APPLE HARVEST CC-13033 5% in DPG

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 11/12/2024 Version: 1.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	APPLE HARVEST CC-13033 5% in DPG
Product code	:	CC-13033_5%
Type of product	:	Perfumes, Fragrances

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

1.2.1. Relevant identified uses

Industrial/Professional use spec	:	Industrial For professional use only
Use of the substance/mixture	:	Perfumes, Fragrances
Function or use category	:	Odour agents

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Candle Craft
Weiherwiese 10
65510 Idstein - Germany
T 49-6126-9363 -0
info@candlecraft.de - www.candlecraft.de

1.4. Emergency telephone number

No additional information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazardous to the aquatic environment – Chronic Hazard Category 3 H412
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Signal word (CLP)	:	-
Hazard statements (CLP)	:	H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	:	P273 - Avoid release to the environment. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH phrases	:	EUH208 - Contains Hexyl cinnamic aldehyde. May produce an allergic reaction.
Extra phrases	:	Restricted to professional users.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
benzyl benzoate	CAS-No.: 120-51-4 EC-No.: 204-402-9 EC Index-No.: 607-085-00-9 REACH-no: 01-2119976371-33	1.25 – 2.5	Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Hexyl cinnamic aldehyde	CAS-No.: 101-86-0 EC-No.: 202-983-3 REACH-no: 01-2119533092-50	0.175 – 0.35	Skin Sens. 1, H317 Aquatic Chronic 2, H411
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, galaxolide, (HHCB)	CAS-No.: 1222-05-5 EC-No.: 214-946-9 EC Index-No.: 603-212-00-7 REACH-no: 01-2119488227-29	0.075 – 0.15	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Carbitol substance with national workplace exposure limit(s) (AT, DE, EE, SE, SI, CH)	CAS-No.: 111-90-0 EC-No.: 203-919-7 REACH-no: 01-2119475105-42	0.014466 – 0.028932	Not classified
Butylated hydroxytoluene (BHT) crystals substance with national workplace exposure limit(s) (AT, BE, BG, DE, DK, ES, FI, FR, GB, GR, HR, IE, PT, SI, CH)	CAS-No.: 128-37-0 EC-No.: 204-881-4 REACH-no: 01-2119480433-40	0 – 0.004	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
(R)-p-mentha-1,8-diene, d-limonene substance with national workplace exposure limit(s) (DE, ES, FI, SI, NO, CH)	CAS-No.: 5989-27-5 EC-No.: 205-341-0 EC Index-No.: 601-096-00-2 REACH-no: 01-2119493353-35	0 – 0.003	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1B, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Toluene substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, NO, CH, TR); substance with a Community workplace exposure limit	CAS-No.: 108-88-3 EC-No.: 203-625-9 EC Index-No.: 601-021-00-3	≤ 0.0000000225	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Germany

Storage class (LGK, TRGS 510) : LGK 12 - Non-combustible liquids

Joint storage table :

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Joint storage not permitted for : LGK 1, LGK 6.2, LGK 7

Joint storage with restrictions permitted for : LGK 4.1A, LGK 4.3, LGK 5.1C

Joint storage permitted for : LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 5.1A, LGK 5.1B, LGK 5.2, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12, LGK 13, LGK 10-13

Switzerland

Storage class (LK) : LK 10/12 - Liquids

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Carbitol (111-90-0)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	35 mg/m³
	6 ppm
MAK (OEL STEL)	140 mg/m³
	24 ppm
Estonia - Occupational Exposure Limits	
OEL TWA	50.1 mg/m³
	10 ppm
OEL chemical category	skin notation
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	35 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
	6 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Slovenia - Occupational Exposure Limits	
OEL TWA	35 mg/m³
	6 ppm
OEL STEL	70 mg/m³
	12 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	80 mg/m³

Carbitol (111-90-0)	
	15 ppm
KGV (OEL STEL)	170 mg/m³
	30 ppm
OEL chemical category	skin notation
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	50 mg/m³ (aerosol, inhalable dust, vapour)
KZGW (OEL STEL)	100 mg/m³ (aerosol, inhalable dust, vapour)

