



## SAFETY DATA SHEET

## FP 3% UL

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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

Date issued	10.12.2012
Revision date	17.04.2018

### 1.1. Product identifier

Product name	FP 3% UL
Article no.	V-FP3UL

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

Use of the substance / preparation	Appliance protection.
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### 1.3. Details of the supplier of the safety data sheet

#### Downstream user

Company name	Viking S.A.
Postal address	Z.I. Haneboesch
Postcode	L-4562
City	Differdange/Nieder Korn
Country	Luxembourg
Telephone number	+352 58 37 37 1
Fax	+352 58 37 36
Website	<a href="http://www.viking-emea.com">http://www.viking-emea.com</a>

### 1.4. Emergency telephone number

Emergency telephone	Telephone number: +44 1273 289451 Description: NCEC CareChem24
Identification, comments	Additional Emergency Phone Number in Section 16

## SECTION 2: Hazards identification

## 2.1. Classification of substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Eye Irrit. 2; H319
	Skin Irrit. 2; H315
	Aquatic Chronic 3; H412

## 2.2. Label elements

### Hazard pictograms (CLP)



Composition on the label	Zinc chloride 0,1 -0,9 %, 2-Methylpropan-1-ol 0,5 -0,9 %
Signal word	Warning
Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements	P273 Avoid release to the environment. P280 Wear protective gloves / protective clothing / eye protection / face 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. P332+P313 If skin irritation occurs: Get medical advice / attention. P337+P313 If eye irritation persists: Get medical advice / attention.

## 2.3. Other hazards

PBT / vPvB	The product does not meet the criteria for PBT (persistent / bioaccumulative / toxic) or vPvB (very persistent / very bioaccumulative).
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## SECTION 3: Composition / information on ingredients

### 3.2. Mixtures

Substance	Identification	Classification	Contents
Zinc chloride	CAS No.: 7646-85-7 EC No.: 231-592-0 Index No.: 030-003-00-2 REACH Reg. No.: 01-2119472431-44	Acute tox. 4; H302 Skin Corr. 1B; H314 Aquatic Acute 1; H400; M-factor 1 Aquatic Chronic 1; H410; M-factor 1	0,1 -0,9 %
2-Methylpentane-2,4-diol	CAS No.: 107-41-5 EC No.: 203-489-0 Index No.: 603-053-00-3 REACH Reg. No.: 01-2119539582-35	Eye Irrit. 2; H319 Skin Irrit. 2; H315	1 -2,9 %
2-Methylpropan-1-ol	CAS No.: 78-83-1 EC No.: 201-148-0 Index No.: 603-108-00-1 REACH Reg. No.: 01-2119484609-23	Flam. Liq. 3; H226 STOT SE 3; H335 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H336	0,5 -0,9 %

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

General	Provide rest, warmth and fresh air. Get medical attention if any discomfort continues.
Inhalation	Fresh air and rest. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing and launder thoroughly before re-use. Wash skin thoroughly with soap and water for several minutes. Get medical attention if any discomfort continues.
Eye contact	Immediately rinse with plenty of lukewarm water for at least 5 minutes. Remove any contact lenses and open eyelids widely. Contact physician if discomfort continues.
Ingestion	Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.
Recommended personal protective equipment for first aid responders	No recommendation given.

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

General symptoms and effects	Irritating to skin. Causes eye irritation.
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### 4.3. Indication of any immediate medical attention and special treatment needed

Medical treatment	Treat Symptomatically.
Medical monitoring for delayed effects	No recommendation given.
Separate first aid equipment	No recommendation given.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	This product is not flammable.
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### 5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	None.
Hazardous combustion products	In case of fire, carbon monoxide and carbon oxide might be released.

### 5.3. Advice for firefighters

Personal protective equipment	Wear respiratory protection.
Fire fighting procedures	Follow the general fire precautions indicated by the workplace.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures

Avoid contact with skin and eyes. Do not breathe vapour. For personal protection, see section 8.

