

MATERIAL SAFETY DATA SHEET

A-Pap Pen, Liquid Blocker

Current Version: 1.1, 10. March 2025

Replaced Version: -



www.lucerna-chem.ch
Abendweg 18
6006 Luzern

SECTION 1: Name of the Product and Company

1.1 Product identifiers

Product/Trade name: A-Pap Pen Liquid Blocker, Regular (Broad point) / - Mini (Fine point)

Product Number: NAN-012 / NAN-011

Brand: Lucerna-Chem AG

Pure substance/mixture: Mixture

Contains Toluene; Solvent naphtha

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

Identified uses: Marker pen for slide glass to draw water repellent circle (Immunostaining). For Research Use Only.

Uses advised against: -

1.3 Details of the supplier of the safety data sheet

Company: Lucerna-Chem AG, Abendweg 18, 6006 Luzern

Phone: +41 41 420 96 36

Fax: +41 41 420 96 5

E-mail: info@lucerna-chem.ch

1.4 Emergency telephone number

Emergency Phone (Tox Info Suisse): 145 (only if calling from CH)

International emergency Phone (Tox-Center): +41 44 251 51 51

CHEMTREC (Chemical Emergencies): +41 43-508-2011

SECTION 2: Possible Hazards

2.1 Classification of the mixture according to Regulation (EC) No 1272/2008 (CLP)

Physical hazards

Hazard statements	Hazard class & Category	Category
H225 Highly flammable liquid and vapour.	Flammable Liquid	Flam. Liquid 2

Health hazards

Hazard statements	Hazard class & Category	Category
H304 May be fatal if swallowed and enters airways.	Aspiration Hazard	Asp. Tox. 1
H315 Causes skin irritation.	Skin Irritation	Skin Irrit. 2
H340 May cause genetic defects	Germ cell mutagenicity	Muta. 1B
H350 May cause cancer	Carcinogenicity	Carc. 1B
H361d Suspected of damaging fertility or the unborn child	Reproductive Toxicity	Repr. 2
H336 May cause drowsiness or dizziness. Inhalation, CNS, Narcotic effects	Specific Target Organ Toxicity - Single Exposure	STOT Single Exp. 3
H373 May cause damage to organs through prolonged or repeated exposure. Inhalation, CNS	Specific target organ toxicity - repeated	STOT Rep. Exp. 2

2.2 Labeling of the mixture

Pictograms:



GHS02, Flame



GHS08, Health Hazard



GHS07, Exclamation mark

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
H340	May cause genetic defects
H350	May cause cancer
H361d	Suspected of damaging the unborn child
H373	May cause damage to organs through prolonged or repeated exposure

Precautionary Statements:**Prevention**

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P201	Obtain special instructions before use
P210	Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P233	Keep container tightly closed.
P235+P403+P410	Store in a well-ventilated place. Keep cool. Protect from sunlight.
P264	Wash face, hands and any exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.

Response

P301+P310	IF SWALLOWED: Immediately call a doctor.
P331	Do NOT induce vomiting.
P314	Get medical advice/attention if you feel unwell.
P370+P378	In case of fire: Use foam, dry chemical, or carbon dioxide to extinguish.
P303+P352+P353	IF ON SKIN (or hair): Wash with plenty of water. Rinse skin with water/shower.
P362	Take off contaminated clothing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/ attention.
P312	Call a POISON CENTER / doctor if you feel unwell.

Unknown aquatic toxicity: Contains 0 % of components with unknown hazards to the aquatic environment.

2.3 Other Hazards**Results of PBT and vPvB assessment**

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

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition / Information on Ingredients**3.1 Chemical characterization**

Liquid mixture

3.2 Hazardous ingredients

Hazardous component	Classification according to Regulation (EC) No 1272/2008 (CLP)	Weight-%	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
<u>Toluene</u> CAS-No.: 108-88-3 EINECS: 203-625-9 EC-Index: 601-021-00-3 REACH Reg. No.: -	Flam. Liq. 2 (H225) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Repr. 2 (H361d) STOT SE 3 (H336) STOT RE 2 (H373)	<35%	-	-	-
<u>Solvent naphtha (petroleum), light arom.</u> CAS-No.: 64742-95-6 EINECS: 265-199-0 EC-Index: 649-356-00-4 REACH Reg. No.: -	Muta. 1B (H340) Carc. 1B (H350) Asp. Tox. 1 (H304)	<30%	-	-	-

For full text of abbreviations, please see Section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATE_{mix}) for classifying a mixture based on its components.