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	10 mg/m³
Belgium - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (aerosol and vapor)
Bulgaria - Occupational Exposure Limits	
OEL TWA	10 mg/m³
OEL STEL	50 mg/m³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	10 mg/m³
Denmark - Occupational Exposure Limits	
OEL TWA	10 mg/m³
OEL STEL	20 mg/m³
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	10 mg/m³
HTP (OEL STEL)	20 mg/m³
France - Occupational Exposure Limits	
VME (OEL TWA)	10 mg/m³
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	10 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed-inhalable fraction)
Greece - Occupational Exposure Limits	
OEL TWA	10 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	2 mg/m³
OEL STEL	6 mg/m³ (calculated)
Portugal - Occupational Exposure Limits	
OEL TWA	2 mg/m³ (inhalable fraction; vapor)
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen
Slovenia - Occupational Exposure Limits	
OEL TWA	10 mg/m³ (inhalable fraction)
OEL STEL	40 mg/m³ (inhalable fraction)

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	10 mg/m³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	10 mg/m³
WEL STEL (OEL STEL)	30 mg/m³ (calculated)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	10 mg/m³ (no elevated carcinogenic risk by keeping the MAK-value-aerosol, inhalable dust, vapour)
KZGW (OEL STEL)	40 mg/m³ (no increased cancer risk by adhering to TWA values-aerosol, inhalable dust, vapour)
OEL chemical category	Category C1B carcinogen carcinogenic with threshold value
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	2 mg/m³ (inhalable fraction and vapor)
ACGIH chemical category	Not Classifiable as a Human Carcinogen

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	140 mg/m³
	25 ppm
HTP (OEL STEL)	280 mg/m³
	50 ppm
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	28 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
	5 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Chemical category	skin notation, Skin sensitization
Slovenia - Occupational Exposure Limits	
OEL TWA	28 mg/m³
	5 ppm
OEL STEL	112 mg/m³
	20 ppm
OEL chemical category	Potential for cutaneous absorption
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	168 mg/m³
	30 ppm
OEL chemical category	Sensitizer, skin - potential for cutaneous absorption
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	140 mg/m³
	25 ppm
Korttidsverdi (OEL STEL)	175 mg/m³ (value calculated)

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
	37.5 ppm (value calculated)
OEL chemical category	Allergenic substance
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	40 mg/m³
	7 ppm
KZGW (OEL STEL)	80 mg/m³
	14 ppm
OEL chemical category	Sensitizer

Toluene (108-88-3)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	192 mg/m³
	50 ppm
IOEL STEL	384 mg/m³
	100 ppm
Remark	Possibility of significant uptake through the skin
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	190 mg/m³
	50 ppm
MAK (OEL STEL)	380 mg/m³
	100 ppm
OEL chemical category	skin notation
Belgium - Occupational Exposure Limits	
OEL TWA	77 mg/m³
	20 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Skin, skin notation
Bulgaria - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
Bulgaria - Biological limit values	
BLV	1.6 mmol/mmol Creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: at the end of exposure or end of work shift
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	192 mg/m³
	50 ppm
KGVI (OEL STEL)	384 mg/m³

