duration h: 96

Endpoint: LC50 - Species: pimephales promelas > 13.5 g/l

12.2. Persistence and degradability

None

ethanol; ethyl alcohol - CAS: 64-17-5

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.

12.3. Bioaccumulative potential

ethanol; ethyl alcohol - CAS: 64-17-5

Bioaccumulation: little bioaccumulative - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

12.4. Mobility in soil

ethanol; ethyl alcohol - CAS: 64-17-5

Mobility in soil: evaporates quickly - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



14.1. UN number

ADR-UN Number: 1993

IATA-UN Number: 1993

IMDG-UN Number: 1993

14.2. UN proper shipping name

ADR-Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol, propan-2-ol; isopropyl alcohol; isopropanol)<CMPDATA,1,0,EWL856,EWL976>

IATA-Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol, propan-2-ol; isopropyl alcohol; isopropanol)<CMPDATA,1,0,EWL856,EWL976>

IMDG-Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol, propan-2-ol; isopropyl alcohol; isopropanol)<CMPDATA,1,0,EWL856,EWL976>

14.3. Transport hazard class(es)

ADR-Class: 3

ADR-Label: 3

ADR - Hazard identification number: 30

IATA-Class: 3

IATA-Label: 3

IMDG-Class: 3

IMDG-Class: 3 INFLAMMABLE LIQUID

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- 14.4. Packing group
 ADR-Packing Group: III
 IATA-Packing group: III
 IMDG-Packing group: III
- 14.5. Environmental hazards
 ADR-Environmental Pollutant: No
 IMDG-Marine pollutant: No
- 14.6. Special precautions for user
 ADR-Subsidiary risks: -
 ADR-S.P.: 274 601 640E
 ADR-Transport category (Tunnel restriction code): (D/E)
 IATA-Passenger Aircraft: 355
 IATA-Subsidiary risks: -
 IATA-Cargo Aircraft: 366
 IATA-S.P.: A3
 IATA-ERG: 3L
 IMDG-EmS: F-E , S-E
 IMDG-Subsidiary risks: -
 IMDG-Stowage and handling: Category A
 IMDG-Segregation: -
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
 N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 Dir. 98/24/EC (Risks related to chemical agents at work)
 Dir. 2000/39/EC (Occupational exposure limit values)
 Regulation (EC) n. 1907/2006 (REACH)
 Regulation (EC) n. 1272/2008 (CLP)
 Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 Regulation (EU) 2015/830
 Regulation (EU) n. 286/2011 (ATP 2 CLP)
 Regulation (EU) n. 618/2012 (ATP 3 CLP)
 Regulation (EU) n. 487/2013 (ATP 4 CLP)
 Regulation (EU) n. 944/2013 (ATP 5 CLP)
 Regulation (EU) n. 605/2014 (ATP 6 CLP)
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 Regulation (EU) n. 2016/918 (ATP 8 CLP)
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
 Restrictions related to the product:
 Restriction 3
 Restriction 40
 Restrictions related to the substances contained:
 No restriction.
- Where applicable, refer to the following regulatory provisions :
 Directive 2012/18/EU (Seveso III)
 Regulation (EC) nr 648/2004 (detergents).
 Dir. 2004/42/EC (VOC directive)
- Provisions related to directive EU 2012/18 (Seveso III):
 Seveso III category according to Annex 1, part 1
 Product belongs to category: P5c

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15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 1	3.8/1	Specific target organ toxicity - single exposure, Category 1

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 2: Hazards identification
SECTION 7: Handling and storage
SECTION 15: Regulatory information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 2, H225	On basis of test data

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of
Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

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	Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

FUCHSIN, PHENOLIZED ACC. ZIEHL Stain for acid-resistant bacteria

Safety Data Sheet dated 18/4/2018, version 5



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

- 1.1. Product identifier

Mixture identification:
Trade name: FUCHSIN, PHENOLIZED ACC. ZIEHL Stain for acid-resistant bacteria
trade code: C0421-2-3-C042AA-C042BB-C042AC
CAS number: 0
- 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use:
Reagent for Anatomy Pathology
Uses advised against:
not any
- 1.3. Details of the supplier of the safety data sheet

Company:
DIAPATH SpA - Via Savoldini , 71 - 24057 Martinengo (BG) -ITALY
DIAPATH SpA - phone +(39) 0363/986411 (8.30-17.30)
Competent person responsible for the safety data sheet:
msds@diapath.com
- 1.4. Emergency telephone number

