



SAFETY DATA SHEET CAJUPUT EXT

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

1.1. Product identifier

Product name	CAJUPUT EXT
Product number	60628
Synonyms; trade names	CAJEPUT ESSENTIAL OIL, CAJEPUT OIL ORGANIC VN, CAJEPUT OIL ORGANIC VN PFM
REACH registration number	01-2120119951-57-XXXX
CAS number	85480-37-1
EC number	287-316-4

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

Identified uses	Cosmetics Flavouring
-----------------	----------------------

1.3. Details of the supplier of the safety data sheet

Supplier	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com
----------	--

1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	60628

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

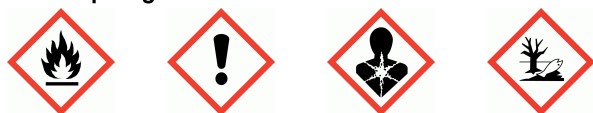
Classification (EC 1272/2008)

Physical hazards	Flam. Liq. 3 - H226
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Asp. Tox. 1 - H304
Environmental hazards	Aquatic Chronic 2 - H411

2.2. Label elements

EC number	287-316-4
-----------	-----------

Hazard pictograms



CAJUPUT EXT

Signal word	Danger
Hazard statements	H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H317 May cause an allergic skin reaction. H304 May be fatal if swallowed and enters airways. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 Avoid release to the environment. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P501 Dispose of contents/ container in accordance with national regulations.
Contains	EUCALYPTOL, LIMONENE, LINALOOL, 2-PINENE, MYRCENE, CARYOPHYLLENE, PIN-2-(10) ENE, P-MENTHA-1,4-DIENE, p-MENTHA-1,4(8)-DIENE, GERANIOL

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1. Substances

EUCALYPTOL TRT			30-60%
CAS number: 470-82-6	EC number: 207-431-5	REACH registration number: 01-2119967772-24-XXXX	
Acute Toxicity Estimate (oral): LD ₅₀ 2480 mg/kg, Oral, Rat			
Classification Flam. Liq. 3 - H226 Skin Sens. 1B - H317			

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL			10-30%
CAS number: 98-55-5	EC number: 202-680-6	REACH registration number: 01-2119980717-23-XXXX	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2 - H319			

CAJUPUT EXT

LIMONENE	5-10%
CAS number: 138-86-3	EC number: 205-341-0
M factor (Acute) = 1	M factor (Chronic) = 1

Classification

Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

LINALOOL		1-5%
CAS number: 78-70-6	EC number: 201-134-4	REACH registration number: 01-2119474016-42-XXXX
Acute Toxicity Estimate (oral): LD ₅₀ 2790 mg/kg, Oral, Rat		
Acute Toxicity Estimate (dermal): LD ₅₀ 5610 mg/kg, Dermal, Rabbit		

Classification

Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Skin Sens. 1B - H317

2-PINENE	1-5%
CAS number: 80-56-8	EC number: 201-291-9
M factor (Acute) = 1	M factor (Chronic) = 1

Classification

Flam. Liq. 3 - H226
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Skin Sens. 1 - H317
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

MYRCENE	1-5%
CAS number: 123-35-3	EC number: 204-622-5

Classification

Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
Asp. Tox. 1 - H304

CAJUPUT EXT

CARYOPHYLLENE 1-5%		
CAS number: 87-44-5	EC number: 201-746-1	REACH registration number: 01-2120745237-53-XXXX

Classification

Skin Sens. 1 - H317
Asp. Tox. 1 - H304
Aquatic Chronic 4 - H413

PIN-2-(10) ENE 1-5%		
CAS number: 127-91-3	EC number: 204-872-5	
M factor (Acute) = 1	M factor (Chronic) = 1	

Classification

Flam. Liq. 3 - H226
Skin Irrit. 2 - H315
Skin Sens. 1B - H317
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

