

Printing date 01.11.2021 Version number 1.00 Revision: 26.01.2021

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

- · 1.1 Product identifier
- · Trade name: Lemon Oil 5-fold (ref.-no. 2018.2214)
- · Chemical Identification: Lemon, extr. (lemon oil terpeneless)
- · Article number: 2006#0057
- CAS Number: 84929-31-7
- **EC number:** 284-515-8
- · Registration number 01-2119495512-35-0024
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture

Flavours/Fragrances

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

MCI Miritz Citrus Intercontinental GmbH & Co. KG

Citrusstr. 3

D-37318 Kirchgandern Tel: 0049-36081-621-0 e-mail: info@miritz.de

MCI Miritz Citrus GmbH & Co. KG

Citrusstr. 3

D-37318 Kirchgandern Tel: 0049-36081-621-0 e-mail: info@miritz.de

MCI Miritz Citrus Ingredients LLC 28 Railroad Avenue Warwick, NY 10990

· Further information obtainable from:

Department Regulatory Affairs

Tel.: 0049-36081-621-0

info@miritz.de

· 1.4 Emergency telephone number:

MCI Miritz Germany: 0049-(0)-170-9131244

Chemtrec USA: 001-1-800-424-9300

Emergency Number China: 0086-532-8388-9090

### SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Flam. Liq. 3 H226 Flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

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

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- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms









GHS02

GHS07

GHS08

· Signal word Danger

### · Hazard-determining components of labelling:

(R)-p-mentha-1,8-diene

p-Mentha-1,4-diene

Citral

Neryl acetate

beta-Pinene

Geranyl acetate

Terpinolene

alpha-Pinene

Citronellal

### · Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

### · Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

*P261* Avoid breathing dust/fume/gas/mist/vapours/spray.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

*P331* Do NOT induce vomiting.

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

with water [or shower].

*P362+P364* Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· 2.3 Other hazards Can cause dry skin.

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

- · 3.1 Substances
- · CAS No. / Description

84929-31-7 Lemon oil

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· Identification number(s)

EINECS CAS 84929-31-7

EINECS 284-515-8

TSCA CAS 68648-39-5

Lemon, extr. (lemon oil terpeneless)

- · EC number: 284-515-8
- · Additional information: For the wording of the listed hazard phrases refer to section 16.

Dangerous compone	nts:	
CAS: 5989-27-5 EINECS: 227-813-5	(R)-p-mentha-1,8-diene	50-100%
	Chronic 3, H412	
	p-Mentha-1,4-diene	10-25%
EINECS: 202-794-6	🚸 Flam. Liq. 3, H226; 🕸 Asp. Tox. 1, H304	
CAS: 5392-40-5	Citral	2.5-10%
EINECS: 226-394-6	🕩 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	1
CAS: 127-91-3	beta-Pinene	1-2.5%
EINECS: 204-872-5	♠ Flam. Liq. 3, H226; ♣ Asp. Tox. 1, H304; ♠ Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1); ♠ Skin Irrit. 2, H315; Skin Sens. 1B, H317	
CAS: 105-87-3	Geranyl acetate	1-2.5%
EINECS: 203-341-5	🗘 Skin Irrit. 2, H315; Skin Sens. 1B, H317; Aquatic Chronic 3, H412	
CAS: 586-62-9	Terpinolene	1-2.5%
EINECS: 209-578-0	♠ Asp. Tox. 1, H304; ♠ Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1); ♠ Skin Sens. 1B, H317	
CAS: 80-56-8	alpha-Pinene	≤1%
	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1); Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1B, H317	
CAS: 106-23-0	Citronellal	≤1%
EINECS: 203-376-6	♦ Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1B, H317	1

### SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information:

If health disorder happens, call for medical help immediately.

Immediately remove any clothing soiled by the product.

· After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Do not induce vomiting; call for medical help immediately.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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 $\cdot$  4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

### SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: CO2, alcohol resistant foam, powder, water spray.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- $\cdot$  5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Carbon dioxide (CO2)

Smoke and soot

Do not use water with full jet to prevend fire spreading.

- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.
- · Additional information

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: Accidental release measures

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

Follow safety measures in chapter 7 and 8.

