

SPICED HONEY & TONKA FRAGRANCE

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date:

Safety Data Sheet

Version: 1.0

08/18/2022

Shay & Company

SECTION 1: Identification Identification 1.1. Product form : Mixture Product name SPICED HONEY & TONKA Product code 99297 Recommended use and restrictions on use 1.2. 1.3. Supplier Shay and Company 10639 SE Fuller Rd Milwaukie, OR 97222 503-653-1155 1.4. **Emergency telephone number** : CHEMTREC - USA: 800-424-9300 International: +1 703-527-3887 / 1-800-424-9300 Emergency number CCN1014530 SECTION 2: Hazard(s) identification Classification of the substance or mixture 2.1. **GHS US classification** Skin corrosion/irritation Category 2 Causes skin irritation Serious eye damage/eye irritation Category 2 Causes serious eye irritation Skin sensitization, Category 1 May cause an allergic skin reaction GHS Label elements, including precautionary statements 2.2. **GHS US labeling** Hazard pictograms (GHS US) GHS07 Signal word (GHS US) : Warning Hazard statements (GHS US) Causes skin irritation May cause an allergic skin reaction Causes serious eye irritation Precautionary statements (GHS US) Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands, forearms and face thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. If on skin: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Specific treatment (see supplemental first aid instruction on this label). If skin irritation occurs: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Wash contaminated clothing before reuse. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. 2.3. Other hazards which do not result in classification No additional information available

2.4.	Unknown acute toxicity (GHS US)	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/Information on ingredients

3.1. Substances Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
BENZYL BENZOATE	(CAS-No.) 120-51-4	10 – 25	Acute Tox. 4 (Oral), H302
ALPHA HEXYLCINNAMALDEHYDE	(CAS-No.) 101-86-0	10 – 25	Skin Sens. 1B, H317
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2- naphthalenyl)ethanone	(CAS-No.) 54464-57-2	5 – 10	Skin Irrit. 2, H315 Skin Sens. 1B, H317
ETHYL VANILLIN	(CAS-No.) 121-32-4	1 – 5	Eye Irrit. 2B, H320
VANILLIN	(CAS-No.) 121-33-5	1 – 5	Eye Irrit. 2A, H319
ETHYL MALTOL	(CAS-No.) 4940-11-8	1 – 5	Acute Tox. 4 (Oral), H302
LINALYL ACETATE	(CAS-No.) 115-95-7	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2, H319
COUMARIN	(CAS-No.) 91-64-5	1 – 5	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Sens. 1B, H317
LINALOOL	(CAS-No.) 78-70-6	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317
Ethyl methylphenylglycidate	(CAS-No.) 77-83-8	1 – 5	Skin Sens. 1B, H317
DIHYDROMYRCENOL	(CAS-No.) 18479-58-8	1 – 5	Flam. Liq. 4, H227 Skin Irrit. 2, H315 Eye Irrit. 2A, H319
CITRAL	(CAS-No.) 5392-40-5	0.1 – 1	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 STOT RE 2, H373

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

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures 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 measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.
4.2. Most important symptoms and effect	cts (acute and delayed)
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
4.3. Immediate medical attention and sp	ecial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguish	ning media
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Specific hazards arising from the ch	nemical
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
5.3. Special protective equipment and p	recautions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 6: Accidental release meas	sures
6.1. Personal precautions, protective equ	
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.
6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions Avoid release to the environment.	
6.3. Methods and material for containme	nt 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.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray.
Hygiene measures	: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, includir	ng any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.
SECTION 8: Exposure controls/perso 8.1. Control parameters	onal protection
8.1. Control parameters	onal protection
8.1. Control parameters OIL, SPICED HONEY & TONKA*	onal protection
8.1. Control parameters OIL, SPICED HONEY & TONKA* No additional information available	onal protection
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Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Remark (ACGIH)	TLV® Basis: Body weight eff; URT irr; eye dam. Notations: Skin; DSEN; A4 (Not classifiable as a Human Carcinogen)	
Regulatory reference	ACGIH 2021	
DIHYDROMYRCENOL (18479-58-8)		
No additional information available		
LINALOOL (78-70-6)		
No additional information available		
LINALYL ACETATE (115-95-7)		
No additional information available		

8.2. Appropriate engineering controls

: Ensure good ventilation of the work station.

