

Safety Data Sheet according to the Hazardous Products Regulation (WHMIS 2015) Issue date: 06/28/2021 Revision date: 01/03/2024

Supersedes: 06/28/2021

Version: 1.1

		Issue date: 06/28/2021	Revision date: 01/03/2024	Supersedes: 06/28/2021	Version: 1.1
SECTION 1: Ide	entification				
1.1. Product i					
Product form	aonunor	: Mixture			
Product name			OTTON CANDY*		
CAS-No.		: N/A			
Product code		: 91-1055-43			
Product group		: Trade produc	t		
. .		•	t.		
1.2. Recomm	ended use and i	restrictions on use			
1.3. Supplier					
The Lebermuth Con 4004 Technology D 46628 South Bend, T 574-259-7000 - F info@lebermuth.cor	rive IN - United State 574-258-7450				
1.4. Emergen	cy telephone nu	imber			
Emergency number			- USA: 800-424-9300 Intern	ational: +1 703-527-3887 / 1-	800-424-9300
		CCN 13010			
SECTION 2: Ha	zard identifi	cation			
		stance or mixture			
Classification (GH					
Skin sensitization,	H317				
Category 1	11317				
Full text of H statem	ents : see sectio	n 16			
2.2. GHS Lab	al alamants inc	luding precautionary stater	nonte		
GHS CA labeling	er elements, me	idding precautionary stater	lents		
Hazard pictograms					
nazaru pictograms	(GHS CA)				
		•/			
Signal word (GHS C	CA)	: Warning			
Hazard statements	(GHS CA)	: H317 - May o	ause an allergic skin reaction		
Precautionary state		•	breathing dust/fume/gas/mist/\	/apors/sprav	
social on any state		P272 - Conta	minated work clothing should r	not be allowed out of the work	
			protective gloves/protective clo		ection.
			IF ON SKIN: Wash with plenty ic treatment (see supplementa		bel)
			If skin irritation or rash occurs:		
		P362+P364 -	Take off contaminated clothing	g and wash it before reuse.	
			se of contents/container to haz		ction point, in
		accordance v	rith local, regional, national and	a/or international regulation.	
2.3. Other has	zards				
No additional inform	ation available				
2.4. Unknown	acute toxicity (GHS CA)			
No data available					
SECTION 3: Co	mposition/Ir	formation on ingredie	ents		
3.1. Substand					
Not applicable					
3.2. Mixtures					

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Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
VANILLIN	2-methoxy-4-formylphenol / 3- methoxy-4-hydroxy benzaldehyde / 4-formyl-2-methoxyphenol / 4- hydroxy meta-anisaldehyde / 4- hydroxy-5-methoxybenzaldehyde / 4- hydroxy-5-methoxybenzaldehyde / 4- hydroxy FEMA No 3107 / lioxin / m-anisaldehyde, 4-hydroxy / lioxin / m-anisaldehyde, 4-hydroxy / meta- anisaldehyde, 4-hydroxy / meta- anisaldehyde, 4-hydroxy / methylprotocatechualdehyde / methylprotocatechualdehyde / para-hydroxy-meta- methoxybenzaldehyde / para-vanillin / p-hydroxy-meta-methoxy benzaldehyde / p-hydroxy-m- methoxybenzaldehyde / protocatechualdehyde / protocatechualdehyde / methyl- / p-vanillin / vanilla aldehyde / vanillaldehyde / vanillic aldehyde / vanillin / zimco	(CAS-No.) 121-33-5	1-5	Eye Irrit. 2A, H319
LINALOOL		(CAS-No.) 78-70-6	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
DELTA DAMASCONE		(CAS-No.) 57378-68-4	0.1 – 1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Skin Sens. 1A, H317
CINNAMIC ALDEHYDE	2-Propenal, 3-phenyl- / 3-phenyl-2- propenal / 3-phenyl-2- propenaldehyde / 3-phenylacrolein / 3-phenylpropenal / ABION CA / acrolein, 3-phenyl- / benzylideneacetaldehyde / beta- phenylacrolein / beta-phenylcrolein / cassia aldehyde / cinnamidehyde / cinnamic aldehyde / cinnamyl aldehyde / FEMA NUMBER 2286 / phenylacrolein / zimtaldehyde	(CAS-No.) 104-55-2	0.1 – 1	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1A, H317

Full text of hazard classes and H-statements : see section 16

SECTION	4: First-aid measures		
4.1. De	escription of first aid measures		
First-aid me	asures after inhalation	:	Remove person to fresh air and keep comfortable for breathing.
First-aid me	asures after skin contact	•	Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid me	asures after eye contact	:	Rinse eyes with water as a precaution.
First-aid me	asures after ingestion	:	Call a poison center/doctor/physician if you feel unwell.
4.2. M	ost important symptoms and effec	ts	(acute and delayed)
Symptoms/e	effects after skin contact	:	May cause an allergic skin reaction.
4.3. In	nmediate medical attention and spe	eci	al treatment, if necessary
Other medic	al advice or treatment	•	Treat symptomatically.