Centro Antiveleni - Ospedale di Niguarda - Milano - Tel. +39 02/66101029
Centro Antiveleni - Osp. Maggiore - Unità operativa di Tossicologia - Bologna - Tel. +39 051/382984235
Centro Antiveleni - Università di Roma, Policlinico Umberto I - Tel.+39 06/490663
Centro Antiveleni - Università di Torino - Tel. +39 011/637637
Centro Antiveleni - Ospedali Riuniti Cardarelli (c/o Usl 40) - Napoli - Tel. +39 081/5453333
Centro Antiveleni - Unità degli Studi di Messina (c/o Facoltà di Farmacia) - Tel. 090/6764059
Centro Antiveleni - Centro di Rianimazione e Terapia Intensiva, Osp. Generale Regionale
Centro Antiveleni - Istituto per l'Infanzia - Trieste - Tel. +39 040/3785373

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):
Flam. Liq. 2, H225 Highly flammable liquid and vapour.
Skin Irrit. 2, H315 Causes skin irritation.
Eye Dam. 1, H318 Causes serious eye damage.
Muta. 2, H341 Suspected of causing genetic defects.
Aquatic Chronic 3, H412 Harmful to aquatic life with long lasting effects.
Adverse physicochemical, human health and environmental effects:
No other hazards
- 2.2. Label elements

Hazard pictograms:



Danger
Hazard statements:
H225 Highly flammable liquid and vapour.

FUCHSIN, PHENOLIZED ACC. ZIEHL Stain for acid-resistant bacteria

H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H341 Suspected of causing genetic defects.
 H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor/...
 P370+P378 In case of fire: Use ... to extinguish.
 P403+P235 Store in a well-ventilated place. Keep cool.

Special Provisions:

None

Contains

phenol; carbolic acid

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 7% - < 10% ethanol; ethyl alcohol

Index number: 603-002-00-5, CAS: 64-17-5, EC: 200-578-6

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

Eye Irrit. 2 H319 Causes serious eye irritation.

>= 3% - < 5% phenol; carbolic acid

Index number: 604-001-00-2, CAS: 108-95-2, EC: 203-632-7

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 3 H331 Toxic if inhaled.

Acute Tox. 3 H311 Toxic in contact with skin.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Muta. 2 H341 Suspected of causing genetic defects.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

>= 0.5% - < 1% FUCHSINA BASICA

CAS: 58969-01-0, EC: 211-189-6

Acute Tox. 4 H302 Harmful if swallowed.

Carc. 2 H351 Suspected of causing cancer.

>= 0.1% - < 0.25% methanol

Index number: 603-001-00-X, CAS: 67-56-1, EC: 200-659-6

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

FUCHSIN, PHENOLIZED ACC. ZIEHL Stain for acid-resistant bacteria

Acute Tox. 3 H311 Toxic in contact with skin.
Acute Tox. 3 H331 Toxic if inhaled.
Acute Tox. 3 H301 Toxic if swallowed.
STOT SE 1 H370 Causes damage to organs.

SECTION 4: First aid measures**4.1. Description of first aid measures**

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media:

In case of fire: Use ... to extinguish.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear personal protection equipment.

FUCHSIN, PHENOLIZED ACC. ZIEHL Stain for acid-resistant bacteria

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethanol; ethyl alcohol - CAS: 64-17-5

TLV/STEL - TWA: 1880 mg/m³, 1000 ppm

ACGIH - STEL: 1000 ppm - Notes: A3 - URT irr

phenol; carbolic acid - CAS: 108-95-2

TWA (EC) - TWA: 8 mg/m³, 2 ppm

STEL (EC) - TWA: 16 mg/m³, 4 ppm

EU - TWA(8h): 8 mg/m³, 2 ppm - STEL: 16 mg/m³, 4 ppm - Notes: Skin

ACGIH - TWA(8h): 5 ppm - Notes: Skin, A4, BEI - URT irr, lung dam, CNS impair

methanol - CAS: 67-56-1

TLV-ACGIH - TWA(8h): 200 ppm - STEL(15min): 250 ppm

OEL - TWA(8h): 260 mg/m³, 200 ppm

EU - TWA(8h): 260 mg/m³, 200 ppm - Notes: Skin

ACGIH - TWA(8h): 200 ppm - STEL: 250 ppm - Notes: Skin, BEI - Headache, eye dam, dizziness, nausea

