

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 1 of 11

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

1.1. Product identifier

KTS Line Green No. 2

Further trade names

UFI: 8V00-70PF-300M-F2NP

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

Use of the substance/mixture

Aroma base for the preparation of electronic cigarette liquids.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name: Parionica j.d.o.o.
 Street: Avenije Dubrava 256H
 Place: HR-10040 Zagreb
 Telephone: +385 99 7420335
 e-mail: info@parionica.hr
 Contact person: Sanja Sprisic
 Internet: http://www.parionica.hr
 Responsible Department: info@parionica.hr

1.4. Emergency telephone number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Respiratory or skin sensitisation: Skin Sens. 1A

Hazard Statements:

May cause an allergic skin reaction.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

4-hydroxy-2,5-dimethylfuran-2(3H)-one

2-(1-mercapto-1-methylethyl)-5-methylcyclohexan-1-one

Neryl acetate

linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool

citral

Signal word: Warning

Pictograms:



Hazard statements

H317

May cause an allergic skin reaction.

Precautionary statements

P101

If medical advice is needed, have product container or label at hand.

P102

Keep out of reach of children.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 2 of 11

P302+P352 IF ON SKIN: Wash with plenty of water.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P501 Dispose of contents/container via the selective disposal system at your place of residence.

2.3. Other hazards

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
3658-77-3	4-hydroxy-2,5-dimethylfuran-2(3H)-one			0.3 - < 0.5 %
	222-908-8			
	Eye Irrit. 2, Skin Sens. 1A; H319 H317			
38462-22-5	2-(1-mercapto-1-methylethyl)-5-methylcyclohexan-1-one			0.3 - < 0.5 %
	253-953-1			
	Skin Sens. 1; H317			
141-12-8	Neryl acetate			0.1 - < 0.2 %
	205-459-2			
	Skin Sens. 1B; H317			
78-70-6	linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool			0.1 - < 0.2 %
	201-134-4	603-235-00-2		
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1B; H315 H319 H317			
5392-40-5	citral			0.1 - < 0.2 %
	226-394-6	605-019-00-3	01-2119462829-23	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1B; H315 H319 H317			

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

Further Information

Product does not contain listed SVHC substances > 0,1 % according to Regulation (EC) No. 1907/2006 Article 59 (REACH)

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 3 of 11

After ingestion

Rinse mouth thoroughly with water. Let water be drunk in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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

No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂). Dry extinguishing powder. alcohol resistant foam. Water fog.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide (CO).

5.3. Advice for firefighters

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

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

See protective measures under point 7 and 8.

6.2. Environmental precautions

Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated objects and areas thoroughly observing environmental regulations.

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

Advice on safe handling

Wear personal protection equipment (refer to section 8).

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

General protection and hygiene measures: refer to chapter 8

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 4 of 11

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Recommended storage temperature: 20°C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL
57-55-6	Propane-1,2-diol, particulates	-	10		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
57-55-6	propane-1,2-diol			
Worker DNEL, long-term		inhalation	systemic	168 mg/m ³
Worker DNEL, long-term		inhalation	local	10 mg/m ³
Consumer DNEL, long-term		dermal	systemic	213 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	50 mg/m ³
Consumer DNEL, long-term		oral	systemic	85 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	10 mg/m ³
5392-40-5	citral			
Worker DNEL, long-term		inhalation	systemic	9 mg/m ³
Worker DNEL, long-term		dermal	systemic	1,7 mg/kg bw/day
Worker DNEL, long-term		dermal	local	0,14 mg/cm ²
Consumer DNEL, long-term		inhalation	systemic	2,7 mg/m ³
Consumer DNEL, long-term		dermal	systemic	1 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,6 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	0,14 mg/cm ²

PNEC values

CAS No	Substance	Value
57-55-6	propane-1,2-diol	
Freshwater		260 mg/l
Freshwater (intermittent releases)		183 mg/l
Marine water		26 mg/l
Marine water (intermittent releases)		183 mg/l
Freshwater sediment		572 mg/kg

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 5 of 11

Marine sediment	57,2 mg/kg
Micro-organisms in sewage treatment plants (STP)	20000 mg/l
Soil	50 mg/kg
5392-40-5	citral
Freshwater	0,00678 mg/l
Freshwater (intermittent releases)	0,0678 mg/l
Marine water	0,000678 mg/l
Marine water (intermittent releases)	0,0678 mg/l
Freshwater sediment	0,125 mg/kg
Marine sediment	0,0125 mg/kg
Micro-organisms in sewage treatment plants (STP)	1,6 mg/l
Soil	0,0209 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Provide adequate ventilation.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

Eye/face protection

Wear safety glasses; chemical goggles (if splashing is possible).

Hand protection

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of glove material: 0,4 mm

Breakthrough time \geq 8 h

Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time \geq 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time \geq 8 h

The selected protective gloves have to satisfy the specifications of EU Directive EC/2016/425 and the standard EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 6 of 11

Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	not determined	
Odour:	characteristic	
pH-Value:		not determined

Changes in the physical state

Melting point:		not determined
Initial boiling point and boiling range:		not determined
Sublimation point:		not determined
Softening point:		not determined
Pour point:		not determined
Flash point:		not determined
Sustaining combustion:		Not sustaining combustion

Explosive properties

Dust clouds may present an explosion hazard.

