

Safety data sheet

According to regulation (EC) No. 1907/2006

Rev.date: 26.07.2019 replaces version from 08.03.2012

1. Identification of the substance/preparation and the company/undertaking

1.1. Product identifier

Catalogue no.: IC2400ka
Product name: Vitamin K1 calibrator (CAL)

1.2. Relevant identified uses of the substance or mixture and uses advised against
Materials for use in the appropriate testkit.

1.3. Details of the supplier of the safety data sheet

Company: ImmuChrom GmbH
Lise-Meitner-Str. 13
64646 Heppenheim
Tel.: +49 6252 910084
Fax: +49 6252 910070
Email: info@immuchrom.de
www.immuchrom.de

1.4. Emergency telephone number

Available during the normal working hours +49 6252 910084

2. Hazards identification

2.1. Classification of the substance or mixture (Regulation (EC) No 1272/2008)

None

2.2. Label elements (Regulation (EC) No 1272/2008)

Hazard pictograms (reduced labeling <125 ml)

Signal word

Hazard statements

Precautionary statements

P280 Wear protective gloves, protective clothing, eye protection
P302+P352 If on skin: Wash with plenty of soap and water
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other dangers

Calibrator contains human blood. It was tested and found negative for HBsAg, anti-HIV-1/2, and anti-HCV. No test can guarantee the absence of HBsAg or HIV, and so all reagents of human origin in this kit must be handled as though capable of transmitting infection. The normal precautions for laboratory working should be observed.

3. Composition/information on ingredients

The mixture contains human plasma and vitamin K.

4. First aid measures

4.1. Description of first aid measures

General advice: First aider needs to protect himself.

After inhalation:

After skin contact: Wash with plenty of water, remove contaminated clothing, in case of discomfort consult a physician.

After eye contact: Rinse out with plenty of water. Immediately contact a ophthalmologist.

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

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

No information available.

4.3. Indication of immediate medical attention and special treatment needed

No information available

5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water, foam, carbon dioxide (CO₂)

Unsuitable extinguishing media: none

5.2. Special hazards arising from the substance or the mixture

Not combustible

Ambient fire may cause hazardous gases

5.3. Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, observe emergency procedures, call an expert.

6.2. Environmental precaution

Do not empty into drains

6.3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind and pump off spills.

6.4. Reference to other sections

For waste treatment refer to section 13

7. Handling and storage

7.1 Precaution for safe handling

Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed.

Store at +2 - +8 °C.

7.3. Specific end uses

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

8. Exposure controls/personal protection

8.1. Control parameters

The composition contains no substances with exposure control.

8.2. Exposure controls

Technical measures to reduce safety risk for the operator should be given priority over the use of personal protective equipment.

Individual protection measures

Hygiene measures: Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards. Do not eat, drink, smoke or apply makeup in areas where specimens or kit reagents are handled.

Eye protection: Wear safety glasses.

Hand protection: wear safety gloves

The gloves must comply with the specifications of the directive EC 89/686/EEC and the related standard EN374.

Respiratory protection: Not necessary

Environmental exposure control: Do not empty into drains

9. Physical and chemical properties

Form	lyophilised
Colour	yellow
Odour	bloodsmell after reconstitution
pH-Value	approx. 7
Melting point	no information available
Boiling point	no information available
Flash point	no information available
Evaporation rate	no information available
Flammability (solid, gas)	not applicable
Lower explosion limit	no information available
Higher explosion limit	no information available
Vapour pressure	no information available
Relative density	no information available
Water solubility	complete
Partition coefficient: n-oktanol/water	no information available
Autoignition temperature	no information available
Decomposition temperature	no information available
Viscosity, dynamic	no information available
Explosive properties	not explosive
Oxidizing properties	no information available
Other data	none

10. Stability and reactivity

10.1. Reactivity

No information available

10.2. Chemical stability

The mixture is stable at 2-8 °C up to the expiry date given on the label

10.3. Possibility of hazardous reactions
no information available

Violent reactions possible with:
No degradation when using according to the specification

10.4. Conditions to avoid
Heat, direct sunlight

10.5. Incompatible materials
Strong bases, strong acids, powdered metals, amines, phosphohalogenides, alcohols, organic materials, strong reduction agents.

10.6. Hazardous decomposition products
No information available

11. Toxicological information

11.1. Information on toxicological effects

Component	Type	Value	Species
No information available			
Skin irritation			
none			
Eye irritation			
slight irritation			
Genotoxicity			
Ames test negative			
Specific target organ toxicity			
No information available			
Aspiration hazard			
Based on available data the classification criteria are not met			
11.2. Further information			
Quantative data on toxicity of the mixture are not available			

12. Ecological information

12.1. Toxicity
No information available

12.2. Persistence and degradability
No information available

12.3. Bioaccumulative potencial
No information available

12.4. Mobility in soil
No information available

12.5. Results of PBT- and vPvB-assessment
A PBT- and vPvB-assessment is not available, as a chemical safety assessment is not required/not conducted.

12.6. Other adverse effects

No other effects known

Danger for drinking water

Do not allow to run into surface water, wastewater or soil.

13. Disposal consideration

Leftovers should be disposed concerning to the regulation 2008/98/EC and/or national and regional regulations.

Uncontaminated packing can be treated as normal waste or conduct into the recycling process.

14. Transport information

Not supposed to the transport regulation

ADR/RID

IATA

IMDG

15. Regulatory information

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

This safety data sheet complies with the requirements of the regulation (EC) No. 1907/2006

15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out

16. Other information

Text of H-codes mentioned in section 2

Precautionary statements

P280 Wear protective gloves, protective clothing, eye protection

P302+P352 If on skin: Wash with plenty of soap and water

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

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.

Safety data sheet

According to regulation (EC) No. 1907/2006

Rev.date: 26.07.2019 replaces version from 08.03.2012

1. Identification of the substance/preparation and the company/undertaking

1.1. Product identifier

Catalogue no.: IC2400ko
Product name: Vitamin K1 control (CTRL)

1.2. Relevant identified uses of the substance or mixture and uses advised against
Materials for use in the appropriate testkit.