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 – 4hr - dust/mist - mg/L	Inhalation LC50 - 4hr - vapour - mg/L	Inhalation LC50- 4hr - gas- ppm
Toluene 108-88-3	2600	12000	12.5	No data available	No data available
Solvent naphtha 64742-95-6	8400	2000	No data available	No data available	No data available

This product does not contain any reportable EU-listed substances of very high concern (SVHC) in a concentration of $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59).

SECTION 4: First Aid Measures

4.1 Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. Immediate medical attention is required.
Inhalation	Remove to fresh air. Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical attention. Delayed pulmonary edema may occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical attention.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Avoid contact with skin, eyes or clothing.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	See Section 2.2 for more information. Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
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4.3 Indication of any immediate medical attention and special treatment needed

Note to doctors	Because of the danger of aspiration, emesis or gastric lavage should not be used unless the risk is justified by the presence of additional toxic substances.
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SECTION 5: Fire Fighting Measures

5.1 Fire extinguishing media

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
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5.3 Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2 Environmental precautions

Environmental precautions	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
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6.3 Methods and materials for containment and cleaning up

Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapour suppressing foam may be used to reduce vapours. Dyke far ahead of spill to collect run-off water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4 Reference to other sections

For information on safe handling, see section 7
For information on personal protection information, see section 8
For information on disposal, see section 13.

SECTION 7: Handling and Storage

7.1 Precautions for a safe handling

Advice on safe handling

Use personal protection equipment. Avoid breathing vapours or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash it before reuse. In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep away from heat, open flame and strong oxidants. Keep out of the reach of children. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near combustible materials. Store preferably at 25°C.

Lagerklasse (TRGS 510)

LGK 3.

7.3 Specific end use

Risk Management Methods (RMM): The information required is contained in this Safety Data Sheet.

SECTION 8: Limitation to Exposition and Protective Equipment

8.1 Control parameters

This product (as delivered) contains no relevant components with workplace exposure limits in CH

Exposure Limits

Chemical name	Switzerland
Toluene 108-88-3	TWA, Mak-Wert: 50 ppm TWA, MAK-Wert: 190 mg/m ³ STEL, KZWG: 200 ppm STEL, KZWG: 760 mg/m ³ H (Skin resorptive)

Biological occupational exposure limits

Chemical name	Switzerland
Toluene 108-88-3	600 µg/L (whole blood - Toluene end of shift) 6.48 µmol/L (whole blood - Toluene end of shift) 2 g/g creatinine (urine - Hippuric acid end of shift, and after several shifts (for long-term exposures)) 1.26 mmol/mmol creatinine (urine - Hippuric acid end of shift, and after several shifts (for long-term exposures)) 0.5 mg/L (urine -o-Cresol end of shift, and after several shifts (for long-term exposures)) 4.62 µmol/L (urine -o-Cresol end of shift, and after several shifts (for long-term exposures)) 75 µg/L (urine - Toluol end of shift)

Derived No Effect Level (DNEL) – Workers

Chemical name	Oral	Dermal	Inhalation
Toluene 108-88-3	-	384 mg/kg bw/day [4] [6]	192 mg/m ³ [1] [3] 384 mg/m ³ [1] [4] 192 mg/m ³ [2] [3] 384 mg/m ³ [2] [4]
Solvent naphtha 64742-95-6	-	-	1286.4 mg/m ³ [1] [4] 837.5 mg/m ³ [2] [3] 1066.67 mg/m ³ [2] [4]

Notes

[1] Systemic health effects. [2] Local health effects. [3] Long term. [4] Short term.

Derived No Effect Level (DNEL) – General Public

Chemical name	Oral	Dermal	Inhalation
Toluene 108-88-3	8.13 mg/kg bw/day [1] [3]	-	56.5 mg/m ³ [1] [3] 226 mg/m ³ [1] [4] 56.5 mg/m ³ [2] [3] 226 mg/m ³ [2] [4]
Solvent naphtha 64742-95-6	-	-	1152 mg/m ³ [1] [4] 178.57 mg/m ³ [2] [3] 640 mg/m ³ [2] [4]

Notes

[1] Systemic health effects. [2] Local health effects. [3] Long term. [4] Short term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
Toluene 108-88-3	0.68 mg/L	0.68 mg/L	0.68 mg/L	-	-
	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
	16.39 mg/kg sediment dw	16.39 mg/kg sediment dw	13.61 mg/L	2.89 mg/kg soil dw	-

8.2 Exposure controls**8.2.1 General protective and hygienic measures**

Handle in accordance with good industrial or laboratories hygiene and safety practice.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.

8.2.2 Personal protective equipment**Eye/face protection**

Eye protection must conform to standard EN 166. Tight sealing safety goggles.



Safety glasses with side protection

Hand protection

Wear suitable gloves. Impervious gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.