Toluene (108-88-3)	
	100 ppm
OEL chemical category	skin notation
Croatia - Biological limit values	
BLV	1 mg/l Parameter: Toluene - Medium: blood - Sampling time: at the end of the work shift 20 ppm Parameter: Toluene - Medium: final exhaled air - Sampling time: during exposure 2.5 g/g Kreatinin Parameter: Hippuric acid - Medium: urine - Sampling time: at the end of the work shift (calculated on the average Creatinine value of 1.2 g/L urine) 1 mg/g Kreatinin Parameter: o-Cresol - Medium: urine - Sampling time: at the end of the work shift (calculated on the average Creatinine value of 1.2 g/L urine)
Cyprus - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Skin-potential for cutaneous absorption
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	200 mg/m³
OEL chemical category	Potential for cutaneous absorption
Czech Republic - Biological limit values	
BLV	1.6 µmol/mmol Creatinine Parameter: o-Cresol - Medium: urine - Sampling time: end of shift (after hydrolysis) 1000 µmol/mmol Creatinine Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift (exposure testing using the o-Cresol parameter to precisely measure Toluene exposure is needed if the value of Hippuric acid is between 1600 and 2500 mg/g of Creatinine, no additional testing is needed if the Hippuric acid value is >2500 mg/g of Creatinine as work exposure to Toluene will have highly exceeded the PEL value.) 1.5 mg/g Kreatinin Parameter: o-Cresol - Medium: urine - Sampling time: end of shift (after hydrolysis) 1600 mg/g Kreatinin Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift (exposure testing using the o-Cresol parameter to precisely measure Toluene exposure is needed if the value of Hippuric acid is between 1600 and 2500 mg/g of Creatinine, no additional testing is needed if the Hippuric acid value is >2500 mg/g of Creatinine as work exposure to Toluene will have highly exceeded the PEL value.)
Denmark - Occupational Exposure Limits	
OEL TWA	94 mg/m³
	25 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Potential for cutaneous absorption
Estonia - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	skin notation

Toluene (108-88-3)	
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	81 mg/m³
	25 ppm
HTP (OEL STEL)	380 mg/m³
	100 ppm
OEL chemical category	Potential for cutaneous absorption
Finland - Biological limit values	
BLV	500 nmol/L Parameter: Toluene - Medium: blood - Sampling time: in the morning after a working day
France - Occupational Exposure Limits	
VME (OEL TWA)	76.8 mg/m³ (restrictive limit)
	20 ppm (restrictive limit)
VLE (OEL C/STEL)	384 mg/m³ (restrictive limit)
	100 ppm (restrictive limit)
OEL chemical category	Reproductive Toxin category 2, Risk of cutaneous absorption
France - Biological limit values	
BLV	20 µg/l Parameter: Toluene - Medium: blood - Sampling time: end of workweek (Semi-quantitative (ambiguous interpretation)) Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift (per the Authority, the values for this substance must be decided and/or determined on a case by case basis. Guidance for the calculation of and interpretation of values is provided in the source)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	190 mg/m³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
	50 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Chemical category	skin notation
Germany - Biological limit values (TRGS 903)	
Biological limit value	600 µg/l Parameter: Toluene - Medium: whole blood - Sampling time: immediately after exposure 75 µg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift 1.5 mg/l Parameter: o-Cresol (after hydrolysis) - Medium: urine - Sampling time: for long-term exposures: at the end of the shift after several shifts 1.5 mg/l Parameter: o-Cresol (after hydrolysis) - Medium: urine - Sampling time: end of shift
Gibraltar - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	skin notation
Greece - Occupational Exposure Limits	
OEL TWA	192 mg/m³

Toluene (108-88-3)	
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	skin - potential for cutaneous absorption
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	190 mg/m³
CK (OEL STEL)	384 mg/m³
OEL chemical category	Potential for cutaneous absorption
Ireland - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Potential for cutaneous absorption
Italy - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL chemical category	skin - potential for cutaneous absorption
Latvia - Occupational Exposure Limits	
OEL TWA	50 mg/m³
	14 ppm
OEL chemical category	skin - potential for cutaneous exposure
Latvia - Biological Exposure Indices	
BEI (BLV)	1.6 g/g Kreatinin Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift 0.05 mg/l Parameter: Toluene - Medium: blood - Sampling time: end of shift
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	192 mg/m³
	50 ppm
TPRV (OEL STEL)	384 mg/m³
	100 ppm
OEL chemical category	Reproductive toxin, skin notation
Luxembourg - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Possibility of significant uptake through the skin
Malta - Occupational Exposure Limits	
OEL TWA	192 mg/m³