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Do not allow to penetrate the ground/soil.

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

### · 6.3 Methods and material for containment and cleaning up:

Wipe up little amounts with absorbent material like cloth or pulp.

Water and cleansing agent

Absorb with incombustible liquid-binding material (sand, diatomite, universal binders).

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

### · 6.4 Reference to other sections

Keep ignition source away, do not smoke and avoid flames.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### SECTION 7: Handling and storage

### · 7.1 Precautions for safe handling

personal protection equipment see point 8.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

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### · Information about fire - and explosion protection:

Fumes can combine with air to form an explosive mixture.

Moistened solids (e.g. cloth, pulp, filter panel, binder) has to be stored hermetically sealed and/or watered and proper disposed (see chapter 9 and 13).

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in unopened original receptacles.

Provide solvent resistant, sealed floor.

- · Information about storage in one common storage facility: Store away from oxidising agents.
- · Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

- · Storage class: 3
- · Classification according to Betriebssicherheitsverordnung (BetrSichV) Flammable liquid
- · 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

· 8.1 Control	l parameters
---------------	--------------

· Ingredients with limit values that require monitoring at the workplace:	
5989-27-5 (R)-p-	mentha-1,8-diene
	Long-term value: 28 mg/m³, 5 ppm 4(II);DFG, H, Sh, Y

·DNLLS		<b>DNELs</b>
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84929-31-7	Citrone, Ext. (REACH)	
Oral	DNEL, acute / short term exp., systemic effects	mg/kg (human, general population) No hazard identified.
	DNEL, long term exp., systemic effects	3.33 mg/kg bw d (human, general population)
Dermal	DNEL, acute / short term exp., local effects	μg/cm² (human, general population) Medium hazard (no threshold derived).
		μg/cm² (human, worker) Medium hazard (no threshold derived).
	DNEL, acute / short term exp., systemic effects	mg/kg bw d (human, general population No hazard identified.
		mg/kg bw d (human, worker) No hazard identified.
	DNEL, long term exp., local effects	μg/cm² (human, general population) No hazard identified.
		μg/cm² (human, worker) No hazard identified.
	DNEL, long term exp., systemic effects	3.33 mg/kg bw d (human, general population)
		6.67 mg/kg bw d (human, worker)

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Inhalative	DNEL, acute / short term exp., local	mg/m³ (human, general population)
	effects	No hazard identified.
		mg/m³ (human, worker) No hazard identified.
	DNEL, acute / short term exp., systemic effects	mg/m³ (human, general population) No hazard identified.
		mg/m³ (human, worker) No hazard identified.
	DNEL, long term exp., local effects	mg/m³ (human, general population) No hazard identified.
		mg/m³ (human, worker) No hazard identified.
	DNEL, long term exp., systemic effects	5.8 mg/m³ (human, general population
		23.3 mg/m³ (human, worker)
Irritation of eyes	DNEL, eye exposure	(human, general population) No hazard identified
		(human, worker) No hazard identified

### 84929-31-7 Citrone Ext (REACH)

04929-31-7 Curone, Ext. (KEACH)	
PNEC, aqua (freshwater)	5.4 μg/l (aqua (freshwater))
PNEC, aqua (marine water)	0.54 μg/l (aqua (marine water))
PNEC, aqua (intermittent releases freshwater)	5.77 μg/l (aqua (freshwater))
PNEC, sediment (freshwater)	1.3 mg/kg sedim. dw (sediment (freshwater))
PNEC, sediment (marine water)	0.13 mg/kg sedim. dw (sediment (marine water))
PNEC, soil	0.29 mg/kg soil dw (soil)
PNEC, secondary poisoning	mg/kg food (predator) No potential to cause toxic effects if accumulated (in higher organisms) via the food chain
PNEC, STP	2.1 mg/l (sewage treatment plant)
PNEC, air	(air) No hazard identified

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

Use personal protective equipment depending on concentration and amount of hazardous substance.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the skin.

Avoid contact with the eyes and skin.

### · Respiratory protection:

Suitable respiratory protection: filter class A2 (brown colour).