P-MENTHA-1,4-DIENE 1-5%		
CAS number: 99-85-4	EC number: 202-794-6	

Classification

Flam. Liq. 3 - H226
Repr. 2 - H361d
Asp. Tox. 1 - H304

p-MENTHA-1,4(8)-DIENE <1%		
CAS number: 586-62-9	EC number: 209-578-0	REACH registration number: 01-2119982324-34-XXXX
M factor (Acute) = 1	M factor (Chronic) = 1	

Classification

Flam. Liq. 3 - H226
Skin Sens. 1B - H317
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

CAJUPUT EXT

PARA CYMENE	<1%
CAS number: 99-87-6	EC number: 202-796-7

Classification

Flam. Liq. 3 - H226
 Acute Tox. 3 - H331
 Repr. 2 - H361
 Asp. Tox. 1 - H304
 Aquatic Chronic 2 - H411

GERANIOL			<1%
CAS number: 106-24-1	EC number: 203-377-1	REACH registration number: 01-2119552430-49-XXXX	

Classification

Skin Irrit. 2 - H315
 Eye Dam. 1 - H318
 Skin Sens. 1 - H317

The full text for all hazard statements is displayed in Section 16.

Product name	CAJUPUT EXT
REACH registration number	01-2120119951-57-XXXX
CAS number	85480-37-1
EC number	287-316-4
Composition comments	The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if symptoms are severe or persist.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Get medical attention if symptoms are severe or persist.
Skin contact	Take off immediately all contaminated clothing. Wash skin thoroughly with soap and water. Continue to rinse. Get medical attention if symptoms are severe or persist.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist.

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

Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes serious eye irritation.

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

Notes for the doctor	Treat symptomatically. Contact specialist immediately poison treatment if large quantities have been ingested or inhaled
-----------------------------	--

SECTION 5: Firefighting measures

CAJUPUT EXT

5.1. Extinguishing media

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Avoid the spillage or runoff entering drains, sewers or watercourses. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. Provide adequate ventilation.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours and contact with skin and eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Provide adequate ventilation.

Advice on general occupational hygiene Do not eat, drink or smoke when using this product. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid exposure to high temperatures or direct sunlight. Unsuitable container materials: Polyvinyl chloride (PVC).

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

CAJUPUT EXT

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

EUCALYPTOL TRT (CAS: 470-82-6)

DNEL	Workers - Dermal; Long term systemic effects: 2 mg/kg Workers - Inhalation; Long term systemic effects: 7.05 mg/kg Consumer - Dermal; Long term systemic effects: 1 mg/kg/day Consumer - Inhalation; Long term systemic effects: 1.74 mg/m ³
PNEC	STP; 10 mg/l Soil; 0.2 mg/kg Fresh water; 0.057 mg/l marine water; 0.0057 mg/l Sediment (Freshwater); 0.06732 mg/kg Sediment (Marinewater); 0.00673 mg/kg

LIMONENE (CAS: 138-86-3)

Ingredient comments	No exposure limits known for ingredient(s).
DNEL	Workers - Dermal; Short term : 222 µg/cm ² Workers - Inhalation; Long term : 33.3 mg/m ³ General population - Dermal; Short term : 111 µg/cm ² General population - Inhalation; Long term : 8.33 mg/m ³ General population - Oral; Long term : 4.76 mg/kg
PNEC	Fresh water; 5.4 µg/l marine water; 0.54 µg/l STP; 1.8 mg/l Sediment (Freshwater); 1.649 mg/kg/day Sediment (Marinewater); 0.165 mg/kg/day Soil; 0.328 mg/kg

LINALOOL (CAS: 78-70-6)

Ingredient comments	No exposure limits known for ingredient(s).
DNEL	Industry - Dermal; Short term systemic effects: 5 mg/kg/day Industry - Inhalation; Short term systemic effects: 16.5 mg/m ³ Industry - Dermal; Long term systemic effects: 2.5 mg/kg/day Industry - Inhalation; Long term systemic effects: 2.8 mg/m ³ Consumer - Dermal; Short term systemic effects: 2.5 mg/kg/day Consumer - Inhalation; Short term systemic effects: 4.1 mg/m ³ Consumer - Oral; Short term systemic effects: 1.2 mg/kg/day Consumer - Inhalation; Long term systemic effects: 0.7 mg/m ³ Consumer - Oral; Long term systemic effects: 0.2 mg/kg/day Consumer - Dermal; Short term local effects: 15 mg/cm ² Workers - Dermal; Long term local effects: 15 mg/cm ² Consumer - Dermal; Long term local effects: 15 mg/cm ²

