BioVendor
Research
and Diagnostic Products

Safety Information

1,25(OH)$_2$ Vitamin D Total ELISA

Revision Date: 7.4.2016

The RIS021R 1,25(OH)$_2$ Vitamin D Total ELISA is an immunoenzymetric assay for the quantitative measurement of 1,25(OH)$_2$ Vitamin D in serum.
For professional use only. Users should have a thorough understanding of the Product Data Sheet prior to their use of this kit.

Kit Components:

A) Microtiterwells
B) Concentrate HRP
C) Conjugate Concentrated Vitamin D
D) Conjugate buffer
E) Incubation Buffer
F) Calibrator 0
G) Calibrators 0-5
H) Controls 1 or 2
I) Wash Solution
J) Chromogen TMB
K) Stop Solution
L) Elution Solution
M) Adhesive Strips
N) Gel

Components D, E and H containing 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1) (ProClin 300) are hazardous mixtures according to CLP Regulation (EC) as amended.
Safety Data Sheet for ProClin 300 < 0.06% according to actual Regulations (EC/EU) is attached.
Stop Solution containing hydrochloric acid is a hazardous mixture according to CLP Regulation (EC) as amended.
Safety Data Sheet for Hydrochloric Acid < 5% according to actual Regulations (EC/EU) is attached.
Elution Solution containing methanol is a hazardous component according to CLP Regulation (EC) as amended.
Safety Data Sheet for Methanol according to actual Regulations (EC/EU) is attached.
The other components do not contain any hazardous mixture according to CLP Regulation (EC) as amended.

BioVendor
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MATERIAL SAFETY DATA SHEET

in accordance with Regulation (EC) No. 1907/2006 of the European Parliament and the Council (REACH) and Commission Regulation (EU) No. 830/2015

ProClin 300 < 0.06%

Date of issue: 4.8.2015
Supersedes date:

SECTION 1 IDENTIFICATION OF THE PREPARATION AND OF COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: ProClin 300 < 0.06%
Additional identification: Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H - isothiazol-3-one (3:1), solution with conc. < 0.06%

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

Preservative compound

1.3 Details of the supplier of the safety data sheet

BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno
Czech Republic
Identification number: 63471507

Tel: +420 549 124 185
E-mail: info@biovendor.com

1.4 Emergency telephone number

Toxicology information centre, Na Bojišti 1, 128 21 Prague, Czech Republic, Tel: +420 224 919 293 or +420 224 915 402 (non-stop service).

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation 1272/2008/EC:
Mixtures containing ProClin 300 (< 0.06%) are considered hazardous according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008
Pictogram:

Signal word:	Warning
Hazard statements:	H317
Precautionary statements:	P261, P264, P272, P280 and P305+P351+P338: IF IN EYES

For full text of H- and P-phrases see section 16.

2.3 Supplemental hazards statements

None

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Description: ProClin 300 is a mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)

Ingredient	Conc. %	CAS-Nr.	Index-Nr.
ProClin 300	< 0.06	55965-84-9	613-167-00-5

Classification according to regulation 1272/2008/EC:
Skin Sens. 1, H317
Specific concentration limits: Skin Corr. 1B, H314: C≥0,6 %; Skin Irrit. 2, H315: 0,06 %≤C<0,6 %; Eye Irrit. 2, H319: 0,06 %≤C<0,6 %; Skin Sens. 1, H317: C≥0,0015 %., EUH208: C≥0,00015 %

For full text of H-phrases see section 16.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

If in eyes: Rinse thoroughly with water for at least 15 minutes and immediately consult a physician.
If on skin (or hair): Immediately take off contaminated clothing or shoes. Wash with plenty of soap and water. Consult a physician.
If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediately consult a physician.

SECTION 5 FIRE-FIGHTING MEASURES

5.1 Suitable extinguishing agents

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special precautions for fire-fighters

Self contained breathing apparatus and full protective clothing must we worn in case of fire.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Person-related safety precautions

Use appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Measures for environmental protection

Keep away from drains.

6.3 Measures for containment and cleaning

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling:

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use normal measures for preventive fire protection.