1.3. Details of the supplier of the safety data sheet

Company: ImmuChrom GmbH
Lise-Meitner-Str. 13
64646 Heppenheim
Tel.: +49 6252 910084
Fax: +49 6252 910070
Email: info@immuchrom.de
www.immuchrom.de

1.4. Emergency telephone number

Available during the normal working hours +49 6252 910084

2. Hazards identification

2.1. Classification of the substance or mixture (Regulation (EC) No 1272/2008)

None

2.2. Label elements (Regulation (EC) No 1272/2008)

Hazard pictograms (reduced labeling <125 ml)

Signal word

Hazard statements

Precautionary statements

P280 Wear protective gloves, protective clothing, eye protection
P302+P352 If on skin: Wash with plenty of soap and water
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other dangers

Calibrator contains human blood. It was tested and found negative for HBsAg, anti-HIV-1/2, and anti-HCV. No test can guarantee the absence of HBsAg or HIV, and so all reagents of human origin in this kit must be handled as though capable of transmitting infection. The normal precautions for laboratory working should be observed.

3. Composition/information on ingredients

The mixture contains human plasma and vitamin K.

4. First aid measures

4.1. Description of first aid measures

General advice: First aider needs to protect himself.

After inhalation:

After skin contact: Wash with plenty of water, remove contaminated clothing, in case of discomfort consult a physician.

After eye contact: Rinse out with plenty of water. Immediately contact a ophthalmologist.

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

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

No information available.

4.3. Indication of immediate medical attention and special treatment needed

No information available

5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water, foam, carbon dioxide (CO₂)

Unsuitable extinguishing media: none

5.2. Special hazards arising from the substance or the mixture

Not combustible

Ambient fire may cause hazardous gases

5.3. Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, observe emergency procedures, call an expert.

6.2. Environmental precaution

Do not empty into drains

6.3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind and pump off spills.

6.4. Reference to other sections

For waste treatment refer to section 13

7. Handling and storage

7.1 Precaution for safe handling

Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed.

Store at +2 - +8 °C.

7.3. Specific end uses

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

8. Exposure controls/personal protection

8.1. Control parameters

The composition contains no substances with exposure control.

8.2. Exposure controls

Technical measures to reduce safety risk for the operator should be given priority over the use of personal protective equipment.

Individual protection measures

Hygiene measures: Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards. Do not eat, drink, smoke or apply makeup in areas where specimens or kit reagents are handled.

Eye protection: Wear safety glasses.

Hand protection: wear safety gloves

The gloves must comply with the specifications of the directive EC 89/686/EEC and the related standard EN374.

Respiratory protection: Not necessary

Environmental exposure control: Do not empty into drains

9. Physical and chemical properties

Form	lyophilised
Colour	yellow
Odour	bloodsmell after reconstitution
pH-Value	approx. 7
Melting point	no information available
Boiling point	no information available
Flash point	no information available
Evaporation rate	no information available
Flammability (solid, gas)	not applicable
Lower explosion limit	no information available
Higher explosion limit	no information available
Vapour pressure	no information available
Relative density	no information available
Water solubility	complete
Partition coefficient: n-oktanol/water	no information available
Autoignition temperature	no information available
Decomposition temperature	no information available
Viscosity, dynamic	no information available
Explosive properties	not explosive
Oxidizing properties	no information available
Other data	none

10. Stability and reactivity

10.1. Reactivity

No information available

10.2. Chemical stability

The mixture is stable at 2-8 °C up to the expiry date given on the label

10.3. Possibility of hazardous reactions
no information available

Violent reactions possible with:
No degradation when using according to the specification

10.4. Conditions to avoid
Heat, direct sunlight

10.5. Incompatible materials
Strong bases, strong acids, powdered metals, amines, phosphohalogenides, alcohols, organic materials, strong reduction agents.

10.6. Hazardous decomposition products
No information available

11. Toxicological information

11.1. Information on toxicological effects

Component	Type	Value	Species
No information available			

Skin irritation
none

Eye irritation
slight irritation

Genotoxicity
Ames test negative

Specific target organ toxicity
No information available

Aspiration hazard
Based on available data the classification criteria are not met

11.2. Further information
Quantative data on toxicity of the mixture are not available

12. Ecological information

12.1. Toxicity
No information available

12.2. Persistence and degradability
No information available

12.3. Bioaccumulative potencial
No information available

12.4. Mobility in soil
No information available

12.5. Results of PBT- and vPvB-assessment
A PBT- and vPvB-assessment is not available, as a chemical safety assessment is not required/not conducted.

12.6. Other adverse effects

No other effects known

Danger for drinking water

Do not allow to run into surface water, wastewater or soil.

13. Disposal consideration

Leftovers should be disposed concerning to the regulation 2008/98/EC and/or national and regional regulations.

Uncontaminated packing can be treated as normal waste or conduct into the recycling process.

14. Transport information

Not supposed to the transport regulation

ADR/RID

IATA

IMDG

15. Regulatory information

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

This safety data sheet complies with the requirements of the regulation (EC) No. 1907/2006

15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out

16. Other information

Text of H-codes mentioned in section 2

Precautionary statements

P280 Wear protective gloves, protective clothing, eye protection

P302+P352 If on skin: Wash with plenty of soap and water

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

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.

Safety data sheet

According to regulation (EC) No. 1907/2006

Rev.date: 26.07.2019 version: 08.03.2012

1. Identification of the substance/preparation and the company/undertaking

1.1. Product identifier

Catalogue no.: IC2400ex
Product name: Vitamin K1 extraction solution (EXTR)

1.2. Relevant identified uses of the substance or mixture and uses advised against materials for use in the appropriate testkit.

1.3. Details of the supplier of the safety data sheet

Company: ImmuChrom GmbH
Lise-Meitner-Str. 13
64646 Heppenheim
Tel.: +49 6252 910084
Fax: +49 6252 910070
Email: info@immuchrom.de
www.immuchrom.de

1.4. Emergency telephone number

Available during the normal working hours +49 6252 910084

2. Hazards identification

2.1. Classification of the substance or mixture (Regulation (EC) No 1272/2008)

Flammable liquids (Category 2)
Reproduction toxicity (Category 2)
Danger for aspiration (Category 1)
Specific target organ toxicity - repeated exposition (Category 2)
Skin irritant (Category 2)
Specific target organ toxicity - single exposition (Category 3)
Hazardous to water, chronic (Category 2)

2.2. Label elements (Regulation (EC) No 1272/2008)

Hazard pictograms



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways
H315 Causes skin irritation
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child
H371 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic for water organisms

Precautionary statements

P280 Wear protective gloves, protective clothing, eye protection
P302+P352 If on skin: Wash with plenty of soap and water
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. Composition/information on ingredients

The mixture contains the substances listed below and substances without dangerous potential.