CAJUPUT EXT

PNEC

- Fresh water; 0.2 mg/l
- marine water; 0.02 mg/l
- Sediment (Freshwater); 2.22 mg/kg
- Sediment (Marinewater); 0.222 mg/kg
- Soil; 0.327 mg/kg
- STP; > 10 mg/l

p-MENTHA-1,4(8)-DIENE (CAS: 586-62-9)

DNEL

Workers - Inhalation; Long term systemic effects: 5.12 mg/m³
 Workers - Dermal; Long term systemic effects: 1.45 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 1.26 mg/m³
 Consumer - Dermal; Long term systemic effects: 0.73 mg/kg/day
 Consumer - Oral; Long term systemic effects: 0.73 mg/kg/day

PNEC

Fresh water; 5.2 µg/l
 marine water; 0.52 µg/l
 STP; 3 mg/l
 Sediment (Freshwater); 0.581 mg/kg
 Sediment (Marinewater); 58.1 mg/kg
 Soil; 113 µg/l

GERANIOL (CAS: 106-24-1)

DNEL

Workers - Inhalation; Long term systemic effects: 161.6 mg/l
 Workers - Dermal; Long term systemic effects: 12.5 mg/kg
 Consumer - Oral; Long term systemic effects: 13.75 mg/kg
 Consumer - Inhalation; Long term systemic effects: 47.8 mg/m³
 Consumer - Dermal; Long term systemic effects: 7.5 mg/kg

8.2. Exposure controls

Protective equipment



Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/141/145/143/149

CAJUPUT EXT

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Clear. to Yellowish.
Odour	Characteristic.
Odour threshold	No information available.
pH	No information available.
Melting point	-20°C
Initial boiling point and range	157 – 210°C @ 101.1 kPa
Flash point	54.5 – 54.6°C
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	5.6 – 253 Pa @ 24 - 25°C
Vapour density	No information available.
Relative density	0.868 - 0.930 @ 20°C
Bulk density	No information available.
Solubility(ies)	Soluble in water.
Partition coefficient	log Pow: 2.74 – 2.98
Auto-ignition temperature	270°C
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	Not considered to be explosive.
Explosive under the influence of a flame	No information available.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Refractive index	1.462 - 1.482
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.

CAJUPUT EXT

Volatile organic compound No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No test data specifically related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Under normal conditions of storage and use, no hazardous reactions will occur.

10.4. Conditions to avoid

Conditions to avoid Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid Polyvinyl chloride (PVC).

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 28,248.59

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

CAJUPUT EXT

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion May be fatal if swallowed and enters airways. Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious eye irritation.

Toxicological information on ingredients.

EUCALYPTOL TRT

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,480.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 2480 mg/kg, Oral, Rat

ATE oral (mg/kg) 2,480.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >5000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Skin corrosion/irritation No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

CAJUPUT EXT

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Toxicokinetics

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Inhalation

Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion

Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

Skin contact

May cause an allergic skin reaction.

Eye contact

May cause temporary eye irritation.

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 4,300.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 4300 mg/kg, Oral, Rat

ATE oral (mg/kg) 4,300.0

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 3000 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

Skin corrosion/irritation Irritating to skin. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Irritating to eyes. Rabbit

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 314 mg/kg, Oral, Rat (90 days ; 7 days/week)

LIMONENE

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

CAJUPUT EXT

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Irritating to respiratory system. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

Ingestion Liquid irritates mucous membranes and may cause abdominal pain if swallowed.

Skin contact Irritating to skin. May cause an allergic skin reaction.

Eye contact May cause temporary eye irritation.

LINALOOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,790.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 2790 mg/kg, Oral, Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,610.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 5610 mg/kg, Dermal, Rabbit

Skin corrosion/irritation

CAJUPUT EXT

Skin corrosion/irritation Irritating to skin. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation Slightly irritating. Rabbit

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction. - Rabbit: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL 117 mg/kg, Oral, Rat NOAEL 250 mg/kg, Dermal, Rat

Aspiration hazard

Aspiration hazard No information available.

Toxicokinetics The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Inhalation May cause respiratory irritation.

Ingestion Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

Skin contact Irritating to skin. May cause an allergic skin reaction.

Eye contact Causes eye irritation.

2-PINENE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 500.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 3700 mg/kg, Oral, Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

CAJUPUT EXT

Species	Rat
Notes (dermal LD₅₀)	LD ₅₀ 5000 mg/kg, Dermal, Rat
ATE dermal (mg/kg)	5,000.0
Inhalation	May cause respiratory system irritation.
Ingestion	Harmful: may cause lung damage if swallowed.
Skin contact	May cause sensitisation by skin contact.
Eye contact	Irritating to eyes.

MYRCENE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 5000 mg/kg, Dermal, Rabbit

CARYOPHYLLENE

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

Toxicokinetics

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

PIN-2-(10) ENE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,000.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 5000 mg/kg, Oral, Rat

ATE oral (mg/kg) 5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rabbit

Notes (dermal LD₅₀) LD₅₀ 5000 mg/kg, Dermal, Rabbit

CAJUPUT EXT

ATE dermal (mg/kg) 5,000.0

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

Inhalation Irritating to respiratory system.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Irritating to skin.

Eye contact Irritating to eyes.

P-MENTH-1-EN-4-OL

Acute toxicity - oral

ATE oral (mg/kg) 500.0

p-MENTHA-1,4(8)-DIENE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ 3850 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ > 2000 mg/kg, Dermal, Rabbit

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.
Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Bacterial reverse mutation test: Negative.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

PARA CYMENE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,669.0

Species Rat

Notes (oral LD₅₀) LD₅₀ 3669 mg/kg, Oral, Rat

ATE oral (mg/kg) 3,669.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 3.0

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

CAJUPUT EXT

Inhalation	Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Coughing.
Ingestion	May be fatal if swallowed and enters airways.
Skin contact	Liquid may irritate skin. Repeated exposure may cause skin dryness or cracking.
Eye contact	Vapour or spray in the eyes may cause irritation and smarting.

GERANIOL

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	3,600.0
Species	Rat
Notes (oral LD ₅₀)	LD ₅₀ 3600 mg/kg, Oral, Rat
ATE oral (mg/kg)	3,600.0

Acute toxicity - dermal

Acute toxicity dermal (LD ₅₀ mg/kg)	5,001.0
Species	Rabbit
Notes (dermal LD ₅₀)	LD ₅₀ > 5000 mg/kg, Dermal, Rabbit
ATE dermal (mg/kg)	5,001.0

Skin corrosion/irritation

Skin corrosion/irritation	Causes skin irritation. Severe skin irritation. Rabbit
---------------------------	---

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye damage. Severe irritation. Cornea score: 3.1 - Rabbit
-------------------------------	---

Skin sensitisation

Skin sensitisation	May cause an allergic skin reaction. Local Lymph Node Assay (LLNA) - Mouse: Sensitising.
--------------------	---

ALPHA-TERPINENE

Acute toxicity - oral

Acute toxicity oral (LD ₅₀ mg/kg)	680.0
Species	Rat
ATE oral (mg/kg)	680.0

Aspiration hazard

Aspiration hazard	May be fatal if swallowed and enters airways.
-------------------	---

SECTION 12: Ecological information

Ecotoxicity	Toxic to aquatic life with long lasting effects.
-------------	--

CAJUPUT EXT

Ecological information on ingredients.

EUCALYPTOL TRT

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

LIMONENE

Ecotoxicity Very toxic to aquatic life with long lasting effects.