SECTION 5: Fire-fighting measures				
5.1.	Suitable extinguishing media			
Suitable	e extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.		
5.2.	Unsuitable extinguishing me	dia		
5.3.	Specific hazards arising from	n the hazardous product		
5.4.	Special protective equipment	t and precautions for fire-fighters		
Protect	ion during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		

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SECTION 6: Accidental relea	ise measures			
6.1. Personal precautions, pro	Personal precautions, protective equipment and emergency procedures			
No additional information available				
6.2. Methods and materials for	r containment and cleaning up			
Methods for cleaning up	: Take up liquid spill into absorbent material.			
Other information	: Dispose of materials or solid residues at an authorized site.			
6.3. Reference to other section	IS			
For further information refer to section 8: "Exposure controls/personal protection"				
SECTION 7: Handling and st	orage			
7.1. Precautions for safe hand	ling			
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.			
Hygiene measures	: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.			
7.2. Conditions for safe storag	je, including any incompatibilities			

Storage conditions : Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters** Butylated hydroxytoluene (128-37-0) USA - ACGIH ACGIH OEL TWA 2 mg/m³ USA - ACGIH Remark (ACGIH) URT irr USA - ACGIH Regulatory reference ACGIH 2023 BENZYL ACETATE (140-11-4) USA - ACGIH ACGIH OEL TWA [ppm] 10 ppm USA - ACGIH URT irr Remark (ACGIH) USA - ACGIH ACGIH 2023 Regulatory reference **PINENE (80-56-8)** USA - ACGIH ACGIH OEL TWA [ppm] 20 ppm USA - ACGIH Remark (ACGIH) TLV® Basis: Lung irr. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen) USA - ACGIH Regulatory reference ACGIH 2023 8.2. Appropriate engineering controls

Appropriate engineering controls

Ensure good ventilation of the work station.Avoid release to the environment.

Environmental exposure controls : Avoid release to the envir 8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



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SECTION 9: Physical and chemical properties				
9.1. Information on basic physical and chemical properties				
Physical state	: Liquid			
Appearance	: No data available			
Color	: COLORLESS TO YELLOW			
Odor	: CHARACTERISTIC, MATCHING RETAINER SAMPLE			
Odor threshold	: No data available			
рН	: No data available			
Relative evaporation rate (butyl acetate=1)	: No data available			
Relative evaporation rate (ether=1)	: No data available			
Melting point	: Not applicable			
Freezing point	: No data available			
Boiling point	: No data available			
Flash point	: 100 °C			
Auto-ignition temperature	: No data available			
Decomposition temperature	: No data available			
Flammability (solid, gas)	: Not applicable			
Vapor pressure	: No data available			
Vapor pressure at 50°C	: No data available			
Relative density	: 0.94 (0.93 – 0.95)			
Solubility	: Insoluble.			
Partition coefficient n-octanol/water (Log Pow)	: No data available			
Explosion limits	: No data available			
9.2. Other information				
Refractive index	: 1.457 (1.447 – 1.467)			

SECTION 10: Stability and reactivity				
10.1. Reactivity				
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.			
Chemical stability	: Stable under normal conditions.			
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.			
Conditions to avoid	: None under recommended storage and handling conditions (see section 7).			
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.			

SECTION 11: Toxicological information				
11.1. Information on toxicologic	Il effects			
Acute toxicity (oral)	: Not classified			
Acute toxicity (dermal)	: Not classified			
Acute toxicity (inhalation)	: Not classified			

DAMASCONE DELTA (57378-68-4)		
LD50 oral	1400 mg/kg body weight	
ATE CA (oral)	1400 mg/kg body weight	
CINNAMIC ALDEHYDE (104-55-2)		
LD50 oral rat	2220 mg/kg (Rat, Oral)	
LD50 oral	2200 mg/kg body weight	
LD50 dermal rabbit	1260 ml/kg (24 h, Rabbit, Male / female, Experimental value, Dermal)	
LD50 dermal	1100 mg/kg body weight	
LC50 Inhalation - Rat	68.88 mg/l (4 h, Rat, Male / female, QSAR, Inhalation)	
ATE CA (oral)	2200 mg/kg body weight	
ATE CA (Dermal)	1100 mg/kg body weight	
ATE CA (vapors)	68.88 mg/l/4h	
ATE CA (dust,mist)	68.88 mg/l/4h	
Linalool (78-70-6)		
LD50 oral	2790 mg/kg body weight	
01/03/2024	EN (English US)	