CAS-Nr.	EINECS	Description	Percent	H-code
110-54-3	203-777-6	n Hexan	98	225, 304, 315, 336, 361, 373, 411

4. First aid measures

4.1. Description of first aid measures

General advice: First aider needs to protect himself.

After inhalation: Fresh air, Immediately call a physician.

After skin contact: Wash with plenty of water, remove contaminated clothing, Immediately consult a physician.

After eye contact: Rinse out with plenty of water. Immediately contact a ophthalmologist.

If swallowed: Give water to drink (two glasses at most). Do **not** induce vomiting. Immediately consult a physician.

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

No information available

4.3. Indication of immediate medical attention and special treatment needed

No information available

5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO₂), foam, extinguishing powder.
Cool all affected containers with flooding quantities of water.

5.2. Special hazards arising from the substance or the mixture

Carbon oxides

5.3. Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation, observe emergency procedures, call an expert.

6.2. Environmental precaution

Do not empty into drains

6.3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind and pump off spills.

6.4. Reference to other sections

For waste treatment refer to section 13

7. Handling and storage

7.1 Precaution for safe handling

Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed.

Store at +2 - +8 °C.

7.3. Specific end uses

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

8. Exposure controls/personal protection

8.1. Control parameters

CAS-Nr.	Description	MAK (TRGS 900)
110-54-3	n-hexan	180 mg/m ³
		TWA (EU)
		72 mg/m ³

8.2. Exposure controls

Technical measures to reduce safety risk for the operator should be given priority over the use of personal protective equipment.

Individual protection measures

Hygiene measures: Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards. Do not eat, drink, smoke or apply makeup in areas where specimens or kit reagents are handled.

Eye protection: Wear safety glasses.

Hand protection: wear safety gloves

The gloves must comply with the specifications of the directive EC 89/686/EEC and the related standard EN374.

Respiratory protection: Not necessary

Environmental exposure control: Do not empty into drains

9. Physical and chemical properties (for n-hexan corresponding to manufacturer)

Form	liquid
Colour	colorless
Odour	no information available
pH-Value	
Melting point	-94,3 °C
Boiling point	69 °C (1013 hPa)
Flash point	-22 °C
Evaporation rate	no information available
Flammability (solid, gas)	flammable
Lower explosion limit	1,1 Vol-%
Upper explosion limit	8,1 Vol-%
Vapour pressure	2,79 (20 °C)
Relative density	0,659 g/cm ³
Water solubility	0,0095 g/l (20 °C) in water
Partition coefficient: n-octanol/water	3,94 (20 °C)

Autoignition temperature	240 °C
Decomposition temperature	no information available
Viscosity, dynamic	no information available
Explosive properties	not explosive
Oxidizing properties	no information available
Other data	no information available

10. Stability and reactivity

10.1. Reactivity

no information available

10.2. Chemical stability

no information available

10.3. Possibility of hazardous reactions

Strong oxidizing reagents

10.4. Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Rubber, diverse plastics

10.6. Hazardous decomposition products

Other decomposition products - no data available

11. Toxicological information

11.1. Information on toxicological effects (for n-hexan corresponding to manufacturer)

	Type	Value	Species
Acute oral toxicity	LD ₅₀ (oral)	25 g/kg	rat
Acute inhalative toxicity	LC ₅₀	171,6 mg/l, 4 h	rat
Acute dermal toxicity	LD ₅₀	>2000 mg/kg	rabbit

Skin irritation
skin irritant

Eye irritation
Eye irritant

CMR effects
Might affect reproducibility

Specific target organ toxicity
Might cause drowsiness

Aspiration hazard
Aspiration danger, aspiration might lead to edema and pneumonia

11.2. Further information

Potential health effects

Inhalation Harmful if inhaled. May cause respiratory tract irritation. Vapours may cause drowsiness and dizziness.

Ingestion Harmful if swallowed.
Skin Harmful if absorbed through skin. May cause skin irritation.
Eyes Causes serious eye irritation.

Signs and symptoms of exposure

Central nervous system depression, prolonged or repeated exposure can cause: Nausea, headache, vomiting, narcosis, drowsiness, overexposure may cause mild, reversible liver effects.

12. Ecological information

12.1. Toxicity (for n-hexan corresponding to manufacturer)

<u>Spezies</u>	<u>Type</u>	<u>Value</u>	<u>Exposition time (h)</u>
Fathead minnow (<i>Pimephales promelas</i>)	LC ₅₀ (mg/l)	2,5	96
Invertebrate (<i>Daphnia magna</i>)	EC ₅₀ (mg/l)	2,1	48

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potential (for n-hexan corresponding to manufacturer)

<u>Substance</u>	<u>Log Pow</u>
n-Hexan	3,94

Bioaccumulation is expected because log Pow > 3

12.4. Mobility in soil

No information available

12.5. Results of PBT- and vPvB-assessment

A PBT- and vPvB-assessment is not available, as a chemical safety assessment is not required/not conducted.

12.6. Other adverse effects

No information available

13. Disposal consideration

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. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. Transport information

ADR/RID	UN 1208 Hexane, 3, II
IATA	UN 1208 HEXANE, 3, II
IMDG	UN 1208 HEXANE, 3, II EmS, F-E, S-D

15. Regulatory information

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

This safety data sheet complies with the requirements of the regulation (EC) No. 1907/2006

15.2. Chemical safety assessment

no information available

16. Other information

Text of H-codes mentioned in section 2

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child
H371	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic for water organisms

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.

Safety data sheet

According to regulation (EC) No. 1907/2006

Rev.date: 26.07.2019 replaces version from 21.08.2015

1. Identification of the substance/preparation and the company/undertaking

1.1. Product identifier

Catalogue no.: IC2401is
Product name: Vitamin K1 Internal standard (IS)

1.2. Relevant identified uses of the substance or mixture and uses advised against materials for use in the appropriate testkit.

1.3. Details of the supplier of the safety data sheet

Company: ImmuChrom GmbH
Lise-Meitner-Str. 13
64646 Heppenheim
Tel.: +49 6252 910084
Fax: +49 6252 910070
Email: info@immuchrom.de
www.immuchrom.de

1.4. Emergency telephone number

Available during the normal working hours +49 6252 910084

2. Hazards identification

2.1. Classification of the substance or mixture (Regulation (EC) No 1272/2008)

Flammable liquids (Category 2)
Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)

2.2. Label elements (Regulation (EC) No 1272/2008)

Hazard pictograms



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. Composition/information on ingredients

The mixture contains the substances listed below and substances without dangerous potential.