Toluene (108-88-3)	
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Possibility of significant uptake through the skin
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	150 mg/m³
	39 ppm
TGG-15min (OEL STEL)	384 mg/m³
	100 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	100 mg/m³
NDSCh (OEL STEL)	200 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA	192 mg/m³ (indicative limit value)
	50 ppm (indicative limit value)
OEL STEL	384 mg/m³ (indicative limit value)
	100 ppm (indicative limit value)
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen, skin - potential for cutaneous exposure indicative limit value
Romania - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	skin notation
Romania - Biological limit values	
BLV	2 g/l Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift 3 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	192 mg/m³
	50 ppm
NPHV (OEL C)	384 mg/m³ (also biological monitoring considered)
OEL chemical category	Potential for cutaneous absorption
Slovakia - Biological limit values	
BLV	600 µg/l Parameter: Toluene - Medium: blood - Sampling time: end of exposure or work shift 1.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: after all work shifts (for long-term exposure) 1.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of exposure or work shift 2401 mg/g Kreatinin Parameter: Hippuric acid - Sampling time: end of exposure or work shift

Toluene (108-88-3)	
Slovenia - Occupational Exposure Limits	
OEL TWA	192 mg/m³
	50 ppm
OEL STEL	384 mg/m³
	100 ppm
OEL chemical category	Category 2, Potential for cutaneous absorption
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	192 mg/m³ (indicative limit value)
	50 ppm (indicative limit value)
VLA-EC (OEL STEL)	384 mg/m³
	100 ppm
OEL chemical category	skin - potential for cutaneous absorption
Spain - Biological limit values	
BLV	0.6 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift 0.05 mg/l Parameter: Toluene - Medium: blood - Sampling time: start of last shift of workweek 0.08 mg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	192 mg/m³
	50 ppm
KGV (OEL STEL)	384 mg/m³
	100 ppm
OEL chemical category	skin notation
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	191 mg/m³
	50 ppm
WEL STEL (OEL STEL)	384 mg/m³
	100 ppm
WEL chemical category	Potential for cutaneous absorption
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	94 mg/m³
	25 ppm
Korttidsverdi (OEL STEL)	141 mg/m³ (value calculated)
	37.5 ppm (value calculated)
OEL chemical category	skin notation
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	190 mg/m³
	50 ppm
KZGW (OEL STEL)	760 mg/m³
	200 ppm

Toluene (108-88-3)	
OEL chemical category	skin notation, Category 2 reproductive toxin
Switzerland - BAT (BLV)	
BAT (BLV)	600 µg/l Parameter: Toluene - Medium: whole blood - Sampling time: end of shift 6.48 µmol/l Parameter: Toluene - Medium: whole blood - Sampling time: end of shift 2 g/g Kreatinin Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) Parameter: Hippuric acid - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 0.5 mg/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 4.62 µmol/l Parameter: o-Cresol - Medium: urine - Sampling time: end of shift, and after several shifts (for long-term exposures) 75 µg/l Parameter: Toluol - Medium: urine - Sampling time: end of shift
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	20 ppm
ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA - ACGIH - Biological Exposure Indices	
BEI (BLV)	0.02 mg/l Parameter: Toluene - Medium: blood - Sampling time: prior to last shift of workweek 0.03 mg/l Parameter: Toluene - Medium: urine - Sampling time: end of shift 0.3 mg/g Kreatinin Parameter: o-Cresol with hydrolysis - Medium: urine - Sampling time: end of shift (background)

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure.

Personal protective equipment symbol(s):

8.2.2.1. Eye and face protection

Eye protection:
Chemical goggles or safety glasses

8.2.2.2. Skin protection

Hand protection:
Wear protective gloves.