*Use the rules for application of respiratory protection systems.* 

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

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### · Hand protection

Preventive skin protection by use of skin-protecting agents is recommended.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

### · Penetration time of glove material

> 480 minutes at layerthickness of 0,425 millimeter (Sol-Vex 37-695/Ansell).

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

E.g. following product: Sol-Vex (37-695) from Ansell.

· As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

· Eye/face protection



Tightly sealed goggles according to EN 166:2001

· Body protection: Protective work clothing

### SECTION 9: Physical and chemical properties

- · 9.1 Information on basic physical and chemical properties
- · General Information

· Physical state Fluid

Colour: Yellow-green/brown
Odour: Characteristic
Odour threshold: Not determined.

• Melting point/freezing point: Undetermined.

· Boiling point or initial boiling point and boiling

range >35 °C • Flammability Not applicable.

· Lower and upper explosion limit

• Lower: 0.7 Vol %
 • Upper: 9.9 Vol %

• Flash point: 54 °C (ASTM D7094)

• Auto-ignition temperature: Product is not selfigniting; but in case of unpropitious storing conditions (air admission,

heat accumulation) selfignition is possible for moistened solids (e.g. cloth, pulp, filter panels,

binder).

· Decomposition temperature: Not determined.

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· pH	Not determined.
· Viscosity:	
Kinematic viscosity at 40 °C	$<18 \text{ mm}^2/\text{s}$
· Dynamic:	Not determined.
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	2.3 hPa
· Density and/or relative density	
· Density at 20 °C:	$0.8675 \ g/cm^3$
· Relative density	Not determined.
· Vapour density	Not determined.
9.2 Other information	
· Appearance:	
Form:	Fluid
· Important information on protection of health	
and environment, and on safety.	
· Ignition temperature:	255 °C
· Explosive properties:	Product is not explosive. However, formation of
	explosive air/vapour mixtures are possible.
· Change in condition	
Evaporation rate	Not determined.
Information with regard to physical hazard	!
classes	
Explosives	Void
	Void
Flammable gases	Void
	Void
Aerosols	Void
	Void
Oxidising gases	Void
	Void
· Gases under pressure	Void
	Void
· Flammable liquids	Flammable liquid and vapour.
	Void
Flammable solids	Void
	Void
Self-reactive substances and mixtures	Void
	Void
· Pyrophoric liquids	Void
	Void
· Pyrophoric solids	Void
	Void
	Void
Self-heating substances and mixtures	voiu
· Self-heating substances and mixtures	Void
· Self-heating substances and mixtures · Substances and mixtures, which emit flammable	Void
· Substances and mixtures, which emit flammable	Void
	Void Void
· Substances and mixtures, which emit flammable	Void



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· Oxidising solids	Void	
-	Void	
· Organic peroxides	Void	
-	Void	
· Corrosive to metals	Void	
	Void	
· Desensitised explosives	Void	
-	Void	

### SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

Heating causes vaporisation and formation of ignitable atmosphere is possible.

· 10.3 Possibility of hazardous reactions

Formation of explosive gas mixture with air possible.

Product is not selfigniting; but in case of unpropitious storing conditions (air admission, heat accumulation) selfignition is possible for moistened solids (e.g. cloth, pulp, filter panels, binder). Reacts violently with oxidising agents.

- · 10.4 Conditions to avoid No further relevant information available.
- $\cdot$  10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

No dangerous decomposition products expected by intended use.

### SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LO	· LD/LC50 values relevant for classification:		
5989-2	5989-27-5 (R)-p-mentha-1,8-diene		
Oral I	LD50 4,400 mg/kg (rat)		
5392-4	5392-40-5 Citral		
Oral I	LD50 4,960 mg/kg (rat)		

### · Skin corrosion/irritation

May cause photoxic effects.

Causes skin irritation.

- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Sensitisation: May cause an allergic skin reaction.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard May be fatal if swallowed and enters airways.
- · Additional toxicological information:
- · Acute effects (acute toxicity, irritation and corrosivity) Aspiration may cause lung damages.

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· 11.2 Information on other hazards

· Endocrine disrupting properties

None of the ingredients is listed.

