Safety data sheet

according to Regulation (EC) No 1907/2006, Article 31

Printing date 14.07.2026 Version number 45 (replaces version 44) Revision: 14.07.2026

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

· **1.1 Product identifier**

· **Trade name:** GRF CLEANER TI 5L*1 L221

· **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**
Thinner, Diluent
Cleaning agent/ Cleaner

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**
Bison International
Dr.A.F.Philipsstraat 9
NL-4462 EW Goes
PO Box 160
NL-4460 AD Goes
tel. +31 88 3235700
fax. +31 88 3235800
e mail: sds@boltonadhesives.com

· **Further information obtainable from:** PSRA

· **1.4 Emergency telephone number:**
National Poisons Information Centre: +353 (1) 809 2166 (8.00 a.m. to 10.00 p.m. 7 days a week)
Healthcare Professionals: +353 (1) 809 2566 (24 hour service)

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**

Flam. Liq. 2	H225 Highly flammable liquid and vapour.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
STOT SE 3	H336 May cause drowsiness or dizziness.
STOT RE 2	H373 May cause damage to the nervous system through prolonged or repeated exposure.
Asp. Tox. 1	H304 May be fatal if swallowed and enters airways.
Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects.

· **2.2 Label elements**

· **Classification needs to be in accordance with the NZ Hazardous Substances (Hazard Classification) Notice 2020**
The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS02 GHS07 GHS08 GHS09

· **Signal word** Danger

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· **Hazard-determining components of labelling:**
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane
n-hexane
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics
Ethyl acetate
· **Hazard statements**
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to the nervous system through prolonged or repeated exposure.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.
· **Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
P331 Do NOT induce vomiting.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of contents/container in accordance with national regulations.
· **2.3 Other hazards**
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable
· **vPvB:** Not applicable

· **Determination of endocrine-disrupting properties**		
78-93-3	Butanone	List II

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SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· **Description:** Cleansing agent

· **Dangerous components:**		
EC number: 926-605-8 Reg.nr.: 01-2119486291-36-XXXX	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336, EUH066	25-50%

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CAS: 141-78-6 EINECS: 205-500-4 Index number: 607-022-00-5 Reg.nr.: 01-2119475103-46-XXXX	Ethyl acetate Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	10-25%
EC number: 927-510-4 Reg.nr.: 01-2119475515-33-XXXX	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	≥10-<25%
CAS: 78-93-3 EINECS: 201-159-0 Index number: 606-002-00-3 Reg.nr.: 01-2119457290-43-XXXX	Butanone Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	10-25%
CAS: 110-54-3 EINECS: 203-777-6 Index number: 601-037-00-0 Reg.nr.: 01-2119480412-44-XXXX	n-hexane Flam. Liq. 2, H225; Repr. 2, H361f; STOT RE 1, H372; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit. 2, H315; STOT SE 3, H336	≥1-<2.5%
CAS: 110-82-7 EINECS: 203-806-2 Index number: 601-017-00-1 Reg.nr.: 01-2119463273-41-XXXX	cyclohexane Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; STOT SE 3, H336	≥0.25-<1%

· **SVHC**

110-54-3	n-hexane

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:**
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. If symptoms persist, consult a doctor.
· **After swallowing:** If symptoms persist consult doctor.
· **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· **Suitable extinguishing agents:**
Water haze
Alcohol resistant foam
Fire-extinguishing powder
Carbon dioxide
· **For safety reasons unsuitable extinguishing agents:** Water with full jet
· **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.
· **5.3 Advice for firefighters**
· **Protective equipment:** No special measures required.
· **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:**
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:**
Send for recovery or disposal in suitable receptacles.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections**
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**
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· **Information about fire - and explosion protection:**
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 in a cool location.
· **Information about storage in one common storage facility:** Not required

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· **Further information about storage conditions:**
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
· **Storage class:** 3
· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