## 6.2. Environmental precautions

Environmental precautionary measures

Prevent discharge of larger quantity to drain. Avoid discharge to the aquatic environment.

## 6.3. Methods and material for containment and cleaning up

Clean up

Absorb in vermiculite, dry sand or earth and place into containers. Collect spills to suitable waste containers. Further handling of waste – see section 13.

## 6.4. Reference to other sections

Additional information

See Sections 8 and 13 for information concerning protective equipment and waste treatment methods.

# SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

Handling

Avoid contact with skin and eyes. Avoid inhalation of vapours. Wash hands before breaks and before smoking, eating or drinking. Wash hands and contaminated areas with water and soap after finished work. Container must be kept tightly closed.

## 7.2. Conditions for safe storage, including any incompatibilities

Storage

Keep container tightly closed. Protect against direct sunlight. Keep cool in a well-ventilated space.

## 7.3. Specific end use(s)

Specific use(s)

See EWC-code under Section 13.

# SECTION 8: Exposure controls / personal protection

## 8.1. Control parameters

Substance	Identification	Value	TWA Year
Zinc chloride	CAS No.: 7646-85-7	<b>OEL short term value</b> Value: 2 mg/m <sup>3</sup>	
2-Methylpentane-2,4-diol	CAS No.: 107-41-5	TWA (8h) : 25 ppm TWA (8h) : 123 mg/m <sup>3</sup> <b>OEL short term value</b> Value: 123 mg/m <sup>3</sup>	TWA Year: 2011
2-Methylpropan-1-ol	CAS No.: 78-83-1	TWA (8h) : 50 ppm TWA (8h) : 154 mg/m <sup>3</sup> <b>OEL short term value</b> Value: 75 ppm <b>OEL short term value</b> Value: 231 mg/m <sup>3</sup>	

## 8.2. Exposure controls

## Safety signs



## Precautionary measures to prevent exposure

Appropriate engineering controls      An eye wash bottle must be available at the work site.

## Eye / face protection

Suitable eye protection      Wear approved chemical safety goggles where eye exposure is reasonably probable.

## Hand protection

Skin- / hand protection, long term contact      Butyl rubber gloves are recommended.

## Skin protection

Suitable protective clothing      Use protective clothes in order to avoid skin contact.

## Respiratory protection

Respiratory protection necessary at      In case of inadequate ventilation use suitable respirator.

## Hygiene / environmental

Specific hygiene measures      No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Dark coloured liquid.
Colour	Dark brown.
Odour	Characteristic.
Odour limit	Comments: No information.
pH	Status: In delivery state Value: 6,0 – 7,0
Melting point / melting range	Comments: No information.
Freezing point	Value: ~ -15 °C
Boiling point / boiling range	Value: > 100 °C
Flash point	Value: > 100 °C
Evaporation rate	Comments: No information.
Flammability (solid, gas)	Not relevant.

Explosion limit	Comments: Product is not explosive.
Vapour pressure	Comments: No information.
Vapour density	Value: < 1
Specific gravity	Value: 1.13 -1.17
Solubility	Comments: Soluble in water.
Partition coefficient: n-octanol/water	Comments: No information.
Spontaneous combustability	Comments: Not relevant.
Decomposition temperature	Comments: No information.
Viscosity	Value: < 12 cSt
Explosive properties	Product is not explosive.
Oxidising properties	Does not meet the criteria for oxidising.