CAS-No.	EINECS	Description	Percent	H-codes
67-63-0	200-661-7	Isopropanol	> 99,9	225, 319, 336

4. First aid measures

4.1. Description of first aid measures

General advice: First aider needs to protect himself.

After inhalation: Fresh air, in case of discomfort consult a physician.

After skin contact: Wash with plenty of water, remove contaminated clothing, in case of discomfort consult a physician.

After eye contact: Rinse out with plenty of water. Immediately contact a ophthalmologist.

If swallowed: Give water to drink (two glasses at most). Immediately consult a physician.

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

Central nervous system depression, prolonged or repeated exposure can cause: Nausea, headache, vomiting, narcosis, drowsiness, overexposure may cause mild, reversible liver effects.

4.3. Indication of immediate medical attention and special treatment needed

No information available

5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media: For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

5.2. Special hazards arising from the substance or the mixture

Carbon oxides

5.3. Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, observe emergency procedures, call an expert.

6.2. Environmental precaution

Do not empty into drains

6.3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind and pump off spills.

6.4. Reference to other sections

For waste treatment refer to section 13

7. Handling and storage

7.1 Precaution for safe handling

Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed.

Store at +2 - +8 °C.

7.3. Specific end uses

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

8. Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Technical measures to reduce safety risk for the operator should be given priority over the use of personal protective equipment.

Individual protection measures

Hygiene measures: Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards. Do not eat, drink, smoke or apply makeup in areas where specimens or kit reagents are handled.

Eye protection: Wear safety glasses.

Hand protection: wear safety gloves

The gloves must comply with the specifications of the directive EC 89/686/EEC and the related standard EN374.

Respiratory protection: Not necessary

Environmental exposure control: Do not empty into drains

9. Physical and chemical properties

Form	liquid
Colour	colourless
Odour	alcohol-like
pH-Value	no information available
Melting point	- 89,5 °C
Boiling point	82 °C
Flash point	12,0 °C – closed cup
Evaporation rate	3,0
Flammability (solid, gas)	no information available
Lower explosion limit	2 % (V)
Upper explosion limit	12,7 % (V)
Vapour pressure	43,2 hPa at 20,0 °C 58,7 hPa at 25,0 °C
Relative density	0,785 g/ml at 25 °C
Water solubility	completely soluble
Partition coefficient: n-octanol/water	log Pow: 0,05
Autoignition temperature	425,0 °C
Decomposition temperature	no information available
Viscosity, dynamic	no information available
Explosive properties	not explosive

Oxidizing properties
Other data

no information available
Surface tension 20,8 mN/m at 25,0 °C

10. Stability and reactivity

10.1. Reactivity

no information available

10.2. Chemical stability

no information available

10.3. Possibility of hazardous reactions

no information available

10.4. Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids

10.6. Hazardous decomposition products

Other decomposition products - no data available

11. Toxicological information

11.1. Information on toxicological effects (for isopropanol corresponding to manufacturer)

Component	Type	Value	Species
	LD50 (oral)	5,045 mg/kg	rat
	LD50 (inhalation)	16000 ppm (8h)	rat
	LD50 (dermal)	12,800 mg/kg	rabbit

Skin irritation

Mild skin irritation

rabbit

Eye irritation

Eye irritation – 24h

rabbit

CMR effects

No information available

Specific target organ toxicity

No information available

Aspiration hazard

No information available

11.2. Further information

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation. Vapours may cause drowsiness and dizziness.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	Causes serious eye irritation.

Signs and symptoms of exposure

Central nervous system depression, prolonged or repeated exposure can cause: Nausea, headache, vomiting, narcosis, drowsiness, overexposure may cause mild, reversible liver effects.

12. Ecological information

12.1. Toxicity

<u>Species</u>	<u>Type</u>	<u>Value</u>	<u>Exposition time (h)</u>
Sonnenbarsch (<i>Lepomis macrochirus</i>)	LC ₅₀ (mg/l)	1,4	96
Wasserfloh (<i>Daphnia magna</i>)	EC ₅₀ (mg/l)	13,299	48
Grünalgen	IC ₅₀ (mg/l)	>1000	72
<i>Pseudomonas putida</i>	EC ₅ (mg/l)	1,50	16

12.2. Persistence and degradability

<u>Substance</u>	<u>t1/2 anaerob (h)</u>
2-Propanol	leicht biologisch abbaubar

12.3. Bioaccumulative potencial

<u>Substance</u>	<u>Log Pow</u>
2-Propanol	0,05

Bioaccumulation is not expected because log Pow < 1

12.4. Mobility in soil

No information available

12.5. Results of PBT- and vPvB-assessment

A PBT- and vPvB-assessment is not available, as a chemical safety assessment is not required/not conducted.

12.6. Other adverse effects

No information available

13. Disposal consideration

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. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. Transport information

ADR/RID	UN 1219 Isopropanol, 3, II
IATA	UN 1219 ISOPROPANOL, 3, II
IMDG	UN 1219 ISOPROPANOL, 3, II EmS, F-E, S-D

15. Regulatory information

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

EU regulation

This safety data sheet complies with the requirements of the regulation (EC) No. 1907/2006

15.2. Chemical safety assessment

no information available

16. Other information

Text of H-codes mentioned in section 2

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.

Safety data sheet

According to regulation (EC) No. 1907/2006

Rev.date: 26.07.2019 replaces version from 08.03.2012

1. Identification of the substance/preparation and the company/undertaking

1.1. Product identifier

Catalogue no.: IC2400il
Product name: Vitamin K1 isopropanolic standard (ISOP)

1.2. Relevant identified uses of the substance or mixture and uses advised against materials for use in the appropriate testkit.

1.3. Details of the supplier of the safety data sheet

Company: ImmuChrom GmbH
Lise-Meitner-Str. 13
64646 Heppenheim
Tel.: +49 6252 910084
Fax: +49 6252 910070
Email: info@immuchrom.de
www.immuchrom.de

1.4. Emergency telephone number

Available during the normal working hours +49 6252 910084

2. Hazards identification

2.1. Classification of the substance or mixture (Regulation (EC) No 1272/2008)

Flammable liquids (Category 2)
Eye irritation (Category 2)
Specific target organ toxicity - single exposure (Category 3)

2.2. Label elements (Regulation (EC) No 1272/2008)

Hazard pictograms



Signal word

Danger

Hazard statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. Composition/information on ingredients

The mixture contains the substances listed below and substances without dangerous potential.