Hand protection

Short term:
Material: fluorinated rubber
Minimum layer thickness: 0,38 mm
Break through time: > 480 min

Skin and body protection

Long-term:
Material: fluorinated rubber
Minimum layer thickness: 0,38 mm
Break through time: > 480 min
Impervious clothing, lab coat (En 13034). Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.
Antistatic boots.

Respiratory protection

Recommended filtering respiratory protection:
DIN EN 136/140/143, DIN 14387 or other accompanying standards relating to the used respiratory protection system.
Recommended Filter type: Filter type ABEK

8.2.3 Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and Chemical Characteristics

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Color	Light green
Odor	Fragrance
Odor Threshold	No information available

a) pH at 20°C:	pH 5.8
b) Melting point/freezing point	no data available
c) Initial boiling point and boiling range	no data available
d) Flash point	no data available
e) Evaporation rate	no data available
f) Flammability (solid, gas)	no data available
g) Explosive limits (upper / lower flammability)	no data available
h) Vapour pressure	no data available
i) Vapour density	no data available
j) Relative density	no data available
k) Water solubility	insoluble
l) Partition coefficient: n- octanol/water	no data available
m) Auto-ignition temperature	280°C
n) Decomposition temperature	no data available
o) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: no data available
p) Explosive properties	no data available
q) Oxidizing properties	no data available

9.2 Other safety informations:

no data available

SECTION 10: Stability and Reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Stable under standard ambient storage and usage conditions (room temperature)

Explosion data

Sensitivity to mechanical impact:	None
Sensitivity to static discharge:	Yes

10.3 Possibility of hazardous reactions

Not to be expected at proper use

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong acids. Strong bases. Strong oxidising agents.

10.6 Hazardous decomposition products

None known based on information supplied.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. May cause drowsiness or dizziness.
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Eye contact	Specific test data for the substance or mixture is not available. May cause irritation.
Skin contact	Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Redness. May cause redness and tearing of the eyes. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
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Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)	10'160 mg/kg
ATEmix (dermal)	5'590 mg/kg
ATEmix (inhalation-vapour)	14.2 mg/l

Component information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Toluene 108-88-3	= 5580 mg/kg (Rat)	= 12124 mg/kg (Rabbit)	= 28.1 mg/L (Rat) 4 h
Solvent naphtha 64742-95-6	= 8400 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	= 5.2 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Classification based on data available for ingredients. Causes skin irritation.
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Serious eye damage/eye irritation	No information available.
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Respiratory or skin sensitisation	No information available.
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Germ cell mutagenicity	Contains a known or suspected mutagen. Classification based on data available for ingredients. May cause genetic defects.
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Ingredients above the cut-off threshold considered as relevant which are listed as mutagenic:

Chemical name	Switzerland, EU
Solvent naphtha	Muta. 1B

Carcinogenicity	Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.
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The table indicates whether each agency has listed any ingredient as a carcinogen:

Chemical name	Switzerland, EU
Solvent naphtha	Carc. 1B

Reproductive toxicity	Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. Suspected of damaging fertility or the unborn child.
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Ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins:

Chemical name	Switzerland, EU
Toluene	Repr. 1B

STOT - single exposure	May cause drowsiness or dizziness.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	May be fatal if swallowed and enters airways.

11.2 Additional Information

11.2.1 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

11.2.1 Other adverse effects

No information available.

SECTION 12: Ecological Information

General note: Avoid release into the environment. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.1 Toxicity

Ecotoxicity	The environmental impact of this product has not been fully investigated.
Unknown aquatic toxicity	Contains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Toluene 108-88-3	EC50: >433mg/L (96h, Pseudokirchneriella subcapitata) EC50: =12.5mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 15.22 - 19.05mg/L (96h, Pimephales promelas) LC50: =12.6mg/L (96h, Pimephales promelas) LC50: 5.89 - 7.81mg/L (96h, Oncorhynchus - 17.16mg/L (96h, Oncorhynchus mykiss) LC50: =5.8mg/L (96h, Oncorhynchus mykiss) LC50: 11.0 - 15.0mg/L (96h, Lepomis macrochirus) LC50: =54mg/L (96h, Oryzias latipes) LC50: =28.2mg/L (96h, Poecilia reticulata) LC50: 50.87 - 70.34mg/L (96h, Poecilia reticulata)	-	EC50: 5.46 - 9.83mg/L (48h, Daphnia magna) EC50: =11.5mg/L (48h, Daphnia magna)
Solvent naphtha 64742-95-6	-	LC50: =9.22mg/L (96h, Oncorhynchus mykiss)	-	EC50: =6.14mg/L (48h, Daphnia magna)

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available for mixture

Component information:

Chemical name	Partition coefficient
Toluene	2.73

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT / vPvB criteria according to REACH, Annex XIII.

