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

1.1 Product identifier

530 Thinner

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

Relevant identified uses

Solvent / Diluent

1.3 Details of the supplier of the safety data sheet

Supplier

Renia Gesellschaft mbH
Ostmerheimer Straße 516
51109 Köln
Deutschland

Telephone: +492216307990
E-mail: info@renia.com
Website: www.renia.com

Department responsible for information

E-mail (competent person) labor@renia.com

1.4 Emergency telephone number

Emergency telephone number Grimme: +49-221-630799-17
Only available during office hours.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

* Flam. Liq. 2; flammable liquids; H225 Highly flammable liquid and vapour.
* Asp. Tox. 1; Aspiration hazard; H304 May be fatal if swallowed and enters airways.
* Eye Irrit. 2; Serious eye damage/eye irritation; H319 Causes serious eye irritation.
* STOT SE 3 Narcotic effects; STOT-single exposure; H336 May cause drowsiness or dizziness.
* Skin Irrit. 2; Skin corrosion/irritation; H315 Causes skin irritation.
* Aquatic Acute 2; Hazardous to the aquatic environment; H401 Toxic to aquatic life.
* Aquatic Chronic 2; Hazardous to the aquatic environment; H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

* **Signal word**

Danger

* **Hazard statements**

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H315	Causes skin irritation.
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.
P103	Read carefully and follow all instructions.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.

P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P261	Avoid breathing vapours.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye/face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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.
P312	Call a POISON CENTER if you feel unwell.
P331	Do NOT induce vomiting.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P370 + P378	In case of fire: Use extinguishing powder or sand to extinguish.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to industrial incineration plant.

* **Hazard components for labelling**

Ethyl acetate
Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane

2.3 Other hazards

No information available.

SECTION 3: Composition / information on ingredients

3.2 Mixtures

* **Description**

Mixture of organic solvents.

Hazardous ingredients

*

CAS No. EC No. INDEX No.	Substance name REACH No. Classification according to Regulation (EC) No 1272/2008 [CLP]	weight-%
141-78-6 205-500-4 607-022-00-5	**Ethyl acetate** 01-2119475103-46 Flam. Liq. 2 H225 / Eye Irrit. 2 H319 / STOT SE 3 H336	40,0 < 45,0
- 921-024-6 649-328-00-1	**Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane** 01-2119475514-35 Flam. Liq. 2 H225 / Asp. Tox. 1 H304 / Skin Irrit. 2 H315 / STOT SE 3 H336 / Aquatic Chronic 2 H411	40,0 < 45,0
110-82-7 203-806-2 601-017-00-1	**cyclohexane** 01-2119463273-41-0000 Flam. Liq. 2 H225 / Asp. Tox. 1 H304 / Skin Irrit. 2 H315 / STOT SE 3 H336 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	13,0 < 16,0

* **Remark**

Full text of H- and EUH-statements: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

* **General information**

Remove affected person from the danger area and lay down.

* **Following inhalation**

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Medical treatment necessary.

* **Following skin contact**

After contact with skin, wash immediately with plenty of water and soap. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician. Rub greasy ointment into the skin.

* **After eye contact**

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

* **After ingestion**

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting.

* **Self-protection of the first aider**

First aider: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

* **Symptoms**

dizziness. Nausea. headache. Unconsciousness.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Transport affected person in lying position, in case of shortness of breath in half-sitting position. Where appropriate artificial ventilation. Subsequent observance for pneumonia and lung oedema.

SECTION 5: Firefighting measures

5.1 Extinguishing media

* **Suitable extinguishing media**

Carbon dioxide (CO_2), alcohol resistant foam, Extinguishing powder, ABC-powder, spray mist, (water), Dry sand.

* **Unsuitable extinguishing media**

Full water jet. Strong water jet.

5.2 Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air. Do not inhale explosion and combustion gases.

5.3 Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

5.4 Additional information

Suppress gases/vapours/mists with water spray jet. Use water spray jet to protect personnel and to cool endangered containers. Remove product from area of fire. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes and skin. Use personal protection equipment. Remove all sources of ignition. Provide adequate ventilation. The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration. Do not breathe gas/fumes/vapour/spray.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Cover drains.