CAS-Nr.	EINECS	Description	Percent	H-code
67-63-0	200-661-7	Isopropanol	> 99,9	225, 319, 336

4. First aid measures

4.1. Description of first aid measures

General advice: First aider needs to protect himself.

After inhalation: Fresh air, in case of discomfort consult a physician.

After skin contact: Wash with plenty of water, remove contaminated clothing, in case of discomfort consult a physician.

After eye contact: Rinse out with plenty of water. Immediately contact a ophthalmologist.

If swallowed: Give water to drink (two glasses at most). Immediately consult a physician.

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

Central nervous system depression, prolonged or repeated exposure can cause: Nausea, headache, vomiting, narcosis, drowsiness, overexposure may cause mild, reversible liver effects.

4.3. Indication of immediate medical attention and special treatment needed

No information available

5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media: For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

5.2. Special hazards arising from the substance or the mixture

Carbon oxides

5.3. Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, observe emergency procedures, call an expert.

6.2. Environmental precaution

Do not empty into drains

6.3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind and pump off spills.

6.4. Reference to other sections

For waste treatment refer to section 13

7. Handling and storage

7.1 Precaution for safe handling

Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed.

Store at +2 - +8 °C.

7.3. Specific end uses

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

8. Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Technical measures to reduce safety risk for the operator should be given priority over the use of personal protective equipment.

Individual protection measures

Hygiene measures: Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards. Do not eat, drink, smoke or apply makeup in areas where specimens or kit reagents are handled.

Eye protection: Wear safety glasses.

Hand protection: wear safety gloves

The gloves must comply with the specifications of the directive EC 89/686/EEC and the related standard EN374.

Respiratory protection: Not necessary

Environmental exposure control: Do not empty into drains

9. Physical and chemical properties

Form	liquid
Colour	colourless
Odour	alcohol-like
pH-Value	no information available
Melting point	- 89,5 °C
Boiling point	82 °C
Flash point	12,0 °C – closed cup
Evaporation rate	3,0
Flammability (solid, gas)	no information available
Lower explosion limit	2 % (V)
Upper explosion limit	12,7 % (V)
Vapour pressure	43,2 hPa at 20,0 °C 58,7 hPa at 25,0 °C
Relative density	0,785 g/ml at 25 °C
Water solubility	completely soluble
Partition coefficient: n-octanol/water	log Pow: 0,05
Autoignition temperature	425,0 °C
Decomposition temperature	no information available
Viscosity, dynamic	no information available
Explosive properties	not explosive

Oxidizing properties	no information available
Other data	
Surface tension	20,8 mN/m at 25,0 °C

10. Stability and reactivity

10.1. Reactivity

no information available

10.2. Chemical stability

no information available

10.3. Possibility of hazardous reactions

no information available

10.4. Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Oxidizing agents, Acid anhydrides, Aluminium, Halogenated compounds, Acids

10.6. Hazardous decomposition products

Other decomposition products - no data available

11. Toxicological information

11.1. Information on toxicological effects (for isopropanol corresponding to manufacturer)

Component	Type	Value	Species
	LD50 (oral)	5,045 mg/kg	rat
	LD50 (inhalation)	16000 ppm (8h)	rat
	LD50 (dermal)	12,800 mg/kg	rabbit
Skin irritation			
Mild skin irritation			rabbit
Eye irritation			
Eye irritation – 24h			rabbit

CMR effects

No information available

Specific target organ toxicity

No information available

Aspiration hazard

No information available

11.2. Further information

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation. Vapours may cause drowsiness and dizziness.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	Causes serious eye irritation.

Signs and symptoms of exposure

Central nervous system depression, prolonged or repeated exposure can cause: Nausea, headache, vomiting, narcosis, drowsiness, overexposure may cause mild, reversible liver effects.

12. Ecological information

12.1. Toxicity

<u>Species</u>	<u>Type</u>	<u>Value</u>	<u>Exposition time (h)</u>
Sonnenbarsch (<i>Lepomis macrochirus</i>)	LC ₅₀ (mg/l)	1,4	96
Wasserfloh (<i>Daphnia magna</i>)	EC ₅₀ (mg/l)	13,299	48
Grünalgen	IC ₅₀ (mg/l)	>1000	72
<i>Pseudomonas putida</i>	EC ₅ (mg/l)	1,50	16

12.2. Persistence and degradability

<u>Substance</u>	<u>t1/2 anaerob (h)</u>
2-Propanol	leicht biologisch abbaubar

12.3. Bioaccumulative potencial

<u>Substance</u>	<u>Log Pow</u>
2-Propanol	0,05

Bioaccumulation is not expected because log Pow < 1

12.4. Mobility in soil

No information available

12.5. Results of PBT- and vPvB-assessment

A PBT- and vPvB-assessment is not available, as a chemical safety assessment is not required/not conducted.

12.6. Other adverse effects

No information available

13. Disposal consideration

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. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. Transport information

ADR/RID	UN 1219 Isopropanol, 3, II
IATA	UN 1219 ISOPROPANOL, 3, II
IMDG	UN 1219 ISOPROPANOL, 3, II EmS, F-E, S-D

15. Regulatory information

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

EU regulation
This safety data sheet complies with the requirements of the regulation (EC) No. 1907/2006

15.2. Chemical safety assessment

no information available

16. Other information

Text of H-codes mentioned in section 2

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.

Safety data sheet

According to regulation (EC) No. 1907/2006

Rev.date: 26.07.2019 replaces version from 08.03.2012

1. Identification of the substance/preparation and the company/undertaking

1.1. Product identifier

Catalogue no.: IC2400Im
Product name: Vitamin K1 mobile phase (ELU)

1.2. Relevant identified uses of the substance or mixture and uses advised against
Materials for use in the appropriate testkit.

1.3. Details of the supplier of the safety data sheet

Company: ImmuChrom GmbH
Lise-Meitner-Str. 13
64646 Heppenheim
Tel.: +49 6252 910084
Fax: +49 6252 910070
Email: info@immuchrom.de
www.immuchrom.de

1.4. Emergency telephone number

Available during the normal working hours +49 6252 910084

2. Hazards identification

2.1. Classification of the substance or mixture (Regulation (EC) No 1272/2008)

Flammable liquid (category 2)

Eye irritant (category 2)

Specific target organ toxicity – single exposition (category 3)

2.2. Label elements (Regulation (EC) No 1272/2008)

Hazard pictograms (reduced labeling <125 ml)



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour
H301+H311+H331 Fatal if swallowed, skin contact or inhaled
H315 Causes skin irritation
H320 Causes eye irritation
H370 Cause damage to organs

Precautionary statements

P280 Wear protective gloves, protective clothing, eye protection
P302+P352 If on skin: Wash with plenty of soap and water
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. Composition/information on ingredients

The mixture contains the substances listed below and substances without dangerous potential.