DNEL Exposure Limit Values

ethanol; ethyl alcohol - CAS: 64-17-5

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Worker Industry: 1900 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Industry: 950 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 343 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

ethanol; ethyl alcohol - CAS: 64-17-5

Target: Fresh Water - Value: 0.96 mg/l

Target: Marine water - Value: 0.79 mg/l

Target: Freshwater sediments - Value: 3.6 mg/kg

Target: Marine water sediments - Value: 2.9 mg/kg

Target: Soil (agricultural) - Value: 0.63 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	liquid purple	--	--
Odour:	characteristic	--	--
Odour threshold:	N.A.	--	--
pH:	5.0	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--

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Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	N.A.	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

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None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

ethanol; ethyl alcohol - CAS: 64-17-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 6200 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 50 mg/m³

Test: LD50 - Route: Skin - Species: Rabbit = 20 g/kg

phenol; carbolic acid - CAS: 108-95-2

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 317 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 900 mg/m³ - Duration: 8h

Test: LD50 - Route: Skin - Species: Rabbit = 630 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: irritation - Species: Rabbit Positive

methanol - CAS: 67-56-1

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 83.2 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 15800 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

d) respiratory or skin sensitisation;

e) germ cell mutagenicity;

f) carcinogenicity;

g) reproductive toxicity;

h) STOT-single exposure;

i) STOT-repeated exposure;

j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

ethanol; ethyl alcohol - CAS: 64-17-5

a) Aquatic acute toxicity:

Endpoint: EC10 - Species: chlorella vulgaris = 11.5 mg/l - Duration h: 72

Endpoint: EC10 - Species: selenastrum capricornutum = 0.44 g/l - Duration h: 72

Endpoint: NOEC - Species: chlamydomonas eugametos = 7.9 g/l - Duration h: 48

Endpoint: NOEC - Species: daphnia magna > 10 mg/l

Endpoint: NOEC - Species: ceriodaphnia dubia = 9.6 mg/l

Endpoint: EC50 - Species: artemia salina = 23.9 g/l - Duration h: 24

Endpoint: EC50 - Species: artemia salina nauplii = 857 mg/l - Duration h: 48

Endpoint: LC50 - Species: salmo gairdneri = 13 g/l - Duration h: 96

Endpoint: LC50 - Species: pimephales promelas > 13.5 g/l

phenol; carbolic acid - CAS: 108-95-2

a) Aquatic acute toxicity:

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Endpoint: LC50 - Species: leuciscus idus = 14.0-25.0 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish = 36.10-68.8 mg/l - Duration h: 96

Endpoint: EC50 - Species: daphnia magna = 56 mg/l - Duration h: 48

Endpoint: EC50 - Species: chlorella vulgaris = 370 mg/l - Duration h: 96

FUCSINA BASICA - CAS: 58969-01-0

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: oryzias latipes = 4.3 mg/l - Duration h: 48

12.2. Persistence and degradability

None

ethanol; ethyl alcohol - CAS: 64-17-5

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.

phenol; carbolic acid - CAS: 108-95-2

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.

FUCSINA BASICA - CAS: 58969-01-0

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.

12.3. Bioaccumulative potential

ethanol; ethyl alcohol - CAS: 64-17-5

Bioaccumulation: little bioaccumulative - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

phenol; carbolic acid - CAS: 108-95-2

Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentration factor 17.5 - Duration: N.A. - Notes: N.A.

12.4. Mobility in soil

ethanol; ethyl alcohol - CAS: 64-17-5

Mobility in soil: evaporates quickly - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



14.1. UN number

ADR-UN Number: 3286

IATA-UN Number: 3286

IMDG-UN Number: 3286

14.2. UN proper shipping name

ADR-Shipping Name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (ethanol; ethyl alcohol, phenol; carbolic acid)<CMPDATA,1,0,EWL856,EWL1025>

IATA-Shipping Name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (ethanol;

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ethyl alcohol, phenol; carbolic acid)<CMPDATA,1,0,EWL856,EWL1025>

IMDG-Shipping Name: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (ethanol; ethyl alcohol, phenol; carbolic acid)<CMPDATA,1,0,EWL856,EWL1025>

14.3. Transport hazard class(es)

ADR-Class: 3
 ADR - Hazard identification number: 368
 IATA-Class: 3
 IATA-Label: 3 + 6.1 + 8
 IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: II
 IATA-Packing group: II
 IMDG-Packing group: II