7.2 Conditions for safe storage:

Store in a cool and dry place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Individual protection measures

Wash hands thoroughly after handling chemical products and before eating, smoking or using the toilet. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Eye/face protection: Wear approved safety goggles.

Skin/hand protection: Handle with protective gloves, plastic or rubber. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection: Wear suitable protective clothing as protection against splashing or contamination.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.

Respiratory protection: In case of inadequate ventilation, use a suitable respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Clear Liquid
Odor:	Not available
Odor threshold:	Not available
pH:	Not available
Melting point/freezing point:	-40ºC
Boiling point/Boiling range:	189ºC

Flash point:	118ºC – closed cup
Evaporation rate:	Not available
Flammability (solid, gas):	Not available
Upper/lower flammability or explosive limits:	Not available
Vapor density :	Not available
Vapor pressure:	Not available
Relative density:	1.03 g/cm^3
Solubility in/Miscibility with Water:	Soluble
Partition coefficient: noctanol/water:	Not available
Auto igniting:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

SECTION 10 STABILITY AND REACTIVITY

10.1 Chemical Stability

Stable under recommended storage conditions.

10.2 Conditions to avoid

Strong oxidizing agents, reducing agents, Amines, Mercaptans

10.3 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions – Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

LD50 Oral – rat – 862 mg/kg

LD50 Dermal – rabbit- 2800 mg/kg

Skin corrosion/irritation:	Can cause severe burns. Skin – rabbit – Corrosive
Serious eye damage/irritation:	Rabbit – Corrosive to eyes
Respiratory or skin sensitization:	May cause allergic skin reaction.
Germ cell mutagenicity:	No data available
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity (STOT) -single exposure:	No data available
Specific target organ toxicity (STOT) -repeated exposure:	No data available
Aspiration hazard:	Can cause severe burns.
Information on likely routes of exposure:	Routes of entry anticipated; oral, dermal, inhalation.

Symptoms related to the physical, chemical and toxicological characteristics:

Inhalation: Harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed. Causes burns.

Skin contact: Harmful if absorbed through skin. Causes burns.

Eye contact: Causes eye burns.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Short term exposure: Potential immediate effects: Not available. Potential delayed effects: Not available.

Long term exposure: Potential immediate effects: Not available. Potential delayed effects: Allergic contact dermatitis.

Effects of chronic exposure:

ProClin 300 at levels greater than or equal to 0.1% is not identified as probable, possible or a confirmed human carcinogen by IARC.

Numerical measures of toxicity:

Not available

Other Information:

Not available

SECTION 12 ECOLOGICAL INFORMATION

12.1 Ecotoxicity

No data available.

12.2 Biodegradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Other adverse effects

Toxic to aquatic organisms.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Disposal methods

Dispose of waste in accordance to applicable national, regional, or local regulations.

13.2 Contaminated packaging

Dispose in the same manner as unused product.

13.3 Special precautions

Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt with separately by qualified disposal personnel. Avoid dispersal of spilled material to soil, waterways, drains and sewers.

SECTION 14 TRANSPORT INFORMATION

UN Number:	None
DOT regulations: Hazard class:	None
Land transport ADR/RID (cross-border):	Not regulated.
Maritime transport IMDG:	Not regulated.
Marine pollutant:	No
Air transport ICAO-TI and IATA-DGR:	Not regulated.
Transport/Additional information:	Not dangerous according to the above specifications.

SECTION 15 REGULATORY INFORMATION

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

Act No. 350/2011 Coll., to regulate chemical substances and chemical mixtures and to amend some statutes, as amended. Implemented regulations to Act No. 350/2011 Coll., as amended
The Waste Act as amended. Government Decree No. 361/2007 Coll., to regulate the conditions of occupational health and safety, as amended. Regulation of the European Parliament and the Council (EC) No. 1907/2006 (REACH). Regulation of the European Parliament and the Council (EC) No. 1272/2008 (CLP). Commission Regulation (EU) No. 830/2015.

SECTION 16 OTHER INFORMATION

Date of issue: 4.8.2015

Supersedes date:

Full text of H- and P-phrases:
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.