CAS-No.	EINECS	Description	Percent	H-codes
67-56-1	200-659-6	Methanol	> 99.9	225, 301+311+331, 370

4. First aid measures

4.1. Description of first aid measures

General advice: First aider needs to protect himself.

After inhalation: Fresh air, in case of discomfort consult a physician.

After skin contact: Wash with plenty of water, remove contaminated clothing, in case of discomfort consult a physician.

After eye contact: Rinse out with plenty of water. Immediately contact a ophthalmologist.

If swallowed : Fresh air. Make victim drink ethanol (e.g. 1 drinking glass of a 40% alcoholic beverage). Never give anything by mouth to an unconscious person. Immediately contact a physician. Only in exceptional cases, if no medical care is available within one hour, induce vomiting (only in conscious persons) and make victim drink ethanol again (approx.. 0.3 ml of a 40 % beverage/kg body weight/hour)

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

Irritant effects, drowsiness, dizziness, narcosis, agitation, spasms, inebriation, nausea, vomiting, headache, blindness, impairment of vision, coma, drying out effect resulting in rough and chapped skin.

4.3. Indication of immediate medical attention and special treatment needed

No information available

5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water, foam, carbon dioxide (CO₂)

Unsuitable extinguishing media: none

5.2. Special hazards arising from the substance or the mixture

Not combustible

Ambient fire may cause hazardous gases

5.3. Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, observe emergency procedures, call an expert.

6.2. Environmental precaution

Do not empty into drains

6.3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind and pump off spills.

6.4. Reference to other sections

For waste treatment refer to section 13

7. Handling and storage

7.1 Precaution for safe handling

Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed.

Store at +2 - +8 °C.

7.3. Specific end uses

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

8. Exposure controls/personal protection

8.1. Control parameters

CAS-Nr.	Description	MAK (TRGS 900)
67-56-1	Methanol	270 mg/m ³

8.2. Exposure controls

Technical measures to reduce safety risk for the operator should be given priority over the use of personal protective equipment.

Individual protection measures

Hygiene measures: Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards. Do not eat, drink, smoke or apply makeup in areas where specimens or kit reagents are handled.

Eye protection: Wear safety glasses.

Hand protection: wear safety gloves

The gloves must comply with the specifications of the directive EC 89/686/EEC and the related standard EN374.

Respiratory protection: Not necessary

Environmental exposure control: Do not empty into drains

9. Physical and chemical properties (for methanol according to manufacturer)

Form	liquid
Colour	colourless
Odour	characteristic
pH-Value	no information available
Melting point	-98 °C
Boiling point	64,5 °C at 1013 hPa
Flash point	11 °C
Evaporation rate	no information available
Flammability (solid, gas)	no information available
Lower explosion limit	5.5 % (V)
Higher explosion limit	36.5 % (V)
Vapour pressure	128 hPa at 20 °C
Relative density	1.11
Water solubility	complete
Partition coefficient: n-oktanol/water	log Pow -0.77
Autoignition temperature	no information available
Decomposition temperature	no information available
Viscosity, dynamic	no information available
Explosive properties	explosive

Oxidizing properties
Other data

no information available
none

10. Stability and reactivity

10.1. Reactivity

Vapour might form explosive mixtures with air.

10.2. Chemical stability

The mixture is stable at 2-8 °C up to the expiry date given on the label

10.3. Possibility of hazardous reactions

Risk of explosion with:

Oxidizing agents, perchloric acid, perchlorates, salts of oxyhalogenic acids, chromium(VI) oxide, halogen oxides, nitrous acid, nitrogen oxides, non-metallic oxides, chromsulfuric acid, chlorates, hydrides, zinc diethyl, halogens, magnesium, hydrogen peroxide.

Exothermic reactions with:

Acid halides, acid anhydrides, reducing agents, acids.

Generates dangerous gases or fumes with:

Alkaline earth metals, alkali metals

Violent reactions possible with:

No degradation when using according to the specification

10.4. Conditions to avoid

Warming (critical from 15 Kelvin below flash point), flames and sparks.

10.5. Incompatible materials

Various plastics, magnesium, zinc alloys.

10.6. Hazardous decomposition products

No information available

11. Toxicological information

11.1. Information on toxicological effects (for methanol corresponding to manufacturer)

Component	Type	Value	Species
Acute oral toxicity	LDLO	143 mg/kg	human
	LD50 (oral)	5.628 mg/kg	rat
Acute inhalative toxicity	LC50	85,26 mg/l, 4 h	rat

Acute dermal toxicity
Resorption

Eye irritation
Serious irritation

Genotoxicity
Ames test negative

Specific target organ toxicity
Causes damage to organs

Aspiration hazard
Based on available data the classification criteria are not met

11.2. Further information

Quantative data on toxicity of the mixture are not available

Methanol may be fatal or cause blindness if swallowed., Cannot be made non-poisonous., Effects due to ingestion may include:, Nausea, Dizziness, Gastrointestinal disturbance, Weakness, Confusion., Drowsiness, Unconsciousness.

12. Ecological information

12.1. Toxicity

<u>Species</u>	<u>Type</u>	<u>Value</u>	<u>Exposition time (h)</u>
Sonnenbarsch (<i>Lepomis macrochirus</i>)	LC ₅₀ (mg/l)	15400	96
Wasserfloh (<i>Daphnia magna</i>)	EC ₅₀ (mg/l)	>10000	48
Grünalgen	IC ₅₀ (mg/l)	8000	8 d
Pseudomonas	EC ₅ (mg/l)	6600	16

12.2. Persistence and degradability

<u>Substance</u>	<u>t1/2 anaerob (h)</u>
Methanol	99%; 30 d

12.3. Bioaccumulative potential

<u>Substance</u>	<u>Log Pow</u>
Methanol	-0,77

Bioaccumulation is not expected log Pow < 1

12.4. Mobilität im Boden

Keine Informationen verfügbar

12.4. Mobility in soil

No information available

12.5. Results of PBT- and vPvB-assessment

A PBT- and vPvB-assessment is not available, as a chemical safety assessment is not required/not conducted.

12.6. Other adverse effects

No other effects known

Danger for drinking water

Do not allow to run into surface water, wastewater or soil.