LINALOOL

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

2-PINENE

Ecotoxicity The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

CARYOPHYLLENE

Ecotoxicity May cause long lasting harmful effects to aquatic life.

PIN-2-(10) ENE

Ecotoxicity Very toxic to aquatic life with long lasting effects.

PARA CYMENE

Ecotoxicity Toxic to aquatic life with long lasting effects.

12.1. Toxicity

Toxicity Toxic to aquatic life.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 280 – 60 930 µg/l, Fish

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 307 – 100 000 µg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 450 – 66 850 µg/l, Algae

Ecological information on ingredients.

EUCALYPTOL TRT

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 102 mg/l, Fish

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Acute aquatic toxicity

CAJUPUT EXT

Acute toxicity - fish	LC ₅₀ , 96 hour: 70 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 73 mg/l, Daphnia magna OECD 202
Acute toxicity - aquatic plants	EC ₅₀ , 72 hour: 68 mg/l, Algae OECD 201 Chronic, NOEC, 72 hour: 3.9 mg/l, Algae OECD 201

LIMONENE

Toxicity	Very toxic to aquatic organisms.
<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.702 - 0.720 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 70 mg/l, Daphnia magna
Acute toxicity - aquatic plants	ErC ₅₀ , 72 hours: 8 mg/l, Algae
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1
Chronic toxicity - aquatic invertebrates	NOEC, 21 days: 0.27 mg/l, Daphnia magna

LINALOOL

Toxicity	Not considered toxic to fish.
<u>Acute aquatic toxicity</u>	
Acute toxicity - fish	LC ₅₀ , 96 hours: 27.8 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 59 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC ₅₀ , 72 hours: 156.7 mg/l, Algae

2-PINENE

<u>Acute aquatic toxicity</u>	
LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hour: 6.74 mg/l, Daphnia magna
<u>Chronic aquatic toxicity</u>	

CAJUPUT EXT

NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1

CARYOPHYLLENE

Toxicity	May cause long lasting harmful effects to aquatic life.
----------	---

PIN-2-(10) ENE

Acute aquatic toxicity

LE(C) ₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hour: 2.2 mg/l, Daphnia magna

Chronic aquatic toxicity

M factor (Chronic)	1
--------------------	---

p-MENTHA-1,4(8)-DIENE

Acute aquatic toxicity

LE(C) ₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 96 hours: 0.72 - 6.104 mg/l, Fish
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 5.184 mg/kg, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 72 hour: 5.4 mg/l, Algae Chronic, NOEC, 72 hour: 3.47 mg/l, Algae
<u>Chronic aquatic toxicity</u>	
M factor (Chronic)	1

PARA CYMENE

Toxicity	Toxic to aquatic life.
----------	------------------------

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hour: 48 ppm, Fish
Acute toxicity - aquatic invertebrates	LC ₅₀ , 48 hour: 6500 µg/l, Daphnia magna

GERANIOL

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 96 hour: 14 - 22 mg/l, Fish OECD 203
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hour: 10.8 mg/l, Daphnia magna OECD 202

CAJUPUT EXT

Acute toxicity - aquatic plants

IC₅₀, 72 hour: 13.1 mg/l, Algae
OECD 201

ALPHA-TERPINENE

Acute aquatic toxicity

Acute toxicity - fish

LC₅₀, 96 hours: 1.48 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: 1.85 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The substance is readily biodegradable.

Ecological information on ingredients.

EUCALYPTOL TRT

Persistence and degradability

The substance is readily biodegradable.

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Persistence and degradability

The product is readily biodegradable.

Biodegradation

- Degradation 80%: 28 day

LIMONENE

Persistence and degradability

The product is not expected to be biodegradable.

LINALOOL

Persistence and degradability

The product is readily biodegradable.

Biodegradation

The substance is readily biodegradable.
- Degradation (%) 64.2%: 28 days
OECD 301D

2-PINENE

Persistence and degradability

The product is readily biodegradable.