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$\Delta T = C \Delta (aral)$	2700 malka body weight
ATE CA (oral)	2790 mg/kg body weight
VANILLIN (121-33-5)	1
LD50 oral rat	3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimenta value, Oral, 14 day(s))
LD50 oral	3300 mg/kg body weight
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal	2600 mg/kg body weight
ATE CA (oral)	3300 mg/kg body weight
ATE CA (Dermal)	2600 mg/kg body weight
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Serm cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
	: Not classified
TOT-repeated exposure	
Aspiration hazard	: Not classified
symptoms/effects after skin contact	: May cause an allergic skin reaction.
SECTION 12: Ecological information	
2.1. Toxicity	
cology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
lazardous to the aquatic environment, short–	
lazardous to the aquatic environment, short– erm (acute)	effects in the environment.
lazardous to the aquatic environment, short– erm (acute) lazardous to the aquatic environment, long– erm (chronic)	effects in the environment. : Not classified
Hazardous to the aquatic environment, short– erm (acute) Hazardous to the aquatic environment, long– erm (chronic) CINNAMIC ALDEHYDE (104-55-2)	effects in the environment. : Not classified : Not classified
Hazardous to the aquatic environment, short– erm (acute) Hazardous to the aquatic environment, long– erm (chronic)	effects in the environment. : Not classified
Azardous to the aquatic environment, short– erm (acute) Azardous to the aquatic environment, long– erm (chronic) CINNAMIC ALDEHYDE (104-55-2)	effects in the environment. : Not classified : Not classified 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental
Hazardous to the aquatic environment, short- erm (acute) Hazardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1]	 effects in the environment. Not classified Not classified 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static
Azardous to the aquatic environment, short- erm (acute) Azardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1] EC50 - Crustacea [1] EC50 72h - Algae [1] Partition coefficient n-octanol/water (Log Pow)	 effects in the environment. Not classified Not classified 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) 31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method 25 °C)
Azardous to the aquatic environment, short- erm (acute) Azardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1] EC50 - Crustacea [1] EC50 72h - Algae [1]	 effects in the environment. Not classified Not classified 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) 31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method 25 °C) 1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on
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Azardous to the aquatic environment, short- erm (acute) Azardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1] EC50 - Crustacea [1] EC50 72h - Algae [1] Partition coefficient n-octanol/water (Log Pow) Organic Carbon Normalized Adsorption Coefficient (Log Koc)	 effects in the environment. Not classified Not classified 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) 31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method 25 °C) 1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on
Azardous to the aquatic environment, short- erm (acute) Azardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1] EC50 - Crustacea [1] EC50 - Crustacea [1] EC50 72h - Algae [1] Partition coefficient n-octanol/water (Log Pow) Organic Carbon Normalized Adsorption Coefficient (Log Koc) VANILLIN (121-33-5)	 effects in the environment. Not classified Not classified A.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) 31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method 25 °C) 1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through
Azardous to the aquatic environment, short- erm (acute) Azardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1] EC50 - Crustacea [1] EC50 72h - Algae [1] Partition coefficient n-octanol/water (Log Pow) Organic Carbon Normalized Adsorption Coefficient (Log Koc) VANILLIN (121-33-5) LC50 - Fish [1]	 effects in the environment. Not classified Not classified 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) 31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method 25 °C) 1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) 123 mg/l Test organisms (species): Pimephales promelas
Azardous to the aquatic environment, short- erm (acute) Azardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1] EC50 - Crustacea [1] EC50 72h - Algae [1] Partition coefficient n-octanol/water (Log Pow) Organic Carbon Normalized Adsorption Coefficient (Log Koc) VANILLIN (121-33-5) LC50 - Fish [1] LC50 - Fish [2]	 effects in the environment. Not classified Not classified A.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) 31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method 25 °C) 1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value) 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) 123 mg/l Test organisms (species): Pimephales promelas 36.79 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static
Azardous to the aquatic environment, short- erm (acute) Azardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1] EC50 - Crustacea [1] EC50 72h - Algae [1] Partition coefficient n-octanol/water (Log Pow) Organic Carbon Normalized Adsorption Coefficient (Log Koc) VANILLIN (121-33-5) LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1]	 effects in the environment. Not classified Not classified 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) 31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method 25 °C) 1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value) 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) 123 mg/l Test organisms (species): Pimephales promelas 36.79 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) 120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata,
Azardous to the aquatic environment, short- erm (acute) Azardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1] EC50 - Crustacea [1] EC50 72h - Algae [1] Partition coefficient n-octanol/water (Log Pow) Organic Carbon Normalized Adsorption Coefficient (Log Koc) VANILLIN (121-33-5) LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1] ErC50 algae	 effects in the environment. Not classified Not classified 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) 31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method 25 °C) 1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value) 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) 123 mg/l Test organisms (species): Pimephales promelas 36.79 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) 120 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names:
Azardous to the aquatic environment, short- erm (acute) Azardous to the aquatic environment, long- erm (chronic) CINNAMIC ALDEHYDE (104-55-2) LC50 - Fish [1] EC50 - Crustacea [1] EC50 72h - Algae [1] Partition coefficient n-octanol/water (Log Pow) Organic Carbon Normalized Adsorption Coefficient (Log Koc) VANILLIN (121-33-5) LC50 - Fish [1] LC50 - Fish [2] EC50 - Crustacea [1] ErC50 algae EC50 72h - Algae [1]	 effects in the environment. Not classified Not classified Not classified 4.15 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) 3.21 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect) 31.6 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Growth rate) 2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method 25 °C) 1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value) 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) 123 mg/l Test organisms (species): Pimephales promelas 36.79 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) 120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) 120 mg/l Test organisms (species): Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