12.6 Other adverse effects

No data available

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

Any chemical waste is a potential environmental pollutant. The generation of waste should be avoided or minimized wherever possible. **ALL DISPOSAL MUST BE IN ACCORDANCE WITH ALL LOCAL, REGIONAL, NATIONAL, AND INTERNATIONAL REGULATIONS.** If in doubt, please contact your local waste disposal company, where you will obtain information on laboratory waste disposal.

Waste from residues/unused products

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. Consign to a licensed waste disposal company. Contaminated containers should be treated like the product itself.

SECTION 14: Transport

General note: **This product is NOT subject to transport regulations.**

14.1 UN-Nummer

ADR, RID, IATA, IMDG: UN 1993

14.2 UN proper shipping name

ADR, RID, IATA, IMDG: FLAMMABLE LIQUID, N.O.S. (Toluene)

14.3 Transport hazard class(es)

ADR, RID, IATA, IMDG: Class 3

14.4 Packaging group

ADR, RID, IATA, IMDG: III

Description: UN 1993, FLAMMABLE LIQUID, N.O.S. (Toluene), 3, III (D/E)

14.5 Environmental hazards

ADR, RID, IATA, IMDG: No

14.6 Special precautions for user

ADR

Special provisions: 274, 601
Classification Code: F1
Excepted quantities: 30ml inner packaging, 1L outer Packaging
Limited quantities: 5L
Tunnel restriction code: (D/E)

RID

Special provisions: 274, 601, 640D
Classification Code: F1
Excepted quantities: 30ml inner packaging, 1L outer Packaging
Limited quantities: 5L

IATA

Special provisions: A3
ERG code: 3L
Limited Quantities (Packing Instruction Y344): 10 L per packaging

IMDG

Special provisions: 223, 274
EmS-No: F-E, S-E

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No information available

SECTION 15: Regulatory Information

This MSDS is in accordance with swiss national requirements and the regulations (EC) No 1272/2008, 453/2010 (EC) and 830/2015 (EC) amended by Regulation (EU) 2020/878.

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

Control of major-accident hazards involving dangerous substances: This product does not contain substances listed in Annex I of the Seveso III Directive (Directive 2012/18/EU) at or above the applicable thresholds. Therefore, it is not subject to the provisions concerning the control of major-accident hazards.

Water hazard class: no data, prevent environmental contamination

Volatile Organic Compounds (VOC): no data

Substance of Very High Concern (SVHC): This product does not contain any substances of very high concern (SVHC) listed by the European Chemicals Agency (ECHA) in concentrations equal to or greater than 0.1% by weight.

National regulations

Observe work restrictions regarding maternity protection in accordance to SR 822.111.52
Take note of SR 822.115.2 on the protection of young people (<18) at work.

15.2 Chemical safety assessment

For this product no chemical safety assessment was carried out

SECTION 16: Other Information

16.1 Full text of H-Statements referred to in section 2 and 3

H225	Flam. Liq. 2	Flammable liquids (Cat. 2)	Highly flammable liquid and vapour
H304	Asp. Tox. 1	Aspiration Toxicity (Cat. 1)	May be fatal if swallowed and enters airways
H315	Skin Irrit. 2	Skin irritation (Cat. 2)	Causes skin irritation
H336	STOT SE 3	Specific target organ toxicity - single exposure (Cat. 3), Central Nervous system (CNS)	May cause drowsiness or dizziness
H340	Muta. 1B	Germ cell mutagenicity (Cat. 1B)	May cause genetic defects
H350	Carc. 1B	Carcinogenicity (Cat. 1B)	May cause cancer
H361d	Repr. 2	Reproductive toxicity (Cat. 2)	Suspected of damaging fertility or the unborn child
H373	STOT RE 2	Specific target organ toxicity - repeated exposure, Inhalation (Cat. 2), Liver, CNS	May cause damage to organs through prolonged or repeated exposure

ADR: Accord européen sur le transport 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
ICAO: International Civil Aviation Organization
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
EC-Index: European Community number
CAS: Chemical Abstracts Service
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
LC50: lethal concentration, 50 percent
LD50: lethal dose, 50 percent
PBT: persistent (P), bioaccumulative(B) and toxich (T)
vPvB: very persistent (vP) and very bioaccumulative (vB)

* Data / content revised compared to the previous version

16.2 Further information

These informations are put together to the best of our knowledge without demand of completeness and represent no assurance of characteristics of this product. These informations should be understood only as a main thread for the user. Existing laws and regulations are observed by the consignee of our product at one's own risk.