Lower explosion limits:		not determined
Upper explosion limits:		not determined
Ignition temperature:		not determined

Auto-ignition temperature

Solid:		not determined
Decomposition temperature:		not determined

Oxidizing properties

none		
Vapour pressure:		not determined
Density:		not determined
Bulk density:		not determined
Water solubility:		not determined

Solubility in other solvents

not determined		
Partition coefficient:		not determined
Viscosity / dynamic:		not determined
Viscosity / kinematic:		not determined
Flow time:		not determined
Vapour density:		not determined
Evaporation rate:		not determined
Solvent separation test:		not determined
Solvent content:		not determined

9.2. Other information

Solid content:		not determined
----------------	--	----------------

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 7 of 11

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide (CO).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

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

The product has not been tested.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
78-70-6	linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool				
	oral	LD50 mg/kg	2200	Mouse.	ECHA Dossier
	dermal	LD50 mg/kg	>5000	Rabbit	ECHA Dossier
5392-40-5	citral				
	oral	LD50 mg/kg	>5000	Rat.	ECHA Dossier
	dermal	LD50 mg/kg	>2000	Rat.	ECHA Dossier

Irritation and corrosivity

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

The product has not been tested.

Sensitising effects

May cause an allergic skin reaction. (4-hydroxy-2,5-dimethylfuran-2(3H)-one; 2-(1-mercapto-1-methylethyl)-5-methylcyclohexan-1-one; Neryl acetate; linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool; citral)

The product has not been tested.

Carcinogenic/mutagenic/toxic effects for reproduction

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

No data available.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 8 of 11

STOT-single exposure

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

No data available.

STOT-repeated exposure

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

No data available.

Aspiration hazard

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

No data available.

Specific effects in experiment on an animal

No data available.

SECTION 12: Ecological information

12.1. Toxicity

The product has not been tested.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
78-70-6	linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool					
	Acute fish toxicity	LC50 mg/l	27,8	96 h	Oncorhynchus mykiss (Rainbow trout)	ECHA Dossier
	Acute algae toxicity	ErC50 mg/l	88,3	96 h	Desmodesmus subspicatus	ECHA Dossier
	Acute crustacea toxicity	EC50	59 mg/l	48 h	Daphnia magna	ECHA Dossier
5392-40-5	citral					
	Acute fish toxicity	LC50 mg/l	6,78	96 h	Leuciscus idus	ECHA Dossier
	Acute algae toxicity	ErC50 mg/l	103,8	72 h	Desmodesmus subspicatus	ECHA Dossier
	Acute crustacea toxicity	EC50	6,8 mg/l	48 h	Daphnia magna	ECHA Dossier
	Acute bacteria toxicity	(160 mg/l)		0,5 h	Activated sludge	ECHA Dossier

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
78-70-6	linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool			
	OECD 301D / EEC 92/69 annex V, C.4-E	64,2%	28	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			
5392-40-5	citral			
	EU Method C.4-D	90%	28	ECHA Dossier
	Easily biodegradable (concerning to the criteria of the OECD)			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
78-70-6	linalool; 3,7-dimethyl-1,6-octadien-3-ol; dl-linalool	2,84
5392-40-5	citral	2,76

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 9 of 11

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

12.6. Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes other than those mentioned in 16 03 05

List of Wastes Code - used product

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes other than those mentioned in 16 03 05

List of Wastes Code - contaminated packaging

150106 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); mixed packaging

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

<u>14.1. UN number:</u>	No dangerous good in sense of this transport regulation.
<u>14.2. UN proper shipping name:</u>	No dangerous good in sense of this transport regulation.
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 10 of 11

14.1. UN number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Refer to section 6-8

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

not relevant

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3

2010/75/EU (VOC): No information available.

2004/42/EC (VOC): No information available.

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

Additional information

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (amended by Regulation (EU) No 2020/878)

This substance is hazardous in the sense of regulation (EC) No 1272/2008 (CLP).

REACH 1907/2006 Appendix XVII, No.: 3

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessmentFor the following substances of this mixture a chemical safety assessment has been carried out:
citral

SECTION 16: Other information

Changes

Rev. 1.0; Initial release 20.04.2020

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

CAS Chemical Abstracts Service

CLP: Classification, Labelling and Packaging of substances and mixtures

DNEL: Derived No Effect Level

d: day(s)

EINECS: European INventory of Existing Commercial chemical Substances

ELINCS: European List of Notified Chemical Substances

ECHA: European Chemicals Agency

EWC: European Waste Catalogue

IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER

IMDG: International Maritime Code for Dangerous Goods

Safety Data Sheet

according to Regulation (EC) No 1907/2006

KTS Line Green No. 2

Revision date: 20.04.2020

Product code:

Page 11 of 11

IATA: International Air Transport Association
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organization
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)
 h: hour
 LOAEL: Lowest observed adverse effect level
 LOAEC: Lowest observed adverse effect concentration
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 NOAEL: No observed adverse effect level
 NOAEC: No observed adverse effect concentration
 NLP: No-Longer Polymers
 N/A: not applicable
 OECD: Organisation for Economic Co-operation and Development
 PNEC: predicted no effect concentration
 PBT: Persistent bioaccumulative toxic
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 REACH: Registration, Evaluation, Authorisation of Chemicals
 SVHC: substance of very high concern
 TRGS: Technische Regeln für Gefahrstoffe
 UN: United Nations
 VOC: Volatile Organic Compounds

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

Classification	Classification procedure
Skin Sens. 1A; H317	Calculation method

Relevant H and EUH statements (number and full text)

H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.

Further Information

Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure:
 Health hazards: Calculation method.
 Environmental hazards: Calculation method.
 Physical hazards: On basis of test data and / or calculated and / or estimated.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)