P261: Avoid breathing mist.
P264: Wash hands thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves and safety glasses.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

MATERIAL SAFETY DATA SHEET

in accordance with Regulation (EC) No. 1907/2006 of the European Parliament and the Council (REACH) and Commission Regulation (EU) No. 830/2015

ProClin 300 < 0.06%

Date of issue: 4.8.2015
Supersedes date:

Note:
The safety data sheet contains data necessary for ensuring occupational health and safety and protection of the environment. The given data correspond to the current state of knowledge and experience and comply with valid legal regulations. The data cannot be considered a guarantee that the specific use of the product will be appropriate.

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MATERIAL SAFETY DATA SHEET

in accordance with Regulation (EC) No. 1907/2006 of the European Parliament and the Council (REACH) and Commission Regulation (EU) No. 830/2015

Hydrochloric Acid < 5%

Date of issue: 30.7.2015
Supersedes date:

SECTION 1 IDENTIFICATION OF THE PREPARATION AND OF COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: Hydrochloric Acid < 5%
Additional identification: solution with hydrochloric acid concentration < 5% w/w

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

Stop solution for the ELISA kit.

1.3 Details of the supplier of the safety data sheet

BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno
Czech Republic
Identification number: 63471507

Tel: +420 549 124 185
E-mail: info@biovendor.com

1.4 Emergency telephone number

Toxicology information centre, Na Bojišti 1, 128 21 Prague, Czech Republic, Tel: +420 224 919 293 or +420 224 915 402 (non-stop service).

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to metals (Category 1), H290

For full text of H-phrases see section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word	Warning
Hazard statement(s)	H290
Precautionary statement(s)	none
Supplemental hazard statement	none

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Hydrochloric Acid < 5%

Date of issue: 30.7.2015
Supersedes date:

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Chemical characterization: Product does not burn
Formula: HCl
Molecular weight: 36.46 g/mol

Ingredient	Conc. %	EINECS	CAS-Nr.	Index-Nr.
Hydrochloric acid	≥1 - < 5	231-595-7	7647-01-0	017-002-01-X

Classification according to regulation 1272/2008/EC:
Met. Corr. 1; Skin Corr. 1B; STOT SE 3; H290, H314, H335

For full text of H-phrases see section 16.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Hydrogen chloride gas

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

The product itself does not burn.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.
Evacuate personnel to safe areas.
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	liquid form
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available

Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other safety information

No data available

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Bases, Amines, Alkali metals, Metals, hexalithium disilicide, permanganates, e.g. potassium permanganate, Fluorine

10.6 Hazardous decomposition products

Other decomposition products - No data available

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrochloric acid)

Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
Additional Information
RTECS: Not available
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No data available

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging
Dispose of as unused product

SECTION 14 TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 1789 / IMDG: 1789 / IATA: 1789

14.2 UN proper shipping name

ADR/RID: HYDROCHLORIC ACID / IMDG: HYDROCHLORIC ACID / IATA: Hydrochloric acid

14.3 Transport hazard class(es)

ADR/RID: 8 / IMDG: 8 / IATA: 8

14.4 Packaging group

ADR/RID: III / IMDG: III / IATA: III

14.5 Environmental hazards

ADR/RID: no / IMDG Marine pollutant: no / IATA: no

14.6 Special precautions for user

No data available

SECTION 15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

SECTION 16 OTHER INFORMATION

Date of issue: 30.7.2015
Supersedes date:

Full text of H-Statements referred to under sections 2 and 3.
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Met. Corr. Corrosive to metals
Skin Corr. Skin corrosion
STOT SE Specific target organ toxicity - single exposure

Note:
The safety data sheet contains data necessary for ensuring occupational health and safety and protection of the environment. The given data correspond to the current state of knowledge and experience and comply with valid legal regulations. The data cannot be considered a guarantee that the specific use of the product will be appropriate.