13. Disposal consideration

Leftovers should be disposed concerning to the regulation 2008/98/EC and/or national and regional regulations.

Uncontaminated packing can be treated as normal waste or conduct into the recycling process.

14. Transport information

ADR/RID	UN 1230 Methanol, 3 (6.1), II
IATA	UN 1230 METHANOL, 3 (6.1), II
IMDG	UN 1230 METHANOL, 3 (6.1), II EmS, F-E, S-D

15. Regulatory information

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

This safety data sheet complies with the requirements of the regulation (EC) No. 1907/2006

15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out

16. Other information

Text of H-codes mentioned in section 2

H225	Highly flammable liquid and vapour
H290	Might be corrosive with metals
H301+H311+H331	Fatal if swallowed, skin contact or inhaled
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H335	May cause respiratory irritation
H370	Cause damage to organs

Precautionary statements

P280	Wear protective gloves, protective clothing, eye protection
P302+P352	If on skin: Wash with plenty of soap and water
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.

Safety data sheet

According to regulation (EC) No. 1907/2006

Rev.date: 26.07.2019 replaces version from 08.03.2012

1. Identification of the substance/preparation and the company/undertaking

1.1. Product identifier

Catalogue no.: IC2400il
Product name: Vitamin K1 precipitation solution (PREC)

1.2. Relevant identified uses of the substance or mixture and uses advised against materials for use in the appropriate testkit.

1.3. Details of the supplier of the safety data sheet

Company: ImmuChrom GmbH
Lise-Meitner-Str. 13
64646 Heppenheim
Tel.: +49 6252 910084
Fax: +49 6252 910070
Email: info@immuchrom.de
www.immuchrom.de

1.4. Emergency telephone number

Available during the normal working hours +49 6252 910084

2. Hazards identification

2.1. Classification of the substance or mixture (Regulation (EC) No 1272/2008

Flammable liquids (Category 2)

2.2. Label elements (Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

H225 Highly flammable liquid and vapour.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep tightly closed

P280 Wear safety gloves / clothes,

P302+P352 If on skin: Wash with plenty of soap and water

P309+P310 In case of exposition or indisposition immediately call a doctor

P403+P235 Store at a cool and ventilated place

3. Composition/information on ingredients

The mixture contains the substances listed below and substances without dangerous potential.

CAS-Nr.	EINECS	Description	Percent	H-code
64-17-5	200-578-6	Ethanol	99	225

4. First aid measures

4.1. Description of first aid measures

General advice: First aider needs to protect himself.

After inhalation: Fresh air, in case of discomfort consult a physician.

After skin contact: Wash with plenty of water, remove contaminated clothing, in case of discomfort consult a physician.

After eye contact: Rinse out with plenty of water. Immediately contact a ophthalmologist.

If swallowed: Give water to drink (two glasses at most). Immediately consult a physician.

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

Irritant, respiratory paralysis, dizziness, narcosis, intoxication, euphoria, nausea, vomiting.

4.3. Indication of immediate medical attention and special treatment needed

No information available

5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media: For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

5.2. Special hazards arising from the substance or the mixture

Carbon oxides

5.3. Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation, observe emergency procedures, call an expert.

6.2. Environmental precaution

Do not empty into drains

6.3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind and pump off spills.

6.4. Reference to other sections

For waste treatment refer to section 13

7. Handling and storage

7.1 Precaution for safe handling

Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed.

Store at +2 - +8 °C.

7.3. Specific end uses

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

8. Exposure controls/personal protection

8.1. Control parameters

CAS-Nr.	Description	MAK (TRGS 900)
64-17-5	Ethanol	960 mg/m ³

8.2. Exposure controls

Technical measures to reduce safety risk for the operator should be given priority over the use of personal protective equipment.

Individual protection measures

Hygiene measures: Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards. Do not eat, drink, smoke or apply makeup in areas where specimens or kit reagents are handled.

Eye protection: Wear safety glasses.

Hand protection: wear safety gloves

The gloves must comply with the specifications of the directive EC 89/686/EEC and the related standard EN374.

Respiratory protection: Not necessary

Environmental exposure control: Do not empty into drains

9. Physical and chemical properties

Form	liquid
Colour	colourless
Odour	alcohol-like
pH-Value	7.0 at 10 g/l (20 °C)
Melting point	no information available
Boiling point	no information available
Flash point	12,0 °C – closed cup
Evaporation rate	no information available
Flammability (solid, gas)	no information available
Lower explosion limit	no information available
Upper explosion limit	no information available
Vapour pressure	no information available
Relative density	no information available
Water solubility	completely soluble
Partition coefficient: n-octanol/water	no information available
Autoignition temperature	no information available
Decomposition temperature	no information available

Viscosity, dynamic	no information available
Explosive properties	no information available
Oxidizing properties	no information available
Other data	
Surface tension	no information available

10. Stability and reactivity

10.1. Reactivity

Vapour can for explosive mixtures with air

10.2. Chemical stability

no information available

10.3. Possibility of hazardous reactions

Explosion hazard with:

Oxidative agents, perchloric acid, perchlorate, chrome(VI)-oxide, halogen-halogenbonds, sulphuric acid, potassium permanganate, Nitric acid, uranhexafluoride, nitrogen dioxide, phosphor oxide, permanganic acid, fluor, ethylenoxid, chromsulfuric acid, chromylchloride, hydrogen peroxide, alkolioxide, eartalkalimetalls, alkalimetalls.

10.4. Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Rubber, different plastics

10.6. Hazardous decomposition products

Other decomposition products - no data available

11. Toxicological information

11.1. Information on toxicological effects (for ethanol corresponding to manufacturer)

Component	Type	Value	Species
	LD50 (oral)	6200 mg/kg	rat
	LC50	95.6 mg/l, 4 h	rat

Skin irritation

No skin irritation

rabbit

Eye irritation

Eye irritation

rabbit

CMR effects

No information available

Specific target organ toxicity

No information available

Aspiration hazard

No information available

11.2. Further information

No information available

12. Ecological information

12.1. Toxicity

No information available

12.2. Persistence and degradability

No information available

12.3. Bioaccumulative potencial

No information available

12.4. Mobility in soil

No information available

12.5. Results of PBT- and vPvB-assessment

A PBT- and vPvB-assessment is not available, as a chemical safety assessment is not required/not conducted.