141-78-6 Ethyl acetate	
OEL (Ireland)	Short-term value: 1468 mg/m³, 400 ppm Long-term value: 734 mg/m³, 200 ppm IOELV
IOELV (EU)	Short-term value: 1468 mg/m³, 400 ppm Long-term value: 734 mg/m³, 200 ppm
78-93-3 Butanone	
OEL (Ireland)	Short-term value: 900 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm Skin, IOELV
IOELV (EU)	Short-term value: 900 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm
110-54-3 n-hexane	
OEL (Ireland)	Long-term value: 72 mg/m³, 20 ppm IOELV, Skin
IOELV (EU)	Long-term value: 72 mg/m³, 20 ppm
110-82-7 cyclohexane	
OEL (Ireland)	Long-term value: 700 mg/m³, 200 ppm IOELV
IOELV (EU)	Long-term value: 700 mg/m³, 200 ppm

· **DNELs**

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane		
Oral	Consumer, oral, longterm exposition	1301 mg/kg bw/day (rat)
Dermal	Worker, dermal, longterm exposition	13964 mg/kg bw/day (rat)
	Consumer, dermal, longterm exposition	1377 mg/kg bw/day (rat)
Inhalative	Worker, inhalative, longterm exposition	5306 mg/m³ (rat)
	Consumer, inhalative, longterm exposition	1131 mg/m³ (rat)
141-78-6 Ethyl acetate		
Oral	Consumer, oral, longterm exposition	4.5 mg/kg bw/day
Dermal	Worker, dermal, longterm exposition	63 mg/kg bw/day
	Consumer, dermal, longterm exposition	37 mg/kg bw/day
Inhalative	Worker, inhalative, shortterm exposition	1468 mg/m³
	Worker, inhalative, longterm exposition	734 mg/m³

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	Consumer DNEL, acute inhalation	734 mg/m³
	Consumer, inhalative, longterm exposition	367 mg/m³
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		
Oral	Consumer, oral, longterm exposition	149 mg/kg bw/day (rat)
Dermal	Worker, dermal, longterm exposition	300 mg/kg bw/day (rat)
	Consumer, dermal, longterm exposition	149 mg/kg bw/day (rat)
Inhalative	Worker, inhalative, longterm exposition	2085 mg/m³ (rat)
	Consumer, inhalative, longterm exposition	477 mg/m³ (rat)
78-93-3 Butanone		
Oral	Consumer, oral, longterm exposition	31 mg/kg bw/day
Dermal	Worker, dermal, longterm exposition	1161 mg/kg bw/day
	Consumer, dermal, longterm exposition	412 mg/kg bw/day
Inhalative	Worker, inhalative, shortterm exposition	900 mg/m³
	Worker, inhalative, longterm exposition	600 mg/m³
	Consumer DNEL, acute inhalation	450 mg/m³
	Consumer, inhalative, longterm exposition	106 mg/m³
110-82-7 cyclohexane		
Oral	Consumer, oral, longterm exposition	59.4 mg/kg bw/day (rat)
Dermal	Worker, dermal, longterm exposition	2016 mg/kg bw/day (rat)
	Consumer, dermal, longterm exposition	1186 mg/kg bw/day (rat)
Inhalative	Worker, inhalative, shortterm exposition	700 mg/m³ (rat)
	Worker, inhalative, longterm exposition	700 mg/m³ (rat)
	Consumer DNEL, acute inhalation	412 mg/m³ (rat)
	Consumer, inhalative, longterm exposition	206 mg/m³ (rat)

· **PNECs**

141-78-6 Ethyl acetate		
	Fresh water	0.24 mg/l
	Fresh water sediment	1.15 mg/kg dry weight
	Marine water	0.024 mg/l
	Marine sediment	0.115 mg/kg dry weight
	Soil	0.148 mg/kg
	Sewage treatment plant	650 mg/l
78-93-3 Butanone		
Oral	Secondary Poisoning	1000 mg/kg
	Fresh water	55.8 mg/l
	Fresh water sediment	284.7 mg/kg dry weight
	Marine water	55.8 mg/l
	Marine sediment	284.7 mg/kg dry weight
	Soil	22.5 mg/kg
	Sewage treatment plant	709 mg/l