6.3 Methods and material for containment and cleaning up

* Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

* **Advices on safe handling**

This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). If handled uncovered, arrangements with local exhaust ventilation should be used if possible. If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

* **Advices on general occupational hygiene**

When using do not eat, drink, smoke, sniff. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. Before starting work, apply solvent-resistant skincare preparations.

* **Further information**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Vapours/aerosols must be exhausted directly at the point of origin. Take precautionary measures against static discharge.

7.2 Conditions for safe storage, including any incompatibilities

* **Requirements for storage rooms and vessels**

Keep only in the original container in a cool, well-ventilated place. Keep container tightly closed. Store in a well-ventilated and dry room at temperatures between 10 °C and 30 °C. Ensure adequate ventilation of the storage area.

* **Hints on joint storage**

Do not store together with: Oxidizing agent, Pyrophoric or self-heating substances. Store packaging and ignitable materials separately. Keep away from food, drink and animal feedingstuffs.

* **Further information on storage conditions**

Floors should be impervious, resistant to liquids and easy to clean. Store small packages in a suitable, robust cabinet.

7.3 Specific end use(s)

Solvents/Thinner.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

* **Occupational exposure limit values**

	CAS No.	Substance name	Source	Long-term /short-term (Spitzenbegrenzung)
*	141-78-6	Ethyl acetate	ACGIH	1.440 / - (-) mg/m³
*	141-78-6	Ethyl acetate	NIOSH	1.400 / - (-) mg/m³
*	141-78-6	Ethyl acetate	OSHA	1.400 / - (-) mg/m³
	110-82-7	cyclohexane	ACGIH	344 / - (-) mg/m³
	110-82-7	cyclohexane	NIOSH	1.050 / - (-) mg/m³
	110-82-7	cyclohexane	OSHA	1.050 / - (-) mg/m³

Additional information

Long-term: long-term occupational exposure limit value
short-term: short-term occupational exposure limit value

* **Biological limit values**

No data available

* **DNEL worker**

CAS No.	Substance name	DNEL type	DNEL value
141-78-6	Ethyl acetate	DNEL long-term inhalative (systemic)	1,468 mg/l
141-78-6	Ethyl acetate	DNEL acute inhalative (local)	1,468 mg/l
141-78-6	Ethyl acetate	DNEL long-term dermal (systemic)	63 mg/kg
-	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	DNEL long-term dermal (systemic)	773 mg/kg

-	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	DNEL long-term inhalative (systemic)	2.035 mg/m³
110-82-7	cyclohexane	DNEL long-term dermal (systemic)	2.016 mg/kg
110-82-7	cyclohexane	DNEL long-term inhalative (systemic)	0,7 mg/l

* **DNEL Consumer**

CAS No.	Substance name	DNEL type	DNEL value
141-78-6	Ethyl acetate	DNEL acute inhalative (systemic)	0,734 mg/l
141-78-6	Ethyl acetate	DNEL long-term inhalative (local)	0,734 mg/l
141-78-6	Ethyl acetate	DNEL long-term dermal (systemic)	37 mg/kg
141-78-6	Ethyl acetate	DNEL long-term inhalative (systemic)	0,037 mg/l
141-78-6	Ethyl acetate	DNEL long-term oral (repeated)	4,5 mg/kg
141-78-6	Ethyl acetate	DNEL acute inhalative (local)	0,367 mg/l
-	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	DNEL long-term dermal (systemic)	699 mg/kg
-	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	DNEL long-term inhalative (systemic)	608 mg/m³
-	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane	DNEL long-term oral (repeated)	699 mg/kg
110-82-7	cyclohexane	DNEL long-term oral (repeated)	59,4 mg/kg
110-82-7	cyclohexane	DNEL long-term dermal (systemic)	699 mg/kg
110-82-7	cyclohexane	DNEL long-term inhalative (systemic)	0,7 mg/l

* **PNEC**

CAS No.	Substance name	PNEC type	PNEC Value
141-78-6	Ethyl acetate	PNEC aquatic, freshwater	0,26 mg/l
141-78-6	Ethyl acetate	PNEC aquatic, marine water	0,026 mg/l
141-78-6	Ethyl acetate	PNEC sediment, freshwater	0,34 mg/kg
141-78-6	Ethyl acetate	PNEC sediment, marine water	0,034 mg/kg
141-78-6	Ethyl acetate	PNEC soil, freshwater	0,22 mg/kg

8.2 Exposure controls

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

* **Personal protection equipment**

* **Respiratory protection**

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.Combination filtering device (EN 14387). Use the following filter types for cleaning waste gases:

* **Hand protection**

Suitable material: NBR (Nitrile rubber)
Thickness of the glove material: >= 0,4 mm
* Breakthrough time (maximum wearing time): >= 480 min
For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

* **Eye/face protection**

Wear closely fitting protective glasses in case of splashes.