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MATERIAL SAFETY DATA SHEET
in accordance with Regulation (EC) No. 1907/2006 of the European Parliament and the Council (REACH) and Commission Regulation (EU) No. 830/2015

Methanol

Date of issue: 7.8.2015
Supersedes date:

SECTION 1 IDENTIFICATION OF THE PREPARATION AND OF COMPANY/UNDERTAKING

1.1 Product identifier

Trade name: Methanol
Additional identification: methanol < 100%

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

Elution Solution

1.3 Details of the supplier of the safety data sheet

BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno
Czech Republic
Identification number: 63471507

Tel: +420 549 124 185
E-mail: info@biovendor.com

1.4 Emergency telephone number

Toxicology information centre, Na Bojišti 1, 128 21 Prague, Czech Republic, Tel: +420 224 919 293 or +420 224 915 402 (non-stop service).

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 2), H225
Acute toxicity, Oral (Category 3), H301
Acute toxicity, Inhalation (Category 3), H331
Acute toxicity, Dermal (Category 3), H311
Specific target organ toxicity - single exposure (Category 1), H370
For full text of H-phrases see section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008
Pictograms

Signal word	Danger
Hazard statement(s)	H225, H301 + H311 + H331, H370
Precautionary statement(s)	P210, P260, P280, P301 + P310 IF SWALLOWED, P311
Supplemental hazard statements	None

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

Synonym: Methyl alcohol
Formula: CH_4O
Molecular weight: 32.04 g/mol

Ingredient	Conc. %	EINECS	CAS-Nr.	Index-Nr.
Methanol	< 100	200-659-6	67-56-1	603-001-00-X

Classification according to regulation 1272/2008/EC:
Flam. Liq. 2; Acute Tox. 3; STOT SE 1; H225, H301 + H311 + H331, H370

For full text of H-phrases see section 16.

SECTION 4 FIRST AID MEASURES

4.1 Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
For personal protection see section 8.

6.2 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 6.4 Reference to other sections

For disposal see section 13. SECTION

SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking.Take measures to prevent the build-up of electrostatic charge.
For precautions see section 2.2.

7.2 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage class (TRGS 510): Flammable liquids

7.3 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Derived No Effect Level (DNEL)

Application Area	Exposure routes	Health effect	Value
Workers	Skin contact	Long-term systemic effects	40 mg/kg BW/d
Consumers	Skin contact	Long-term systemic effects	8 mg/kg BW/d
Consumers	Ingestion	Long-term systemic effects	8 mg/kg BW/d
Workers	Skin contact	Acute systemic effects	40 mg/kg BW/d
Consumers	Skin contact	Acute systemic effects	8 mg/kg BW/d
Consumers	Ingestion	Acute systemic effects	8 mg/kg BW/d
Workers	Inhalation	Acute systemic effects	260 mg/m^3
Workers	Inhalation	Acute local effects	260 mg/m^3
Workers	Inhalation	Long-term systemic effects	260 mg/m^3
Workers	Inhalation	Long-term local effects	260 mg/m^3
Consumers	Inhalation	Acute systemic effects	50 mg/m^3
Consumers	Inhalation	Acute local effects	50 mg/m^3
Consumers	Inhalation	Long-term systemic effects	50 mg/m^3
Consumers	Inhalation	Long-term local effects	50 mg/m^3

Predicted No Effect Concentration (PNEC)

Compartment	Value
Soil	23.5 mg/kg
Marine water	15.4 mg/l
Fresh water	154 mg/l
Fresh water sediment	570.4 mg/kg
Onsite sewage treatment plant	100 mg/kg

8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, flame retardant antistatic protective clothing, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	colourless liquid
Odour	pungent
Odour threshold	no data available
pH	no data available
Melting point/freezing point	melting point/range: -98°C
Initial boiling point and boiling range	64.7°C
Flash point	9.7°C - closed cup
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Upper/lower flammability or explosive limits	upper explosion limit: 36 %(V) lower explosion limit: 6 %(V)
Vapour pressure	130.3 hPa at 20.0°C 546.6 hPa at 50.0°C 169.3 hPa at 25.0°C
Vapour density	1.11
Relative density	0.791 g/mL at 25°C
Water solubility	completely miscible
Partition coefficient: n-octanol/water	log Pow: -0.77
Auto-ignition temperature	455.0°C at 1013 hPa
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	not explosive
Oxidizing properties	The substance or mixture is not classified as oxidizing.