## 9.2. Other information

# SECTION 10: Stability and reactivity

## 10.1. Reactivity

Reactivity	Stable product under normal conditions of handling and storage.
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## 10.2. Chemical stability

Stability	Stable product under normal conditions of handling and storage.
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## 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Stable product under normal conditions of handling and storage.
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## 10.4. Conditions to avoid

Conditions to avoid	Not known under normal conditions of handling and storage.
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## 10.5. Incompatible materials

Materials to avoid	Alkali earth metals.
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## 10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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# SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

Acute toxicity	Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral
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	Value: > 2000 mg/kg Species: Rat
Substance	Zinc chloride
Acute toxicity	<b>Type of toxicity:</b> Acute <b>Effect tested:</b> LD50 <b>Route of exposure:</b> Oral <b>Value:</b> = 350 mg/kg bw <b>Animal test species:</b> Rat <b>Comments:</b> Hazardous if ingested.
Substance	2-Methylpentane-2,4-diol
Acute toxicity	<b>Type of toxicity:</b> Acute <b>Effect tested:</b> LD50 <b>Route of exposure:</b> Oral <b>Value:</b> = 3700 mg/kg bw <b>Animal test species:</b> Rat <b>Comments:</b> Non-acute toxic.  <b>Type of toxicity:</b> Acute <b>Effect tested:</b> LD50 <b>Route of exposure:</b> Dermal <b>Value:</b> = 7920 mg/kg bw <b>Animal test species:</b> Rabbit <b>Comments:</b> Non-acute toxic.
Substance	2-Methylpropan-1-ol
Acute toxicity	<b>Type of toxicity:</b> Acute <b>Effect tested:</b> LC50 <b>Route of exposure:</b> Inhalation. <b>Duration:</b> = 4 hour(s) <b>Value:</b> = 6,5 mg/l <b>Animal test species:</b> Rat <b>Comments:</b> Might be hazardous if inhaled.  <b>Type of toxicity:</b> Acute <b>Effect tested:</b> LD50 <b>Route of exposure:</b> Oral <b>Value:</b> = 2460 mg/kg bw <b>Animal test species:</b> Rat <b>Comments:</b> Non-acute toxic.  <b>Type of toxicity:</b> Acute <b>Effect tested:</b> LD50 <b>Route of exposure:</b> Dermal <b>Value:</b> = 2460 mg/kg bw <b>Animal test species:</b> Rabbit <b>Comments:</b> Non-acute toxic.

### Other information regarding health hazards

Inhalation	May cause mild irritation of respiratory system.
Skin contact	Irritating to skin.

Eye contact	Causes serious eye irritation.
Ingestion	In case of ingestion of large quantities may cause nausea, vomiting, dizziness, confusion, loss of consciousness.
Sensitisation	No known chronic or acute health risks.
Mutagenicity	No known chronic or acute health risks.
Carcinogenicity, other information	No known chronic or acute health risks.
Reproductive toxicity	No known chronic or acute health risks.

## Symptoms of exposure

In case of ingestion	Ingestion of large quantities may cause cause nausea, vomiting, dizziness, confusion, loss of consciousness.
In case of skin contact	Irritating.
In case of inhalation	Slightly Irritating.
In case of eye contact	Irritation of eyes and mucous membrane.

## SECTION 12: Ecological information

### 12.1. Toxicity

Acute aquatic, fish	Value: > 1000 mg/l Test duration: 96 h Species: Leuciscus Idus
Substance	Zinc chloride
Acute aquatic, fish	<b>Toxicity type:</b> Acute <b>Value:</b> = 0,9 mg/l <b>Effect dose concentration :</b> LC50 <b>Exposure time:</b> = 96 hour(s) <b>Species:</b> Salmo salar <b>Comments:</b> Very toxic to aquatic life.
Substance	2-Methylpentane-2,4-diol
Acute aquatic, fish	<b>Toxicity type:</b> Acute <b>Value:</b> = 8510 mg/l <b>Exposure time:</b> 96 hour(s) <b>Species:</b> Gambusia affinis <b>Comments:</b> Not hazardous for environment.
Substance	2-Methylpropan-1-ol
Acute aquatic, algae	<b>Toxicity type:</b> Acute <b>Value:</b> = 290 mg/l <b>Effect dose concentration :</b> IC50 <b>Exposure time:</b> = 72 hour(s) <b>Comments:</b> Not hazardous for environment.
Substance	Zinc chloride
Acute aquatic, Daphnia	<b>Toxicity type:</b> Acute <b>Value:</b> = 0,329 mg/l