Appropriate engineering controls Environmental exposure controls

: Avoid release to the environment.

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



SECTION 9: Physical and chemical	properties	
9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Color	: COLORLESS TO YELLOW	
Odor	: CHARACTERISTIC, MATCHING RETAINER SAMPLE	
Odor threshold	: No data available	
pH	: No data available	
Melting point	: Not applicable	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: 100 °C	
Relative evaporation rate (butyl acetate=1)	: No data available	
Flammability (solid, gas)	: Not applicable.	
Vapor pressure	: No data available	
Relative vapor density at 20 °C	: No data available	
Relative density	: 1.0202 (1.0102 – 1.0302)	
Solubility	: Insoluble.	
Partition coefficient n-octanol/water (Log Pow)	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Viscosity, kinematic	: No data available	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

/iscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available : No data available
Oxidizing properties	
9.2. Other information	. 4 50400 /4 54400 . 4 50400)
Refractive index	: 1.52128 (1.51128 – 1.53128)
SECTION 10: Stability and reactive	vity
10.1. Reactivity	
The product is non-reactive under normal co	onditions of use, storage and transport.
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactio	ns
No dangerous reactions known under norma	al conditions of use.
10.4. Conditions to avoid	
None under recommended storage and han	dling conditions (see section 7).
10.5. Incompatible materials	
No additional information available	
10.6. Hazardous decomposition prod	ucts
Under normal conditions of storage and use	, hazardous decomposition products should not be produced.
SECTION 11: Toxicological inform	mation
11.1. Information on toxicological effe	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
COUMARIN (91-64-5)	
LD50 oral rat	293 mg/kg body weight Animal: rat, Guideline: other:
LD50 dermal rat	293 mg/kg body weight Animal: rat, Guideline: other:
ATE US (oral)	293 mg/kg body weight
ATE US (dermal)	293 mg/kg body weight
ETHYL VANILLIN (121-32-4)	
LD50 oral rat	> 3160 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rat ATE US (oral)	
	Toxicity)
ATE US (oral)	Toxicity) 3000 mg/kg body weight
ATE US (oral) VANILLIN (121-33-5)	Toxicity) 3000 mg/kg body weight 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental
ATE US (oral) VANILLIN (121-33-5) LD50 oral rat	Toxicity) 3000 mg/kg body weight 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female,
ATE US (oral) VANILLIN (121-33-5) LD50 oral rat LD50 dermal rat	Toxicity) 3000 mg/kg body weight 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
ATE US (oral) VANILLIN (121-33-5) LD50 oral rat LD50 dermal rat ATE US (oral)	Toxicity) 3000 mg/kg body weight 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
ATE US (oral) VANILLIN (121-33-5) LD50 oral rat LD50 dermal rat ATE US (oral) ETHYL MALTOL (4940-11-8)	Toxicity) 3000 mg/kg body weight 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s)) 3300 mg/kg body weight
ATE US (oral) VANILLIN (121-33-5) LD50 oral rat LD50 dermal rat ATE US (oral) ETHYL MALTOL (4940-11-8) LD50 oral rat	Toxicity) 3000 mg/kg body weight 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s)) 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Dermal, 14 day(s)) 3300 mg/kg body weight 1220 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral) > 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal
ATE US (oral) VANILLIN (121-33-5) LD50 oral rat LD50 dermal rat ATE US (oral) ETHYL MALTOL (4940-11-8) LD50 oral rat LD50 dermal rabbit	Toxicity) 3000 mg/kg body weight 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s)) 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral) 3300 mg/kg body weight 1220 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral) > 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: no indication of skin irritation up to the relevant limit dose level 1200 mg/kg body weight
ATE US (oral) VANILLIN (121-33-5) LD50 oral rat LD50 dermal rat ATE US (oral) ETHYL MALTOL (4940-11-8) LD50 oral rat LD50 dermal rabbit ATE US (oral)	Toxicity) 3000 mg/kg body weight 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s)) 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s)) 3300 mg/kg body weight 1220 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral) > 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: no indication of skin irritation up to the relevant limit dose level 1200 mg/kg body weight
ATE US (oral) VANILLIN (121-33-5) LD50 oral rat LD50 dermal rat ATE US (oral) ETHYL MALTOL (4940-11-8) LD50 oral rat LD50 dermal rabbit ATE US (oral) ALPHA HEXYLCINNAMALDEHYDE (107)	Toxicity) 3000 mg/kg body weight 3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) > 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s)) 3300 mg/kg body weight 1220 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral) > 5000 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral) > 5000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: no indication of skin irritation up to the relevant limit dose level 1200 mg/kg body weight