9.2 Other safety information

Minimum ignition energy	0.14 mJ
Conductivity	< 1 µS/cm
Relative vapour density	1.11

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Acid chlorides, Acid anhydrides, Oxidizing agents, Alkali metals, Reducing agents, Acids

10.6 Hazardous decomposition products

Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LDLO Oral - Human - 143 mg/kg
Remarks: Lungs, Thorax, or Respiration: Dyspnea. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
LD50 Oral - Rat - 1187 - 2769 mg/kg
LC50 Inhalation - Rat - 4 h – 128.2 mg/l
LC50 Inhalation - Rat - 6 h – 87.6 mg/l
LD50 Dermal - Rabbit – 17100 mg/kg

Skin corrosion/irritation

Skin - Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Eyes - Rabbit
Result: No eye irritation

Respiratory or skin sensitisation

Maximisation Test (GPMT) - Guinea pig
Does not cause skin sensitisation.
(OECD Test Guideline 406)

Germ cell mutagenicity

Ames test / S. typhimurium
Result: negative
In vitro assay / fibroblast
Result: negative

Mutation in mammalian somatic cells.
Mutagenicity (in vivo mammalian bone-marrow cytogenetic test, chromosomal analysis)
Mouse - male and female
Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

Damage to fetus not classifiable.
Fertility classification not possible from current data.

Specific target organ toxicity - single exposure

Causes damage to organs.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No aspiration toxicity classification

Additional Information

RTECS: PC1400000
Methyl alcohol may be fatal or cause blindness if swallowed.
Effects due to ingestion may include:, Headache, Dizziness, Drowsiness, metabolic acidosis, Coma, Seizures.
Symptoms may be delayed., Damage of the:, Liver, Kidney

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish	mortality LC50 - Lepomis macrochirus (Bluegill) – 15400 mg/l - 96 h NOEC - Oryzias latipes – 7900 mg/l – 200 h
Toxicity to daphnia and other aquatic invertebrates	EC50 - Daphnia magna (Water flea) - > 10000 mg/l - 48 h
Toxicity to algae	Growth inhibition EC50 - Scenedesmus capricornutum (fresh water algae) - 22000 mg/l - 96 h

12.2 Persistence and degradability

Biodegradability	aerobic - exposure time 5 d result: 72 % - rapidly biodegradable
Biochemical Oxygen Demand (BOD)	600 - 1120 mg/g
Chemical Oxygen Demand (COD)	1420 mg/g
Theoretical oxygen demand	1500 mg/g

12.3 Bioaccumulative potential

Bioaccumulation	Cyprinus carpio (Carp) - 72 d at 20 °C - 5 mg/l Bioconcentration factor (BCF): 1,0

12.4 Mobility in soil

Will not adsorb on soil.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Additional ecological information	Avoid release to the environment.
Stability in water	at 19 °C83 - 91 % - 72 h Remarks: Hydrolyses on contact with water. Hydrolyses readily.

SECTION 13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product

SECTION 14 TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1230 / IMDG: 1230 / IATA: 1230

14.2 14.2 UN proper shipping name

ADR/RID: METHANOL / IMDG: METHANOL / IATA: Methanol

14.3 14.3 Transport hazard class(es)

ADR/RID: 3 (6.1) / IMDG: 3 (6.1) / IATA: 3 (6.1)

14.4 14.4 Packaging group

ADR/RID: II / IMDG: II / IATA: II

14.5 14.5 Environmental hazards

ADR/RID: no / IMDG Marine pollutant: no / IATA: no

14.6 14.6 Special precautions for user

No data available

SECTION 15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16 OTHER INFORMATION

Date of issue: 7.8.2015

Supersedes date:

Full text of H-Statements referred to under sections 2 and 3.
H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H301 + H311 + H331 Toxic if swallowed, in contact with skin or if inhaled
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H370 Causes damage to organs.

Acute Tox. Acute toxicity
Flam. Liq. Flammable liquids

Note:
The safety data sheet contains data necessary for ensuring occupational health and safety and protection of the environment. The given data correspond to the current state of knowledge and experience and comply with valid legal regulations. The data cannot be considered a guarantee that the specific use of the product will be appropriate.