14.5. Environmental hazards

ADR-Environmental Pollutant: No
 IMDG-Marine pollutant: No

14.6. Special precautions for user

ADR-Subsidiary risks: 6.1+8
 ADR-S.P.: 274
 ADR-Transport category (Tunnel restriction code): (D/E)
 IATA-Passenger Aircraft: 352
 IATA-Subsidiary risks: 6.1+8
 IATA-Cargo Aircraft: 363
 IATA-S.P.: -
 IATA-ERG: 3CP
 IMDG-EmS: F-E , S-C
 IMDG-Subsidiary risks: 6.1+8
 IMDG-Stowage and handling: Category B
 IMDG-Segregation: Clear of living quarters. Segregation as for class 3 but "away from" class 4.1.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
 N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)
 Dir. 2000/39/EC (Occupational exposure limit values)
 Regulation (EC) n. 1907/2006 (REACH)
 Regulation (EC) n. 1272/2008 (CLP)
 Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 Regulation (EU) 2015/830
 Regulation (EU) n. 286/2011 (ATP 2 CLP)
 Regulation (EU) n. 618/2012 (ATP 3 CLP)
 Regulation (EU) n. 487/2013 (ATP 4 CLP)
 Regulation (EU) n. 944/2013 (ATP 5 CLP)
 Regulation (EU) n. 605/2014 (ATP 6 CLP)
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 Regulation (EU) n. 2016/918 (ATP 8 CLP)
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:
 Restriction 3

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Restriction 40

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Hazard class and hazard category	Code	Description
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Muta. 2	3.5/2	Germ cell mutagenicity, Category 2
Carc. 2	3.6/2	Carcinogenicity, Category 2
STOT SE 1	3.8/1	Specific target organ toxicity - single exposure, Category 1
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

FUCHSIN, PHENOLIZED ACC. ZIEHL Stain for acid-resistant bacteria

SECTION 1: Identification of the substance/mixture and of the company/undertaking
 SECTION 2: Hazards identification
 SECTION 3: Composition/information on ingredients
 SECTION 7: Handling and storage
 SECTION 15: Regulatory information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 2, H225	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
Muta. 2, H341	Calculation method
Aquatic Chronic 3, H412	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
 Commission of the European Communities
 SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
 Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 CAS: Chemical Abstracts Service (division of the American Chemical Society).
 CLP: Classification, Labeling, Packaging.
 DNEL: Derived No Effect Level.
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 IATA: International Air Transport Association.
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 ICAO: International Civil Aviation Organization.
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
 IMDG: International Maritime Code for Dangerous Goods.
 INCI: International Nomenclature of Cosmetic Ingredients.
 KSt: Explosion coefficient.

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LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

ACID ALCOHOL ACC. ZIEHL Solution for histology

Safety Data Sheet dated 24/4/2018, version 6



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

- 1.1. Product identifier
Mixture identification:
Trade name: ACID ALCOHOL ACC. ZIEHL Solution for histology
trade code: G0052-3-G005AA-G005BB-G005AC
CAS number: 0
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
Reagent for Anatomy Pathology
Uses advised against:
not any
- 1.3. Details of the supplier of the safety data sheet
Company:
DIAPATH SpA - Via Savoldini , 71 - 24057 Martinengo (BG) -ITALY
DIAPATH SpA - phone +(39) 0363/986411 (8.30-17.30)
Competent person responsible for the safety data sheet:
msds@diapath.com
- 1.4. Emergency telephone number
Centro Antiveloni - Ospedale di Niguarda - Milano - Tel. +39 02/66101029
Centro Antiveloni - Osp. Maggiore - Unità operativa di Tossicologia - Bologna - Tel. +39 051/382984235
Centro Antiveloni - Università di Roma, Policlinico Umberto I - Tel.+39 06/490663
Centro Antiveloni - Università di Torino - Tel. +39 011/637637
Centro Antiveloni - Ospedali Riuniti Cardarelli (c/o Usl 40) - Napoli - Tel. +39 081/5453333
Centro Antiveloni - Unità degli Studi di Messina (c/o Facoltà di Farmacia) - Tel. 090/6764059
Centro Antiveloni - Centro di Rianimazione e Terapia Intensiva, Osp. Generale Regionale
Centro Antiveloni - Istituto per l'Infanzia - Trieste - Tel. +39 040/3785373

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
EC regulation criteria 1272/2008 (CLP):
Flam. Liq. 2, H225 Highly flammable liquid and vapour.
Skin Corr. 1A, H314 Causes severe skin burns and eye damage.
Eye Dam. 1, H318 Causes serious eye damage.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H225 Highly flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

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smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor/...