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	Sporadic release	55.8 mg/l
110-82-7 cyclohexane		
	Fresh water	0.207 mg/l (rat)
	Fresh water sediment	3.627 mg/kg dry weight (rat)
	Marine water	0.207 mg/l (rat)
	Marine sediment	3.627 mg/kg dry weight (rat)
	Soil	2.99 mg/kg (rat)
	Sewage treatment plant	3.24 mg/l (rat)
	Sporadic release	0.207 mg/l

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· **Appropriate engineering controls** No further data; see section 7.
· **Individual protection measures, such as personal protective equipment**
· **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes and skin.
· **Respiratory protection:**
Use suitable respiratory protective device in case of insufficient ventilation.
· **Recommended filter device for short term use:** Filter A
· **Hand protection**
Solvent resistant gloves



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**
Recommended thickness of the material: > 0,12 mm
Butyl rubber, BR
Nitrile rubber, NBR
Recommended thickness of the material: > 0,7 mm
· **Penetration time of glove material**
For the mixture of chemicals mentioned below the penetration time has to be at least 10 minutes (Permeation according to EN 374 Part 3: Level 1).
For the mixture of chemicals mentioned below the penetration time has to be at least 120 minutes (Permeation according to EN 374 Part 3: Level 4).

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· **Eye/face protection**



Tightly sealed goggles

Goggles recommended during refilling

· **Body protection:**
Use protective suit.
Solvent resistant protective clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Physical state**	Liquid
· **Colour:**	According to product specification
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined
· **Melting point/freezing point:**	Undetermined
· **Boiling point or initial boiling point and boiling range**	60 °C
· **Flammability**	Highly flammable.
· **Lower and upper explosion limit**	
· **Lower:**	0.7 Vol %
· **Upper:**	11.5 Vol %
· **Flash point:**	-9 °C
· **Auto-ignition temperature:**	450 °C
· **Decomposition temperature:**	Not determined
· **pH**	Not determined
· **Viscosity:**	
· **Kinematic viscosity**	Not determined
· **Dynamic at 20 °C:**	5 mPas
· **Solubility**	
· **water:**	Not miscible or difficult to mix.
· **Partition coefficient n-octanol/water (log value)**	Not determined
· **Vapour pressure at 20 °C:**	105 hPa
· **Vapour pressure at 50 °C:**	360 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	0.79 g/cm³
· **Relative density**	Not determined
· **Vapour density**	Not determined
· **9.2 Other information**	All relevant physical data were determined for the mixture. All non-determined data are not measurable or not relevant for the characterization of the mixture.

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· **Appearance:**	
· **Form:**	Fluid
· **Important information on protection of health and environment, and on safety.**	
· **Ignition temperature:**	Product is not selfigniting.
· **Explosive properties:**	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· **Solvent content:**	
· **Organic solvents:**	100.0 %
· **Solids content:**	0.0 %
· **Change in condition**	
· **Evaporation rate**	Not determined

· **Information with regard to physical hazard classes**	
· **Explosives**	Void
· **Flammable gases**	Void
· **Aerosols**	Void
· **Oxidising gases**	Void
· **Gases under pressure**	Void
· **Flammable liquids**	Highly flammable liquid and vapour.
· **Flammable solids**	Void
· **Self-reactive substances and mixtures**	Void
· **Pyrophoric liquids**	Void
· **Pyrophoric solids**	Void
· **Self-heating substances and mixtures**	Void
· **Substances and mixtures, which emit flammable gases in contact with water**	Void
· **Oxidising liquids**	Void
· **Oxidising solids**	Void
· **Organic peroxides**	Void
· **Corrosive to metals**	Void
· **Desensitised explosives**	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** Danger of forming toxic pyrolysis products.

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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/LC50 values relevant for classification:**		
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane		
Oral	LD50	>3350 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4 h	>20 mg/l (rat)
141-78-6 Ethyl acetate		
Oral	LD50	4934 mg/kg (rabbit)
Dermal	LD50	>20000 mg/kg (rabbit)
Inhalative	LC50/4 h	29.3 mg/l (rat)
Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics		
Oral	LD50	>5840 mg/kg (rat)
Dermal	LD50	>2920 mg/kg (rat)
Inhalative	LC50/4 h	>23.3 mg/l (rat)
78-93-3 Butanone		
Oral	LD50	>2193 mg/kg (rat)
Dermal	LD50	>8050 mg/kg (rat)
110-54-3 n-hexane		
Oral	LD50	16000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)
Inhalative	LC50/4 h	172 mg/l (rat)
110-82-7 cyclohexane		
Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalative	LC50/4 h	32.88 mg/l (rat)

· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes skin irritation.
· **Serious eye damage/irritation**
Causes serious eye irritation.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **Germ cell mutagenicity**
Not applicable
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** May cause drowsiness or dizziness.
· **STOT-repeated exposure**
May cause damage to the nervous system through prolonged or repeated exposure.
· **Aspiration hazard** May be fatal if swallowed and enters airways.

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· **Additional toxicological information:**
· **Acute effects (acute toxicity, irritation and corrosivity)** Not applicable
· **Sensitisation** Not applicable
· **Repeated dose toxicity** Not applicable
· **11.2 Information on other hazards**

· **Endocrine disrupting properties**		
78-93-3	Butanone	List II

SECTION 12: Ecological information

· **12.1 Toxicity**
· **Aquatic toxicity:** No further relevant information available.
· **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
· **Additional ecological information:**
· **General notes:**
Do not allow product to reach ground water, water course or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Disposal must be made according to official regulations.

· **Uncleaned packaging:**
· **Recommendation:**
Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· **14.1 UN number or ID number**
· **ADR/ADN, IMDG, IATA** UN1993

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· **14.2 UN proper shipping name**	
· **ADR/ADN**	1993 FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrotreated light, ETHYL ACETATE), special provision 640D
· **IMDG**	FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrotreated light, ETHYL ACETATE), MARINE POLLUTANT
· **IATA**	FLAMMABLE LIQUID, N.O.S. (Naphtha (petroleum), hydrotreated light, ETHYL ACETATE)
· **14.3 Transport hazard class(es)**	
· **ADR/ADN**	
· **Class**	3 (F1) Flammable liquids.
· **Label**	3
· **IMDG**	
· **Class**	3 Flammable liquids.
· **Label**	3
· **IATA**	
· **Class**	3 Flammable liquids.
· **Label**	3
· **14.4 Packing group**	
· **ADR/ADN, IMDG, IATA**	II
· **14.5 Environmental hazards:**	Product contains environmentally hazardous substances: Naphtha (petroleum), hydrotreated light
· **Marine pollutant:**	Yes Symbol (fish and tree)
· **Special marking (ADR/ADN):**	Symbol (fish and tree)
· **14.6 Special precautions for user**	Warning: Flammable liquids.
· **Hazard identification number (Kemler code):**	33
· **EMS Number:**	F-E,S-E

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· **Stowage Category**	B
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable
· **Transport/Additional information:**	
· **Quantity limitations**	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· **ADR/ADN**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **Transport category**	2
· **Tunnel restriction code**	D/E
· **IMDG**	
· **Limited quantities (LQ)**	1L
· **Excepted quantities (EQ)**	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· **Remarks:**	For substances with class 3 according to IMDG-Code chapter 2.3.2.2 packing group is classified in packing group III, as viscosity is in accordance with requirements (flow time t > 100s).
· **UN "Model Regulation":**	UN 1993 FLAMMABLE LIQUID, N.O.S. (NAPHTHA (PETROLEUM), HYDROTREATED LIGHT, ETHYL ACETATE), 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**
· **Named dangerous substances - ANNEX I** None of the ingredients is 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, 57

· **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.

· **Regulation (EC) No 273/2004 on drug precursors**

78-93-3	Butanone	3

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

78-93-3	Butanone	3

· **National regulations:**

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

110-54-3	n-hexane

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not 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**

H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H361f Suspected of damaging fertility.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

· **Classification according to Regulation (EC) No 1272/2008**

Flammable liquids	Bridging principles
Skin corrosion/irritation Serious eye damage/irritation Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated exposure) Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
Aspiration hazard	Expert judgement

· **Department issuing SDS:** PSRA

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· **Contact:** PSRA
· **Date of previous version:** 20.01.2022
· **Version number of previous version:** 44
· **Abbreviations and acronyms:**
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
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
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
· *** Data compared to the previous version altered.**

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