	<b>Effect dose concentration :</b> EC50 <b>Exposure time:</b> = 48 hour(s) <b>Species:</b> D. magna <b>Comments:</b> Very toxic to aquatic life.
Substance	2-Methylpentane-2,4-diol
Acute aquatic, Daphnia	<b>Toxicity type:</b> Acute <b>Value:</b> = 2800 mg/l <b>Exposure time:</b> 48 hour(s) <b>Species:</b> Ceriodaphnia sp. <b>Comments:</b> Not hazardous for environment.
Substance	2-Methylpropan-1-ol
Acute aquatic, Daphnia	<b>Toxicity type:</b> Acute <b>Value:</b> = 1030 mg/l <b>Effect dose concentration :</b> EC50 <b>Exposure time:</b> = 48 hour(s) <b>Species:</b> D. magna <b>Comments:</b> Not hazardous for environment.
Ecotoxicity	Harmful to aquatic life with long lasting effects.
Aquatic, comments	On basis of test data.

## 12.2. Persistence and degradability

Biodegradability	Value: > 90 Method: OECD 301A Test period: 28 days
Substance	2-Methylpentane-2,4-diol
Biodegradability	<b>Value:</b> = 0,02 <b>Method:</b> BOD5/COD
Substance	2-Methylpropan-1-ol
Biodegradability	<b>Value:</b> = 99 % <b>Method:</b> OECD 301A degradation in 14 days <b>Comments:</b> Readily biodegradable.
Persistence and degradability, comments	The product is expected to be biodegradable.

## 12.3. Bioaccumulative potential

Bioaccumulative potential	Bioaccumulation: Is not expected to be bioaccumulable.
Substance	Zinc chloride
Bioconcentration factor (BCF)	<b>Value:</b> = 2000 <b>Comments:</b> Risk of bioaccumulation.
Substance	2-Methylpentane-2,4-diol
Bioconcentration factor (BCF)	<b>Value:</b> < 10 <b>Comments:</b> No bioaccumulation expected.

## 12.4. Mobility in soil

Mobility	The product contains substances, which are water soluble and may spread in water systems.
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## 12.5. Results of PBT and vPvB assessment

PBT assessment results	Not Classified as PBT/vPvB by current EU criteria.
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## 12.6. Other adverse effects

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Specify the appropriate methods of disposal	Dispose of waste and residues in accordance with local authority requirements.
EWC waste code	EWC waste code: 160305 organic wastes containing dangerous substances Classified as hazardous waste: Yes
EU Regulations	Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. Annex III to Directive 2008/98/EC.

## SECTION 14: Transport information

Dangerous goods	No
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### 14.1. UN number

### 14.2. UN proper shipping name

### 14.3. Transport hazard class(es)

### 14.4. Packing group

### 14.5. Environmental hazards

### 14.6. Special precautions for user

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk (yes/no)	No
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## SECTION 15: Regulatory information

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

EEC-directive	Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC. Commission Directive 2012/45/EU adapting for the second time the Annexes to Directive 2008/68/EC of the European Parliament and of the Council on the inland transport of dangerous goods to scientific and technical progress.
Legislation and regulations	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances

and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

## 15.2. Chemical safety assessment

Chemical safety assessment Yes  
performed

## SECTION 16: Other information

List of relevant H-phrases  
(Section 2 and 3)

H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes Serious eye damage.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H336 May cause drowsiness or dizziness.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

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

Eye Irrit. 2; H319  
Skin Irrit. 2; H315  
Aquatic Chronic 3; H412

Additional information

Emergency Phone No  
\*Europe (English, Dutch, French, German, Italian, Spanish) +44 1273 289451  
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