P370+P378 In case of fire: Use ... to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

Special Provisions:

None

Contains

hydrochloric acid ... %

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 40% - < 50% ethanol; ethyl alcohol

Index number: 603-002-00-5, CAS: 64-17-5, EC: 200-578-6

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

Eye Irrit. 2 H319 Causes serious eye irritation.

>= 15% - < 20% hydrochloric acid ... %

Index number: 017-002-01-X, EC: 231-595-7

Met. Corr. 1 H290 May be corrosive to metals.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

STOT SE 3 H335 May cause respiratory irritation.

>= 0.5% - < 1% methanol

Index number: 603-001-00-X, CAS: 67-56-1, EC: 200-659-6

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

Acute Tox. 3 H311 Toxic in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.

Acute Tox. 3 H301 Toxic if swallowed.

STOT SE 1 H370 Causes damage to organs.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire: Use ... to extinguish.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

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Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethanol; ethyl alcohol - CAS: 64-17-5

TLV/STEL - TWA: 1880 mg/m³, 1000 ppm

ACGIH - STEL: 1000 ppm - Notes: A3 - URT irr

methanol - CAS: 67-56-1

TLV-ACGIH - TWA(8h): 200 ppm - STEL(15min): 250 ppm

OEL - TWA(8h): 260 mg/m³, 200 ppm

EU - TWA(8h): 260 mg/m³, 200 ppm - Notes: Skin

ACGIH - TWA(8h): 200 ppm - STEL: 250 ppm - Notes: Skin, BEI - Headache, eye dam, dizziness, nausea

DNEL Exposure Limit Values

ethanol; ethyl alcohol - CAS: 64-17-5

Worker Industry: 1900 mg/m³ - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Industry: 950 mg/m³ - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Industry: 343 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

ethanol; ethyl alcohol - CAS: 64-17-5

Target: Fresh Water - Value: 0.96 mg/l

Target: Marine water - Value: 0.79 mg/l

Target: Freshwater sediments - Value: 3.6 mg/kg

Target: Marine water sediments - Value: 2.9 mg/kg

Target: Soil (agricultural) - Value: 0.63 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

ACID ALCOHOL ACC. ZIEHL Solution for histology

None
 Environmental exposure controls:
 None
 Appropriate engineering controls:
 None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	liquid colorless	--	--
Odour:	characteristic	--	--
Odour threshold:	N.A.	--	--
pH:	0.1	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	N.A.	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--

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Oxidizing properties:	N.A.	--	--
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9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

N.A.

Toxicological information of the main substances found in the product:

ethanol; ethyl alcohol - CAS: 64-17-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 6200 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat > 50 mg/m3

Test: LD50 - Route: Skin - Species: Rabbit = 20 g/kg

methanol - CAS: 67-56-1

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 83.2 mg/l - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 15800 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

d) respiratory or skin sensitisation;

e) germ cell mutagenicity;

f) carcinogenicity;

ACID ALCOHOL ACC. ZIEHL Solution for histology

- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

ethanol; ethyl alcohol - CAS: 64-17-5

a) Aquatic acute toxicity:

Endpoint: EC10 - Species: chlorella vulgaris = 11.5 mg/l - Duration h: 72

Endpoint: EC10 - Species: selenastrum capricornutum = 0.44 g/l - Duration h: 72

Endpoint: NOEC - Species: chlamydomonas eugametos = 7.9 g/l - Duration h: 48

Endpoint: NOEC - Species: daphnia magna > 10 mg/l

Endpoint: NOEC - Species: ceriodaphnia dubia = 9.6 mg/l

Endpoint: EC50 - Species: artemia salina = 23.9 g/l - Duration h: 24

Endpoint: EC50 - Species: artemia salina nauplii = 857 mg/l - Duration h: 48

Endpoint: LC50 - Species: salmo gairdneri = 13 g/l - Duration h: 96

Endpoint: LC50 - Species: pimephales promelas > 13.5 g/l

12.2. Persistence and degradability

None

ethanol; ethyl alcohol - CAS: 64-17-5

Biodegradability: Readily biodegradable - Test: N.A. - Duration: N.A. - %: N.A. - Notes: N.A.