8.2.2.3. Respiratory protection

Respiratory protection:
Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Conforms to standard.
Odor	:	characteristic.
Odor threshold	:	Not available
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Non flammable.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	> 93 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	Not available
Viscosity, kinematic	:	Not available
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapor pressure	:	Not available
Vapor pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	Not available
Relative vapor density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

benzyl benzoate (120-51-4)	
LD50 oral rat	> 2000 mg/kg (Source: ECHA_API)
LD50 oral	1160 mg/kg body weight
LD50 dermal rabbit	4000 mg/kg (Source: NLM_CIP)

Hexyl cinnamic aldehyde (101-86-0)	
LD50 oral rat	3100 mg/kg (Source: NLM_CIP)
LD50 oral	3100 mg/kg body weight
LD50 dermal rabbit	> 3000 mg/kg (Source: EPA_HPV)
LC50 Inhalation - Rat	> 5 mg/l/4h

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, galaxolide, (HHCB) (1222-05-5)	
LD50 oral rat	> 3250 mg/kg (Source: CHEMVIEW)
LD50 dermal rabbit	> 3250 mg/kg (Source: CHEMVIEW)
LC50 Inhalation - Rat	> 5.04 mg/l/4h

Carbitol (111-90-0)	
LD50 oral rat	10502 mg/kg (Source: OECD_SIDS)
LD50 dermal rabbit	9143 mg/kg (Source: OECD_SIDS)
LC50 Inhalation - Rat	> 5240 mg/m³ (Exposure time: 4 h Source: NLM_CIP)

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
LD50 oral rat	> 2930 mg/kg (Source: EPA_HPV)
LD50 dermal rat	> 2000 mg/kg (Source: JAPAN_GHS)

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
LD50 oral rat	4400 mg/kg (Source: CHEMVIEW)
LD50 dermal rabbit	> 5 g/kg (Source: CHEMVIEW)

Toluene (108-88-3)	
LD50 oral rat	2600 mg/kg (Source: JAPAN_GHS)
LD50 dermal rabbit	12000 mg/kg (Source: JAPAN_GHS)
LC50 Inhalation - Rat	12.5 mg/l/4h

Skin corrosion/irritation : Not classified
Additional information : Based on available data, the classification criteria are not met
Serious eye damage/irritation : Not classified
Additional information : Based on available data, the classification criteria are not met
Respiratory or skin sensitization : Not classified
Additional information : Based on available data, the classification criteria are not met
Germ cell mutagenicity : Not classified
Additional information : Based on available data, the classification criteria are not met
Carcinogenicity : Not classified
Additional information : Based on available data, the classification criteria are not met

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
IARC group	3 - Not classifiable

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
IARC group	3 - Not classifiable

Toluene (108-88-3)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
Additional information : Based on available data, the classification criteria are not met
STOT-single exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

Toluene (108-88-3)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified
Additional information : Based on available data, the classification criteria are not met

Toluene (108-88-3)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified
Additional information : Based on available data, the classification criteria are not met

benzyl benzoate (120-51-4)	
Viscosity, kinematic	7.456 mm²/s

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
Hydrocarbon	Yes

Toluene (108-88-3)	
Hydrocarbon	Yes

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified

Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.

benzyl benzoate (120-51-4)	
LC50 - Fish [1]	2.32 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static] Source: ECHA)
NOEC (chronic)	0.168 mg/l

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, galaxolide, (HHCB) (1222-05-5)	
LC50 - Fish [1]	0.452 mg/l Wolf, 1996d-27682
LC50 - Other aquatic organisms [1]	> 0.14 mg/l REACH DOSSIER Pimephales promelas
EC50 - Crustacea [2]	260 µg/l REACH Dossier
EC50 - Other aquatic organisms [1]	0.131 mg/l REACH Dossier

Carbitol (111-90-0)	
LC50 - Fish [1]	10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)
LC50 - Fish [2]	19100 – 23900 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through] Source: EPA)
EC50 - Crustacea [1]	3940 – 4670 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
EC50 72h - Algae [1]	6 mg/l (Species: Pseudokirchneriella subcapitata)
EC50 72h - Algae [2]	> 0.42 mg/l (Species: Desmodesmus subspicatus)

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
LC50 - Fish [1]	0.619 – 0.796 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
LC50 - Fish [2]	35 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: EPA)