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

BENZYL BENZOATE (120-51-4)	
LD50 dermal rabbit	> 2000 mg/kg bw/day (Modification of Draize 1959 method, 4 h, Rabbit, Experimental value, Dermal)
ATE US (oral)	1500 mg/kg body weight
ATE US (dermal)	4000 mg/kg body weight
CITRAL (5392-40-5)	
LD50 oral rat	≈ 6800 mg/kg body weight Animal: rat
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Remarks on results: other:
ATE US (dermal)	2250 mg/kg body weight
DIHYDROMYRCENOL (18479-58-8)	
ATE US (oral)	3600 mg/kg body weight
LINALOOL (78-70-6)	
ATE US (oral)	2790 mg/kg body weight
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
COUMARIN (91-64-5)	
IARC group	3 - Not classifiable

CITRAL (5392-40-5)	
NOAEL (chronic,oral,animal/male,2 years)	60 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Remarks on results: other:
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
COUMARIN (91-64-5)	
NOAEL (subchronic,oral,animal/female,90 days)	> 138.3 mg/kg body weight Animal: mouse, Animal sex: female
ETHYL MALTOL (4940-11-8)	
NOAEL (oral,rat,90 days)	≥ 200 mg/kg body weight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

GITRAL (5392-40-5)	
LOAEC (inhalation,rat,gas,90 days)	68 ppm Animal: rat, Animal sex: female
NOAEL (oral,rat,90 days)	100 mg/kg body weight Animal: rat, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
NOAEC (inhalation,rat,gas,90 days)	34 ppm Animal: rat, Animal sex: female
NOAEL (subchronic,oral,animal/male,90 days)	60 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information 12.1. Toxicity Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. COUMARIN (91-64-5) [.250 - Fish [1] 2.94 mg/l Test organisms (species): Daphnia sp. LC50 - Fish [2] 1324 mg/l Test organisms (species): Daphnia sp. [.260 - Fish [2] NOEE (chronic) 0.5 mg/l Test organisms (species): Duration: '21 d' [.260 - Fish [1] [.260 - Fish [1] NOEE (chronic) 0.5 mg/l Test organisms (species): Duration: '30 d' [.260 - Fish [1] [.260 - Chronic) [.260 - Chronic) [.260 - Fish [1] [.261 - Chronic) [.260 - Chronic] [.261 - Chronic] [.271 - Chronic] [.272 - Chronic] [.271 - Chronic] [.271	Symptoms/effects after eye contact	: Eye irritation.
Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. COUMARIN (91-64-5)	SECTION 12: Ecological information	on
effects in the environment. COUMARIN (91-64-5) LC50 - Fish [1] 2.94 mg/l Test organisms (species): LC50 - Fish [2] 1324 mg/l Test organisms (species): Duration: '21 d' NOEC (chronic) 0.5 mg/l Test organisms (species): Duration: '21 d' NOEC (chronic) 0.5 mg/l Test organisms (species): Duration: '21 d' NOEC (chronic) 1.87.6 mg/l Test organisms (species): Duration: '21 d' LC50 - Fish [1] 87.6 mg/l Test organisms (species): Daphnia magna LC50 - Chronic fish 0.191 mg/l Test organisms (species): Daphnia magna LC50 - Chronic (chronic) 10 mg/l Test organisms (species): Daphnia magna LC50 - Fish [1] 87.6 mg/l Test organisms (species): Daphnia magna LC50 - Fish [1] 87.7 mg/l (Equivalent or similar to DECD 203, 96 h, Pimephales promelas EC50 - Crustacea [1] 57 mg/l (Equivalent or similar to DECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) EC50 - Crustacea [1] 36.7 mg/l (DECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) LC50 - Fish [2] 123 mg/l Test organisms (species): Daphnia magna Duration: '21 d' LC50 - Crustacea [1] 23 6.7 mg/l Test organisms (species): Daphnia magna Duration: '21 d' LC50 - Fish [2] <	12.1. Toxicity	