12.3. Bioaccumulative potential

ethanol; ethyl alcohol - CAS: 64-17-5

Bioaccumulation: little bioaccumulative - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

12.4. Mobility in soil

ethanol; ethyl alcohol - CAS: 64-17-5

Mobility in soil: evaporates quickly - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

ADR-UN Number: 1993

IATA-UN Number: 1993

IMDG-UN Number: 1993

14.2. UN proper shipping name

ADR-Shipping Name: FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol,

ACID ALCOHOL ACC. ZIEHL Solution for histology

methanol)	
IATA-Shipping Name:	FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol, methanol)
IMDG-Shipping Name:	FLAMMABLE LIQUID, N.O.S. (ethanol; ethyl alcohol, methanol)
14.3. Transport hazard class(es)	
ADR-Class:	3
ADR-Label:	3
ADR - Hazard identification number:	33
IATA-Class:	3
IATA-Label:	3
IMDG-Class:	3
IMDG-Class:	3 inflammable liquid
14.4. Packing group	
ADR-Packing Group:	II
IATA-Packing group:	II
IMDG-Packing group:	II
14.5. Environmental hazards	
ADR-Environmental Pollutant:	No
IMDG-Marine pollutant:	No
14.6. Special precautions for user	
ADR-Subsidiary risks:	-
ADR-S.P.:	274 601 640C
ADR-Transport category (Tunnel restriction code):	(D/E)
IATA-Passenger Aircraft:	353
IATA-Subsidiary risks:	-
IATA-Cargo Aircraft:	364
IATA-S.P.:	A3
IATA-ERG:	3H
IMDG-EmS:	F-E , S-E
IMDG-Subsidiary risks:	-
IMDG-Stowage and handling:	Category B
IMDG-Segregation:	-
14.7. Transport in bulk according to Annex II of Marpol and the IBC Code	
N.A.	

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- Dir. 98/24/EC (Risks related to chemical agents at work)
 - Dir. 2000/39/EC (Occupational exposure limit values)
 - Regulation (EC) n. 1907/2006 (REACH)
 - Regulation (EC) n. 1272/2008 (CLP)
 - Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 - Regulation (EU) 2015/830
 - Regulation (EU) n. 286/2011 (ATP 2 CLP)
 - Regulation (EU) n. 618/2012 (ATP 3 CLP)
 - Regulation (EU) n. 487/2013 (ATP 4 CLP)
 - Regulation (EU) n. 944/2013 (ATP 5 CLP)
 - Regulation (EU) n. 605/2014 (ATP 6 CLP)
 - Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 - Regulation (EU) n. 2016/918 (ATP 8 CLP)
 - Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

ACID ALCOHOL ACC. ZIEHL Solution for histology

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P5c

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Acute Tox. 3	3.1/3/Dermal	Acute toxicity (dermal), Category 3
Acute Tox. 3	3.1/3/Inhal	Acute toxicity (inhalation), Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
STOT SE 1	3.8/1	Specific target organ toxicity - single exposure, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3

Paragraphs modified from the previous revision:

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

SECTION 2: Hazards identification

SECTION 7: Handling and storage

SECTION 15: Regulatory information

ACID ALCOHOL ACC. ZIEHL Solution for histology

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Flam. Liq. 2, H225	On basis of test data
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average

ACID ALCOHOL ACC. ZIEHL Solution for histology

WGK: German Water Hazard Class.

DEIONIZED WATER

Safety Data Sheet dated 26/4/2018, version 10

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

1.1. Product identifier

Mixture identification:

Trade name:

DEIONIZED WATER

trade code:

G0143-6-7-G014AA-G014AB-G014BB-G014AC-H0095-H0095WR-N0095-Z0095

CAS number:

7732-18-5

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

Recommended use:

Reagent for Anatomy Pathology

production of chemicals

Uses advised against:

not any

1.3. Details of the supplier of the safety data sheet

Company:

DIAPATH SpA - Via Savoldini , 71 - 24057 Martinengo (BG) -ITALY

DIAPATH SpA - phone +(39) 0363/986411 (8.30-17.30)

Competent person responsible for the safety data sheet:

msds@diapath.com

1.4. Emergency telephone number

Centro Antiveleni - Ospedale di Niguarda - Milano - Tel. +39 02/66101029

Centro Antiveleni - Osp. Maggiore - Unità operativa di Tossicologia - Bologna - Tel. +39 051/382984235

Centro Antiveleni - Università di Roma, Policlinico Umberto I - Tel.+39 06/490663

Centro Antiveleno - Università di Torino - Tel. +39 011/637637

Centro Antiveleni - Ospedali Riuniti Cardarelli (c/o Usl 40) - Napoli - Tel. +39 081/5453333

Centro Antiveleni - Unità degli Studi di Messina (c/o Facoltà di Farmacia) - Tel. 090/6764059

Centro Antiveleni - Centro di Rianimazione e Terapia Intensiva, Osp. Generale Regionale

Centro Antiveleni - Istituto per l'Infanzia - Trieste - Tel. +39 040/3785373

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP):

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

DEIONIZED WATER

- 2.3. Other hazards
vPvB Substances: None - PBT Substances: None
Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

- 3.1. Substances
Identification of the substance
trade code: G0143-6-7-G014AA-G014AB-G014BB-G014AC-H0095-H0095WR-N0095-Z0095
Product type and use: Reagent for Anatomic Pathology
CAS number: 7732-18-5
None.
- 3.2. Mixtures
N.A.