### SECTION 12: Ecological information

### · 12.1 Toxicity

· Aquatic toxi	· Aquatic toxicity:		
84929-31-7	84929-31-7 Citrone, Ext. (REACH)		
LC50 (4 d)	5.65 mg/L (fish)		
EC50 (48h)	1.1 mg/L (daphnia)		
EC50 (72h)	8 mg/L (algae)		

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

- · 12.7 Other adverse effects
- · Remark: Toxic for fish
- · Remark: Quantitative data according to the ecological effects are not available.
- $\cdot \textit{Additional ecological information:}$
- · General notes:

Danger to drinking water if even small quantities leak into the ground.

Do not allow product to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Water hazard class 3 (German regulation)(AwSV 2884; CAS 84929-31-7): severe hazardous for water

Toxic for aquatic organisms

### SECTION 13: Disposal considerations

### · 13.1 Waste treatment methods

### · Recommendation

Recycling is prefered to disposal or burning.

Disposal must be made according to official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

	· European waste catalogue		
(	02 00 00	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING	
(		wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation	
(	02 03 03	wastes from solvent extraction	

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- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product. Moistened solids (e.g. cloth, pulp, filter panels, binder) can be burnt after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

15 02 02: Filter and absorption materials contaminated with hazardous agents.

SECTION 14: Transport information	
· 14.1 UN number or ID number · ADR, IMDG, IATA	UN1993
· 14.2 UN proper shipping name · ADR	1993 FLAMMABLE LIQUID, N.O.S. (d-limonene, p Mentha-1,4-diene), ENVIRONMENTALL HAZARDOUS
· IMDG · IATA	FLAMMABLE LIQUID, N.O.S. (d-limonene, p. Mentha-1,4-diene), MARINE POLLUTANT FLAMMABLE LIQUID, N.O.S. (d-limonene, p. Mentha-1,4-diene)
· 14.3 Transport hazard class(es)	Tremme 1, remember
· ADR	
· Class	3 (F1) Flammable liquids.
· Label  · IMDG	3
· IMDG	
· Class	3 Flammable liquids.
· Label  · IATA	3
· Class	3 Flammable liquids.
· Label	3

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14.4 Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards:	Product contains environmentally hazardou substances: d-Limonene
Marine pollutant:	Yes Symbol (fish and tree)
Special marking (ADR):	Symbol (fish and tree)
14.6 Special precautions for user	Warning: Flammable liquids.
Hazard identification number (Kemle	
EMS Number:	<i>F-E</i> , <u><i>S-E</i></u>
Stowage Category	A
14.7 Maritime transport in bulk accor	rding to
IMO instruments	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Excepted quantities $(\widetilde{EQ})$	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 m
Transport category	3
Tunnel restriction code	D/E
IMDG	
Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 m
UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (L
	LIMONENE, P-MENTHA-1,4-DIENE), 3, II
	ENVIRONMENTALLY HAZARDOUS

### SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- $\cdot \textit{Named dangerous substances ANNEX I Substance is not listed}.$
- · Seveso category
- E2 Hazardous to the Aquatic Environment
- P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment Annex II

None of the ingredients is listed.

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### · REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

### · Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

### · National regulations:

### · Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

### · Breakdown regulations:

Critical quantity values according to the regulations on accidents should be adhered to.

· Technical instructions (air):

Class	Share in %
NK	50-100

### · Waterhazard class:

Water hazard class 3 (German regulation)(AwSV 2884; CAS 84929-31-7): severe hazardous for water

### · Other regulations, limitations and prohibitive regulations

Comply with the rules and regulations of skin protection.

Comply with the rules and regulations of respiratory protection.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### · Relevant phrases

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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.

- · Recommended restriction of use For industrial application only.
- · Department issuing SDS: Regulatory Affairs
- Contact:

Department Regulatory Affairs

Tel.: 0049-36081-621-0

info@miritz.de

- · Date of previous version: 24.06.2020
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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ICAO: International Civil Aviation Organisation

 $ADR: Accord\ relatif\ au\ transport\ international\ des\ marchandises\ dangereuses\ par\ route\ (European\ Agreement\ Concerning\ the$ 

International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity - Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1: Skin sensitisation – Category 1 Skin Sens. 1B: Skin sensitisation – Category 1B Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3

DEN