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VANILLIN (121-33-5)	
LOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
2.2. Persistence and degradability	
CINNAMIC ALDEHYDE (104-55-2)	
Persistence and degradability	Readily biodegradable in water.
VANILLIN (121-33-5)	
Persistence and degradability	Readily biodegradable in water.
2.3. Bioaccumulative potential	
CINNAMIC ALDEHYDE (104-55-2)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Partition coefficient n-octanol/water (Log Pow)	2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value
VANILLIN (121-33-5)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Partition coefficient n-octanol/water (Log Pow)	1.17 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.438 (log Koc, Experimental value)
2.4. Mobility in soil	
CINNAMIC ALDEHYDE (104-55-2)	
Surface tension	45.3 mN/m (20 °C, Experimental value)
Ecology - soil	Highly mobile in soil.
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.958 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value
Partition coefficient n-octanol/water (Log Pow)	2.107 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
VANILLIN (121-33-5)	
Ecology - soil	Low potential for mobility in soil.
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.438 (log Koc, Experimental value)

12.5.	Other adverse effects	
Ozone		: Not classified

Partition coefficient n-octanol/water (Log Pow)

SECTION 13: Disposal consideration	15				
13.1. Disposal methods					
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.				
SECTION 14: Transport information					
14.1. Basic shipping description					
In accordance with TDG					
Transportation of Dangerous Goods					
Not regulated for transport					
14.2. Transport information/DOT					
Department of Transport					
Not regulated for transport					
14.3. Air and sea transport					
IMDG					
Not regulated for transport					
ΙΑΤΑ					
Not regulated for transport					

1.17 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 $^{\circ}\text{C}$)

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015)

SECTION 15: Regulatory information		
15.1. National regulations		
DAMASCONE DELTA (57378-68-4)		
Listed on the Canadian DSL (Domestic Substances List)		
CINNAMIC ALDEHYDE (104-55-2)		
Listed on the Canadian DSL (Domestic Substances List)		
Linalool (78-70-6)		
Listed on the Canadian DSL (Domestic Substances List)		
VANILLIN (121-33-5)		
Listed on the Canadian DSL (Domestic Substances List)		
15.2. International regulations		
DAMASCONE DELTA (57378-68-4)		
Listed on INSQ (Mexican National Inventory of Chemical Substances)		
CINNAMIC ALDEHYDE (104-55-2)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Linalool (78-70-6)		
Listed on INSQ (Mexican National Inventory of Chemical Substances)		
VANILLIN (121-33-5)		
Listed on INSQ (Mexican National Inventory of Chemical Substances)		

SECTION 16: Other information

SDS Major/Minor	:	None
Issue date	:	06/28/2021
Revision date	:	01/03/2024
Supersedes	:	06/28/2021

Full text of H-phrases:

	H227	Combustible liquid
	H302	Harmful if swallowed
	H312	Harmful in contact with skin
	H315	Causes skin irritation
	H317	May cause an allergic skin reaction
	H319	Causes serious eye irritation

SDS Canada (GHS) - Lebermuth

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.