SECTION 4: First aid measures

- 4.1. Description of first aid measures
In case of skin contact:
In case of eyes contact:
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
In case of Ingestion:
Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.
In case of Inhalation:
Remove casualty to fresh air and keep warm and at rest.
- 4.2. Most important symptoms and effects, both acute and delayed
None
- 4.3. Indication of any immediate medical attention and special treatment needed
Treatment:
None

SECTION 5: Firefighting measures

- 5.1. Extinguishing media
Suitable extinguishing media:
Carbon dioxide (CO2).
Extinguishing media which must not be used for safety reasons:
None in particular.
- 5.2. Special hazards arising from the substance or mixture
Do not inhale explosion and combustion gases.
Burning produces heavy smoke.
- 5.3. Advice for firefighters
Use suitable breathing apparatus .
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
Wear personal protection equipment.
Remove persons to safety.

DEIONIZED WATER

- See protective measures under point 7 and 8.
- 6.2. Environmental precautions
Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
Retain contaminated washing water and dispose it.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
Wash with plenty of water.
- 6.4. Reference to other sections
See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
Avoid contact with skin and eyes, inhalation of vapours and mists.
Do not eat or drink while working.
See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.
- 7.3. Specific end use(s)
None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
No occupational exposure limit available
DNEL Exposure Limit Values
N.A.
PNEC Exposure Limit Values
N.A.
- 8.2. Exposure controls
Eye protection:
Not needed for normal use. Anyway, operate according good working practices.
Protection for skin:
No special precaution must be adopted for normal use.
Protection for hands:
Not needed for normal use.
Respiratory protection:
Not needed for normal use.
Thermal Hazards:
None
Environmental exposure controls:
None
Appropriate engineering controls:
None

SECTION 9: Physical and chemical properties

- 9.1. Information on basic physical and chemical properties

DEIONIZED WATER

Properties	Value	Method:	Notes:
Appearance and colour:	liquid colorless	--	--
Odour:	odorless	--	--
Odour threshold:	N.A.	--	--
pH:	6	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	N.A.	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

DEIONIZED WATER

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the substance:

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

- 12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
N.A.
- 12.2. Persistence and degradability
None
N.A.
- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil

DEIONIZED WATER

N.A.

12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects
None

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
N.A.
- 14.3. Transport hazard class(es)
N.A.
- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
Restrictions related to the product:
No restriction.
Restrictions related to the substances contained:
No restriction.
Where applicable, refer to the following regulatory provisions :

DEIONIZED WATER

Directive 2012/18/EU (Seveso III)
Regulation (EC) nr 648/2004 (detergents).
Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
None

15.2. Chemical safety assessment
No Chemical Safety Assessment has been carried out for the substance.

SECTION 16: Other information

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 3: Composition/information on ingredients
SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

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Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

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This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.

DEIONIZED WATER

RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

PERIODIC ACID 1% Solution for histology and cytology

Safety Data Sheet dated 26/4/2018, version 6



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

- 1.1. Product identifier
 - Mixture identification:
 - Trade name: PERIODIC ACID 1% Solution for histology and cytology
 - trade code: G0162-3-G016AA-G016BB-G016AC
 - CAS number: 0
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
 - Recommended use: Reagent for Anatomy Pathology
 - Uses advised against: not any
- 1.3. Details of the supplier of the safety data sheet
 - Company: DIAPATH SpA - Via Savoldini, 71 - 24057 Martinengo (BG) - ITALY
 - DIAPATH SpA - phone +(39) 0363/986411 (8.30-17.30)
 - Competent person responsible for the safety data sheet: msds@diapath.com
- 1.4. Emergency telephone number
 - Centro Antiveloni - Ospedale di Niguarda - Milano - Tel. +39 02/66101029
 - Centro Antiveloni - Osp. Maggiore - Unità operativa di Tossicologia - Bologna - Tel. +39 051/382984235
 - Centro Antiveloni - Università di Roma, Policlinico Umberto I - Tel. +39 06/490663
 - Centro Antiveloni - Università di Torino - Tel. +39 011/637637
 - Centro Antiveloni - Ospedali Riuniti Cardarelli (c/o Usl 40) - Napoli - Tel. +39 081/5453333
 - Centro Antiveloni - Unità degli Studi di Messina (c/o Facoltà di Farmacia) - Tel. 090/6764059
 - Centro Antiveloni - Centro di Rianimazione e Terapia Intensiva, Osp. Generale Regionale
 - Centro Antiveloni - Istituto per l'Infanzia - Trieste - Tel. +39 040/3785373