Toluene (108-88-3)	
LC50 - Fish [1]	15.22 – 19.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: EPA)
LC50 - Fish [2]	12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: EPA)
EC50 - Crustacea [1]	5.46 – 9.83 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 - Crustacea [2]	11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 72h - Algae [1]	12.5 mg/l (Species: Pseudokirchneriella subcapitata [static])
EC50 96h - Algae [1]	> 433 mg/l (Species: Pseudokirchneriella subcapitata)

12.2. Persistence and degradability

APPLE HARVEST CC-13033 5% in DPG	
Persistence and degradability	Not established.

benzyl benzoate (120-51-4)	
Persistence and degradability	May cause long-term adverse effects in the environment.

Hexyl cinnamic aldehyde (101-86-0)	
Persistence and degradability	Rapidly degradable

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, galaxolide, (HHCB) (1222-05-5)	
Persistence and degradability	Rapidly degradable

Carbitol (111-90-0)	
Persistence and degradability	Rapidly degradable

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
Persistence and degradability	Rapidly degradable

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
Persistence and degradability	Rapidly degradable

Toluene (108-88-3)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

APPLE HARVEST CC-13033 5% in DPG	
Bioaccumulative potential	Not established.

benzyl benzoate (120-51-4)	
Partition coefficient n-octanol/water (Log Pow)	3.97 (at 25 °C)
Bioaccumulative potential	Not established.

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, galaxolide, (HHCB) (1222-05-5)	
BCF - Fish [1]	(1618 dimensionless (whole body w.w.)
Partition coefficient n-octanol/water (Log Pow)	5.3 (at 25 °C (at pH 7)

Carbitol (111-90-0)	
Partition coefficient n-octanol/water (Log Pow)	-0.8

Butylated hydroxytoluene (BHT) crystals (128-37-0)	
BCF - Fish [1]	230 – 2500
Partition coefficient n-octanol/water (Log Pow)	5.1

(R)-p-mentha-1,8-diene, d-limonene (5989-27-5)	
Partition coefficient n-octanol/water (Log Pow)	4.38 (at 37 °C (at pH 7.2)

Toluene (108-88-3)	
Partition coefficient n-octanol/water (Log Pow)	2.73 (at 20 °C (at pH 7)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecological information : Avoid release to the environment.

HP code : HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on	Entry title or description
3(a)	(R)-p-mentha-1,8-diene, d-limonene ; Toluene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	benzyl benzoate ; Hexyl cinnamic aldehyde ; (R)-p-mentha-1,8-diene, d-limonene ; Toluene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	APPLE HARVEST CC-13033 5% in DPG ; benzyl benzoate ; Hexyl cinnamic aldehyde ; 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, galaxolide, (HHCB) ; (R)-p-mentha-1,8-diene, d-limonene	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
40.	(R)-p-mentha-1,8-diene, d-limonene ; Toluene	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.
48.	Toluene	Toluene

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Name	CN designation	CAS-No.	CN code	Category, Subcategory	Threshold	Annex
Toluene		108-88-3	2902 30 00	Category 3		Annex I

15.1.2. National regulations

France

Professional diseases	
Code	Description
RG 4 BIS	Gastrointestinal disorders caused by benzene, toluene, xylenes and all products containing them
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Water hazard class (WGK) : WGK 1, slightly hazardous to water (Classification according to AwSV, Annex 1).

List of sensitizing substances (TRGS 907) : Contains sensitizing substances according TRGS 907.

Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : A(2) - toxic for aquatic organisms, may have longterm hazardous effects in aquatic environment

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : Toluene is listed

Denmark

Classification remarks : Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-phrases:	
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1

Full text of H- and EUH-phrases:	
EUH208	Contains Hexyl cinnamic aldehyde. May produce an allergic reaction.
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
H225	Highly flammable liquid and vapor.
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause 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.
H412	Harmful to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
Skin Sens. 1B	Skin sensitization, Category 1B
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.