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ETHYL VANILLIN (121-32-4) LC50 - Fish [1] 87.6 mg/l Test organisms (species): Pimephales promelas EC50 - Crustacea [1] 26.2 mg/l Test organisms (species): Daphnia magna LOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna NOEC (chronic) 5.9 mg/l Test organisms (species): Daphnia magna VANILLIN (121-33-5) LC50 - Fish [1] 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) EC50 - Crustacea [1] 36.79 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) LC50 - Fish [2] 123 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 5.9 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value LC50 - Fish [1] > 85 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value EC50 - Crustacea [1] 27 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh wat	NOEC (chronic)	
LC50 - Fish [1] 87.6 mg/l Test organisms (species): Pimephales promelas EC50 - Crustacea [1] 26.2 mg/l Test organisms (species): Daphnia magna LOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d' VANILLIN (121-33-5) 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) EC50 - Fish [1] 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, GLP) LC50 - Fish [2] 123 mg/l Test organisms (species): Dimphales promelas EC50 algae 120 mg/l CECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) LOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' EHYL MALTOL (4940-11-8) EC50 - Crustacea [1] LC50 - Fish [1] > 85 mg/l (OECD 202: Sphina sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) EC50 - Crustacea [1] > 85 mg/l (OECD 202: Algunia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system,	NOEC chronic fish	0.191 mg/l Test organisms (species): Duration: '30 d'
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VANILLIN (121-33-5) LC50 - Fish [1] 57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) EC50 - Crustacea [1] 36.79 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) LC50 - Fish [2] 123 mg/l Test organisms (species): Pimephales promelas ErC50 algae 120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) LOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d' ETHYL MALTOL (4940-11-8) > 85 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value) EC50 - Crustacea [1] > 85 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) EC50 - Crustacea [1] 27 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value) EC50 - Grustacea [1] 2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) EC50 - Fish [1] 2.32 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)	LOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
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system, Fresh water, Experimental value) EC50 - Crustacea [1] 36.79 mg/l (OECD 202: Daphia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) LC50 - Fish [2] 123 mg/l Test organisms (species): Pimephales promelas ErC50 algae 120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) LOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d' ETHYL MALTOL (4940-11-8) LC50 - Fish [1] > 85 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value) EC50 - Crustacea [1] > 85 mg/l (OECD 203: Epshnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) EC50 - Crustacea [1] 2.7 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) ErC50 algae 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) BENZYL BENZOATE (120-51-4) LC50 - Fish [1] 2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 2.32 mg/l (EU Method C.1, 96 h, Danio re	VANILLIN (121-33-5)	
system, Fresh water, Experimental value, GLP) LC50 - Fish [2] 123 mg/l Test organisms (species): Pimephales promelas ErC50 algae 120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) LOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d' ETHYL MALTOL (4940-11-8) LC50 - Fish [1] > 85 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value) EC50 - Crustacea [1] > 85 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) ErC50 algae 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value) ErC50 algae 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value) ErC50 algae 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) BENZYL BENZOATE (120-51-4) 2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphni	LC50 - Fish [1]	