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
 - EC regulation criteria 1272/2008 (CLP):
 - Skin Corr. 1A, H314 Causes severe skin burns and eye damage.
 - Eye Dam. 1, H318 Causes serious eye damage.
- Adverse physicochemical, human health and environmental effects:
 - No other hazards

- 2.2. Label elements
 - Hazard pictograms:



Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

PERIODIC ACID 1% Solution for histology and cytology

skin with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor/...

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Contains

ACIDO PERIODICO

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

>= 1% - < 3% ACIDO PERIODICO

CAS: 10450-60-9, EC: 233-937-0

Ox. Sol. 2 H272 May intensify fire; oxidiser.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do NOT induce vomiting.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

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SECTION 5: Firefighting measures

- 5.1. Extinguishing media
 - Suitable extinguishing media:
 - Carbon dioxide (CO₂).
 - Extinguishing media which must not be used for safety reasons:
 - None in particular.
- 5.2. Special hazards arising from the substance or mixture
 - Do not inhale explosion and combustion gases.
 - Burning produces heavy smoke.
- 5.3. Advice for firefighters
 - Use suitable breathing apparatus .
 - Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
 - Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
 - Wear personal protection equipment.
 - Remove persons to safety.
 - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
 - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
 - Retain contaminated washing water and dispose it.
 - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
 - Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
 - Wash with plenty of water.
- 6.4. Reference to other sections
 - See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists.
 - Don't use empty container before they have been cleaned.
 - Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
 - Contaminated clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
 - See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
 - Keep away from food, drink and feed.
 - Incompatible materials:
 - None in particular.
 - Instructions as regards storage premises:
 - Adequately ventilated premises.
- 7.3. Specific end use(s)
 - None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters

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No occupational exposure limit available

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

Appropriate engineering controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	liquid colorless	--	--
Odour:	odorless	--	--
Odour threshold:	N.A.	--	--
pH:	1.8	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	N.A.	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--

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Relative density:	N.A.	--	--
Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	N.A.	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

- 10.1. Reactivity
Stable under normal conditions
- 10.2. Chemical stability
Stable under normal conditions
- 10.3. Possibility of hazardous reactions
None
- 10.4. Conditions to avoid
Stable under normal conditions.
- 10.5. Incompatible materials
None in particular.
- 10.6. Hazardous decomposition products
None.

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the product:
N.A.
Toxicological information of the main substances found in the product:

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If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

SECTION 12: Ecological information

- 12.1. Toxicity
Adopt good working practices, so that the product is not released into the environment.
N.A.
- 12.2. Persistence and degradability
None
N.A.
- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

- 14.1. UN number
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
N.A.
- 14.3. Transport hazard class(es)
N.A.
- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

PERIODIC ACID 1% Solution for histology and cytology**SECTION 15: Regulatory information**

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
 Dir. 98/24/EC (Risks related to chemical agents at work)
 Dir. 2000/39/EC (Occupational exposure limit values)
 Regulation (EC) n. 1907/2006 (REACH)
 Regulation (EC) n. 1272/2008 (CLP)
 Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
 Regulation (EU) 2015/830
 Regulation (EU) n. 286/2011 (ATP 2 CLP)
 Regulation (EU) n. 618/2012 (ATP 3 CLP)
 Regulation (EU) n. 487/2013 (ATP 4 CLP)
 Regulation (EU) n. 944/2013 (ATP 5 CLP)
 Regulation (EU) n. 605/2014 (ATP 6 CLP)
 Regulation (EU) n. 2015/1221 (ATP 7 CLP)
 Regulation (EU) n. 2016/918 (ATP 8 CLP)
 Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Hazard class and hazard category	Code	Description
Ox. Sol. 2	2.14/2	Oxidising solid, Category 2
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Eye Dam. 1	3.3/1	Serious eye damage, Category 1

Paragraphs modified from the previous revision:

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

SECTION 2: Hazards identification

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SECTION 15: Regulatory information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

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