* **Body protection**

When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn.
Wear anti-static footwear and clothing

* **Environmental exposure controls**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state	liquid
Colour	transparent
Safety characteristics	
Odour	characteristic
Odour threshold	not determined
* pH at 20 °C:	not determined
Melting point/freezing point	-35 °C
Initial boiling point and boiling range	65 - 95 °C
Flash point	-18 °C
Evaporation rate at 20°C	not determined
Burning time (s)	not applicable
Lower explosion limit at 20°C	1 g/cm³
Upper explosion limit at 20°C	11,5 g/cm³
Vapour pressure at 20°C	175 mbar
Density at 20°C	0,781 kg/l
Water solubility (g/L) at 20°C	not determined
Partition coefficient: n-octanol/water	see section 12
Ignition temperature in °C	200 °C
Decomposition temperature	not determined
Viscosity	5,53 mPas
Explosive properties	not relevant
Oxidising properties	not relevant

9.2 Other information

not applicable

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2 Chemical stability

The study does not need to be conducted because the substance is known to be stable at room temperature for prolonged periods of time (days).

10.3 Possibility of hazardous reactions

Gases / vapours, highly flammable. Vapours can form explosive mixtures with air.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

Acid, concentrated, Oxidising agent, strong.

10.6 Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

* **Acute toxicity**

Based on available data, the classification criteria are not met.

Ethyl acetate
LD50: oral (Rat): > 5.620 mg/kg

LD50: dermal (Rabbit): > 18.000 mg/kg

LC50: inhalative (Rat): = 56 mg/l (4 h)

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane
LD50: (Rat): > 5.000 mg/kg; (OECD 401)

LC50: (Rat): > 20 mg/l (4 h); (OECD 403)

LD50: dermal (Rabbit): > 2.000 mg/kg; (OECD 402)

cyclohexane
LD50: (Rat): > 5.000 mg/kg

LC50: inhalative (Rat): > 32,88 mg/l (4 h); (OECD 403)

LD50: dermal (Rabbit): > 2.000 mg/kg; (OECD 402)

* **Skin corrosion/irritation**

Causes skin irritation.

* **Serious eye damage/eye irritation**

Causes serious eye irritation.

* **Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.

* **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

Based on available data, the classification criteria are not met.

* **STOT-single exposure**

May cause drowsiness or dizziness.

* **STOT-repeated exposure**

Based on available data, the classification criteria are not met.

* **Aspiration hazard**

May be fatal if swallowed and enters airways.

* **Practical experience/human evidence**

Inhaling of solvent components above the MWC-value can lead to health damage, e.g. irritation of the mucous membrane and respiratory organs, as well as damage to the liver, kidneys and the central nerve system. Indications for this are: Headache, Dizziness, fatigue, amyosthenia, Drowsiness, in serious cases: unconsciousness. Solvents may cause some of the aforementioned effects through skin resorption. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and/or absorption through skin. Splashing may cause eye irritation and reversible damage.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Acute (short-term) fish toxicity
Ethyl acetate
LC50: (Oncorhynchus mykiss (Rainbow trout)): = 230 mg/l (96 h)

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane
LC50: (Oncorhynchus mykiss (Rainbow trout)): = 11,4 mg/l (96 h)

cyclohexane
LC50: (Pimephales promelas (fathead minnow)): = 4,53 mg/l (96 h)

Acute (short-term) toxicity to aquatic algae and cyanobacteria
Ethyl acetate
LC50: (Desmodesmus subspicatus): = 5.600 mg/l (48 h)