PIN-2-(10) ENE

Persistence and degradability

The product is readily biodegradable.

p-MENTHA-1,4(8)-DIENE

Persistence and degradability

The product is readily biodegradable.

CAJUPUT EXT

Biodegradation - Degradation 72%: 28 day
OECD 301D

PARA CYMENE

Persistence and degradability There are no data on the degradability of this product.

GERANIOL

Persistence and degradability The product is readily biodegradable.

Biodegradation - Degradation 90 - 100%: 28 day
OECD 301A
- Degradation 82%: 28 day
OECD 301D

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: 2.74 – 2.98

Ecological information on ingredients.

EUCALYPTOL TRT

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient log Pow: 2.97

1-METHYL 4-ISO PROPYL-1-CYCLOHEXEN-8-OL

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.67

LIMONENE

Bioaccumulative potential BCF: 490 - 1460,

Partition coefficient log Pow: 4.59

LINALOOL

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Kow: 2.7

CARYOPHYLLENE

Bioaccumulative potential Potentially bioaccumulating.

Partition coefficient log Pow: 6.23

p-MENTHA-1,4(8)-DIENE

Bioaccumulative potential Bioaccumulation is unlikely.

CAJUPUT EXT

Partition coefficient log Pow: 3.7

PARA CYMENE

Bioaccumulative potential No data available on bioaccumulation.

GERANIOL

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient log Pow: 2.6

12.4. Mobility in soil

Mobility No information available.

Surface tension 56.17 mN/m @ 19.8°C

Ecological information on ingredients.

EUCALYPTOL TRT

Mobility The product is insoluble in water.

LIMONENE

Mobility The product is insoluble in water.

LINALOOL

Mobility The product is insoluble in water.

2-PINENE

Mobility The product is insoluble in water.

PIN-2-(10) ENE

Mobility The product is insoluble in water.

PARA CYMENE

Mobility Not determined.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

EUCALYPTOL TRT

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

LIMONENE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

CAJUPUT EXT

LINALOOL

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

PARA CYMENE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

EUCALYPTOL TRT

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

LIMONENE

Other adverse effects No information available.

LINALOOL

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

CARYOPHYLLENE

Other adverse effects The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

PARA CYMENE

Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

CAJUPUT EXT

UN No. (ADR/RID)	1197
UN No. (IMDG)	1197
UN No. (ICAO)	1197
UN No. (ADN)	1197

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	EXTRACTS, LIQUID
Proper shipping name (IMDG)	EXTRACTS, LIQUID
Proper shipping name (ICAO)	EXTRACTS, LIQUID
Proper shipping name (ADN)	EXTRACTS, LIQUID

14.3. Transport hazard class(es)

ADR/RID class	3
ADR/RID classification code	F1
ADR/RID label	3
IMDG class	3
ICAO class/division	3
ADN class	3

Transport labels

**14.4. Packing group**

ADR/RID packing group	III
IMDG packing group	III
ICAO packing group	III
ADN packing group	III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

**14.6. Special precautions for user**

EmS	F-E, S-D
ADR transport category	3
Emergency Action Code	•3YE
Hazard Identification Number (ADR/RID)	33
Tunnel restriction code	(D/E)

CAJUPUT EXT

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).
Commission Regulation (EU) No 2015/830 of 28 May 2015.
This product may impact SEVESO storage regulations.

Restrictions (Annex XVII Regulation 1907/2006) This product is/contains a substance that is included in REGULATION (EC) No 1907/2006 (REACH) ANNEX XVII - RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES. Entry number: 3

Seveso Directive - Control of major accident hazards P5c E2

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Other information

CAJUPUT EXT

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

31/05/2023

Version number

2.000

Supersedes date

10/08/2021

SDS number

60628

CAJUPUT EXT

SDS status	Approved.
Hazard statements in full	H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H319 Causes serious eye irritation. H361 Suspected of damaging fertility or the unborn child. H361d Suspected of damaging the unborn child. 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. H413 May cause long lasting harmful effects to aquatic life.
Signature	Jitendra Panchal

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.