ErC50 algae 120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) LOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d' ETHYL MALTOL (4940-11-8)	EC50 - Crustacea [1]	36.79 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
Static system, Fresh water, Experimental value, GLP) LOEC (chronic) 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d' NOEC (chronic) 5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d' ETHYL MALTOL (4940-11-8) Image: Constraint of the system of the system of the system, Fresh water, Experimental value) EC50 - Fish [1] > 85 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value) EC50 - Crustacea [1] 27 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) ErC50 algae 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) BENZYL BENZOATE (120-51-4) 2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) EC50 - Fish [1] 6.78 mg/l Test organisms (species): Leuciscus idus	LC50 - Fish [2]	123 mg/l Test organisms (species): Pimephales promelas
NOEC (chronic) 5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d' ETHYL MALTOL (4940-11-8) LC50 - Fish [1] > 85 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value) EC50 - Crustacea [1] 27 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) ErC50 algae 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) BENZYL BENZOATE (120-51-4) LC50 - Fish [1] 2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) EC50 - Fish [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) CITRAL (5392-40-5) LC50 - Fish [1] 6.78 mg/l Test organisms (species): Leuciscus idus	ErC50 algae	
ETHYL MALTOL (4940-11-8) LC50 - Fish [1] > 85 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value) EC50 - Crustacea [1] 27 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) ErC50 algae 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) BENZYL BENZOATE (120-51-4) 2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) EC50 - Fish [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) EC50 - Fish [1] 6.78 mg/l Test organisms (species): Leuciscus idus	LOEC (chronic)	10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
LC50 - Fish [1] > 85 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value) EC50 - Crustacea [1] 27 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value) ErC50 algae 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value) ErC50 algae 7.2 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP) BENZYL BENZOATE (120-51-4) 2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) EC50 - Fish [1] 2.32 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) CITRAL (5392-40-5) 1 LC50 - Fish [1] 6.78 mg/l Test organisms (species): Leuciscus idus	NOEC (chronic)	5.9 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
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Static system, Fresh water, Experimental value, GLP) BENZYL BENZOATE (120-51-4) LC50 - Fish [1] 2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) CITRAL (5392-40-5) LC50 - Fish [1] 6.78 mg/l Test organisms (species): Leuciscus idus	EC50 - Crustacea [1]	
LC50 - Fish [1] 2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) CITRAL (5392-40-5) LC50 - Fish [1] 6.78 mg/l Test organisms (species): Leuciscus idus	ErC50 algae	
value, GLP) EC50 - Crustacea [1] 3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP) CITRAL (5392-40-5) LC50 - Fish [1] 6.78 mg/l Test organisms (species): Leuciscus idus	BENZYL BENZOATE (120-51-4)	
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LC50 - Fish [1] 6.78 mg/l Test organisms (species): Leuciscus idus	EC50 - Crustacea [1]	
	CITRAL (5392-40-5)	
	LC50 - Fish [1]	6.78 mg/l Test organisms (species): Leuciscus idus
	EC50 - Crustacea [1]	