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane
EL50: (Pseudokirchneriella subcapitata): = 30 < x > 100 mg/l (72 h)

cyclohexane
ErC50: (Desmodesmus subspicatus): > 4,425 mg/l (96 h)

Acute (short-term) toxicity to crustacea
Ethyl acetate
EC50 (Daphnia magna (Big water flea)): = 165 mg/l (48 h)

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane
EL50: (Daphnia magna (Big water flea)): = 3 mg/l (48 h)

cyclohexane
EC50 (Daphnia magna (Big water flea)): = 0,9 mg/l (48 h)

12.2 Persistence and degradability

Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane
Biodegradation; (Activated sludge) = 81 % (28 d)
Method: OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D
Readily biodegradable (according to OECD criteria).

cyclohexane
Biodegradation; (Activated sludge) = 77 % (28 d)
Method: OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D
Readily biodegradable (according to OECD criteria).

12.3 Bioaccumulative potential

cyclohexane
Bioconcentration factor (BCF), (Pimephales promelas (fathead minnow)) = 167
Method: calculated
No indication of bioaccumulation potential.
Partition coefficient: n-octanol/water = 0,68

12.4 Mobility in soil

No information 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 information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

* **Product/Packaging disposal**

Do not empty into drains; dispose of this material and its container in a safe way.Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

* **Waste codes/waste designations according to EWC/AVV**

* 070704* - other organic solvents, washing liquids and mother liquors

* **Other disposal recommendations**

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1 UN number

UN 1993

14.2 UN proper shipping name

* **Land transport (ADR/RID)**

ENTZÜNDBARER FLÜSSIGER STOFF, N.A.G. (enthält Ethylacetat, Kohlenwasserstoffe, C6-C7, Isoalkane, Cyclene, <5% n-Hexan)

* **Sea transport (IMDG)**

Flammable liquid, n.o.s. (contain Ethyl acetate, Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane, cyclohexane)

* **Air transport (ICAO-TI / IATA-DGR)**

Flammable liquid, n.o.s. (contain Ethyl acetate, Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane)

14.3 Transport hazard class(es)

Land transport (ADR/RID)	3
Sea transport (IMDG)	3
Air transport (ICAO-TI / IATA-DGR)	3

14.4 Packing group

Land transport (ADR/RID)	II
Sea transport (IMDG)	II
Air transport (ICAO-TI / IATA-DGR)	II

14.5 Environmental hazards

Land transport (ADR/RID)	ENVIRONMENTALLY HAZARDOUS
Sea transport (IMDG)	Marine pollutant / cyclohexane

14.6 Special precautions for user

Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage. Advices on safe handling: see parts 6 - 8

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No transport as bulk according to IBC Code.

14.8 Additional information

* **Land transport (ADR/RID)**

tunnel restriction code: D/E

* **Sea transport (IMDG)**

* EmS-Code: F-E, S-E

* **Air transport (ICAO-TI / IATA-DGR)**

* not applicable

SECTION 15: Regulatory information

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

* **EU legislation**

* **Restrictions of occupation**

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

* **Directive 2010/75/EU on industrial emissions**

* VOC-value (in g/L): 780,9 g/l

* **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]**
Hazard categories / Named dangerous substances

E2 Hazardous to the aquatic environment in Category Chronic 2
Quantity 1: 200t; Quantity 2: 500t
P5c Flammable liquids
Quantity 1: 5.000t; Quantity 2: 50.000t

* **National regulations**

15.2 Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

REACH No.	Substance name
01-2119475103-46	Ethyl acetate
01-2119475514-35	Hydrocarbons, C6-C7, isoalkanes, cyclics, <5% n-hexane
01-2119463273-41-0000	cyclohexane

SECTION 16: Other information

Relevant R-, H- and EUH-phrases (Number and full text)

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.
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.

* **Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]**

Flam. Liq. 2	On basis of test data.
Asp. Tox. 1	Calculation method.
Eye Irrit. 2	Calculation method.
STOT SE 3 Narcotic effects	Calculation method.
Skin Irrit. 2	Calculation method.
* Aquatic Acute 2	Calculation method.
* Aquatic Chronic 2	Calculation method.

* **Abbreviations and acronyms**

For abbreviations and acronyms, see table at http://abbrev.esdscom.eu

* **Indication of changes**

* Data changed compared with the previous version