12.6. Other adverse effects

No information available

13. Disposal consideration

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. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. Transport information

ADR/RID	UN 1170 Ethanol, 3, II
IATA	UN 1170 ETHANOL, 3, II
IMDG	UN 1170 ETHANOL, 3, II EmS, F-E, S-D

15. Regulatory information

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

EU regulation

This safety data sheet complies with the requirements of the regulation (EC) No. 1907/2006

15.2. Chemical safety assessment

no information available

16. Other information

Text of H-codes mentioned in section 2

H225 Highly flammable liquid and vapour.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep tightly closed

P280 Wear safety gloves / clothes,

P302+P352 If on skin: Wash with plenty of soap and water

P309+P310 In case of exposition or indisposition immediately call a doctor

P403+P235 Store at a cool and ventilated place

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.

Safety data sheet

According to regulation (EC) No. 1907/2006

Rev.date: 26.07.2019 replaces version from 08.03.2012

1. Identification of the substance/preparation and the company/undertaking

1.1. Product identifier

Catalogue no.: IC2400zi
Product name: Vitamin K1 zinc (ZINC)

1.2. Relevant identified uses of the substance or mixture and uses advised against materials for use in the appropriate testkit.

1.3. Details of the supplier of the safety data sheet

Company: ImmuChrom GmbH
Lise-Meitner-Str. 13
64646 Heppenheim
Tel.: +49 6252 910084
Fax: +49 6252 910070
Email: info@immuchrom.de
www.immuchrom.de

1.4. Emergency telephone number

Available during the normal working hours +49 6252 910084

2. Hazards identification

2.1. Classification of the substance or mixture (Regulation (EC) No 1272/2008

Self-heating substance (Category 1)

Substance, which emits flammable gases by contact with water (Category 2)

2.2. Label elements (Regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Danger

Hazard statements

H251 Self-heating; may catch fire
H261 In contact with water releases flammable gas

Precautionary statements

P231 + P232 Handle under inert gas. Protect from humidity
P235 + P410 Keep cool, Protect from sunlight
P422 Store under inert gas

3. Composition/information on ingredients

The mixture contains the substances listed below and substances without dangerous potential.

CAS-Nr.	EINECS	Description	Percent	H-codes
7440-66-6	231-175-3	Zink	99,9	251, 261

4. First aid measures

4.1. Description of first aid measures

General advice: First aider needs to protect himself.

After inhalation: Fresh air, in case of discomfort consult a physician.

After skin contact: Wash with plenty of water, remove contaminated clothing, in case of discomfort consult a physician.

After eye contact: Rinse out with plenty of water. Immediately contact a ophthalmologist.

If swallowed: Give water to drink (two glasses at most). Immediately consult a physician.

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

Central nervous system depression, prolonged or repeated exposure can cause: Nausea, headache, vomiting, narcosis, drowsiness, overexposure may cause mild, reversible liver effects.

4.3. Indication of immediate medical attention and special treatment needed

No information available

5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Powder

5.2. Special hazards arising from the substance or the mixture

Zinc/zinc oxides

5.3. Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, observe emergency procedures, call an expert.

6.2. Environmental precaution

Do not empty into drains

6.3. Methods and materials for containment and cleaning up

Cover drains. Collect, bind and pump off spills.

6.4. Reference to other sections

For waste treatment refer to section 13

7. Handling and storage

7.1 Precaution for safe handling

Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards.

7.2. Conditions for safe storage, including any incompatibilities

Keep tightly closed. Avoid contact with humidity/water during storage.

Store at +20 - +25 °C.

7.3. Specific end uses

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

8. Exposure controls/personal protection

8.1. Control parameters

None

8.2. Exposure controls

Technical measures to reduce safety risk for the operator should be given priority over the use of personal protective equipment.

Individual protection measures

Hygiene measures: Wear disposable gloves while handling specimens or kit reagents and wash hands thoroughly afterwards. Do not eat, drink, smoke or apply makeup in areas where specimens or kit reagents are handled.

Eye protection: Wear safety glasses.

Hand protection: wear safety gloves

The gloves must comply with the specifications of the directive EC 89/686/EEC and the related standard EN374.

Respiratory protection: Not necessary

Environmental exposure control: Do not empty into drains

9. Physical and chemical properties

Form	granules
Colour	grey
Odour	no information available
pH-Value	no information available
Melting point	420 °C
Boiling point	907 °C
Flash point	no information available
Evaporation rate	no information available
Flammability (solid, gas)	no information available
Lower explosion limit	no information available
Upper explosion limit	no information available
Vapour pressure	no information available
Relative density	7.133 g/cm ³ at 25 °C
Water solubility	no information available
Partition coefficient: n-octanol/water	no information available
Autoignition temperature	Self-heating (category 1)
Decomposition temperature	no information available
Viscosity, dynamic	2.2 mPa.s bei 20 °C
Explosive properties	no information available

Oxidizing properties
Other data

no information available
no information available

10. Stability and reactivity

10.1. Reactivity

no information available

10.2. Chemical stability

no information available

10.3. Possibility of hazardous reactions

Reacts severe with water

10.4. Conditions to avoid

Humidity

10.5. Incompatible materials

Acids, strong bases, chlorides, fluor, nitrates, carbon disulfit.

10.6. Hazardous decomposition products

Other decomposition products - no data available

11. Toxicological information

11.1. Information on toxicological effects

Component	Type	Value	Species
no information available			
Skin irritation			
no information available			
Eye irritation			
no information available			
CMR effects			
No information available			
Specific target organ toxicity			
No information available			
Aspiration hazard			
No information available			
11.2. Further information			
no information available			

11.2. Further information

no information available

12. Ecological information

12.1. Toxicity

no information available

12.2. Persistence and degradability

no information available

12.3. Bioaccumulative potential

no information available

12.4. Mobility in soil
No information available

12.5. Results of PBT- and vPvB-assessment
A PBT- and vPvB-assessment is not available, as a chemical safety assessment is not required/not conducted.

12.6. Other adverse effects
No information available

13. Disposal consideration

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. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

14. Transport information

No restrictions

ADR/RID

IATA

IMDG

15. Regulatory information

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

This safety data sheet complies with the requirements of the regulation (EC) No. 1907/2006

15.2. Chemical safety assessment
no information available

16. Other information

Text of H-codes mentioned in section 2

Hazard statements

H251	Self-heating; may catch fire
H261	In contact with water releases flammable gas

Precautionary statements

P231 + P232	Handle under inert gas. Protect from humidity
P235 + P410	Keep cool, Protect from sunlight
P422	Store under inert gas

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.