12.2. Persistence and degradability

VANILLIN (121-33-5)		
Persistence and degradability	Readily biodegradable in water.	
ETHYL MALTOL (4940-11-8)		
Persistence and degradability	Readily biodegradable in water.	
BENZYL BENZOATE (120-51-4)		
Persistence and degradability	Readily biodegradable in water.	
DIHYDROMYRCENOL (18479-58-8)		
Persistence and degradability	Biodegradability in water: no data available.	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.3. Bioaccumulative potential

VANILLIN (121-33-5)	
Partition coefficient n-octanol/water (Log Pow)	1.17 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
ETHYL MALTOL (4940-11-8)	
Partition coefficient n-octanol/water (Log Pow)	2.9 (Practical experience/observation, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
BENZYL BENZOATE (120-51-4)	
BCF - Fish [1]	193.4 l/kg (BCFBAF v3.01, Pisces, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	3.97 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
DIHYDROMYRCENOL (18479-58-8)	
Partition coefficient n-octanol/water (Log Pow)	3.47 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

VANILLIN (121-33-5)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.438 (log Koc, Experimental value)
Ecology - soil	Low potential for mobility in soil.
ETHYL MALTOL (4940-11-8)	
Ecology - soil	No (test)data on mobility of the substance available.
BENZYL BENZOATE (120-51-4)	
Surface tension	27 mN/m (210 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	3.8 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Low potential for mobility in soil.
DIHYDROMYRCENOL (18479-58-8)	
Ecology - soil	No (test)data on mobility of the substance available.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT) In accordance with DOT Not regulated

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

SECTION 15: Regulatory information

Safety Data Sheet

15.1. US Federal regulations

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Air transport

Not applicable

COUMARIN (91-64-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
ETHYL VANILLIN (121-32-4)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
ALPHA HEXYLCINNAMALDEHYDE (101-86-0)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
BENZYL BENZOATE (120-51-4)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

15.2. International regulations

CANADA

COUMARIN (91-64-5)		
Listed on the Canadian DSL (Domestic Substances List)		
ETHYL VANILLIN (121-32-4)		
Listed on the Canadian DSL (Domestic Substances List)		
VANILLIN (121-33-5)		
Listed on the Canadian DSL (Domestic Substances List)		
ETHYL MALTOL (4940-11-8)		
Listed on the Canadian DSL (Domestic Substances List)		
Ethyl methylphenylglycidate (77-83-8)		
Listed on the Canadian DSL (Domestic Substances List)		
ALPHA HEXYLCINNAMALDEHYDE (101-86-0)		
Listed on the Canadian DSL (Domestic Substances List)		
1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (54464-57-2)		
Listed on the Canadian DSL (Domestic Substances List)		
BENZYL BENZOATE (120-51-4)		
Listed on the Canadian DSL (Domestic Substances List)		
CITRAL (5392-40-5)		
Listed on the Canadian DSL (Domestic Substances List)		
DIHYDROMYRCENOL (18479-58-8)		
Listed on the Canadian DSL (Domestic Substances List)		
LINALOOL (78-70-6)		
Listed on the Canadian DSL (Domestic Substances List)		
LINALYL ACETATE (115-95-7)		
Listed on the Canadian DSL (Domestic Substances List)		

EU-Regulations

No additional information available

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

National regulations	
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VANILLIN (121-33-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

ETHYL MALTOL (4940-11-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

Ethyl methylphenylglycidate (77-83-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active

1-(1,2,3,4,5,6,7,8-Octahydro-2,3,8,8-tetramethyl-2-naphthalenyl)ethanone (54464-57-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

CITRAL (5392-40-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

DIHYDROMYRCENOL (18479-58-8)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

LINALOOL (78-70-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

LINALYL ACETATE (115-95-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

🗥 WARNING:

This product can expose you to furocoumarines (e. g. trioxysalen (inn), 8-methoxypsoralen, 5-methoxypsoralen) except for normal content in natural essences used. in sunprotection and in bronzing products, furocoumarines shall be below 1 mg/kg, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

This product can expose you to myrcene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

text of H-phrases:		
H227	Combustible liquid	
H301	Toxic if swallowed	
H302	Harmful if swallowed	
H311	Toxic in contact with skin	
H315	Causes skin irritation	
H317	May cause an allergic skin reaction	
H319	Causes serious eye irritation	
H320	Causes eye irritation	
H373	May cause damage to organs through prolonged or repeated exposure	

SDS US (GHS HazCom 2012)

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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.