

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 11/16/2018 Revision date: 11/16/2018 Version: 1.2

SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Product name	: OIL, HANSEL AND GRETAL
CAS-No.	: N/A
Product code	: PHANS&GRET
1.2. Recommended use and restrictions	s on use
No additional information available	
1.3. Supplier	
The Essential Oil Company 5498 SE International Way Milwaukie, Oregon 97222 T 800-729-5912 - F 503-872-8767 info@essentialoil.com - www.essentialoil.com	
1.4. Emergency telephone number	
Emergency number	: CHEMTREC - USA: 800-424-9300 International: +1 703-527-3887 / 1-800-424-9300 CCN 13010
SECTION 2: Hazard(s) identification	
2.1. Classification of the substance or r	
GHS US classification	
Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2 Skin sensitization, Category 1	Causes skin irritation Causes serious eye irritation May cause an allergic skin reaction
2.2. GHS Label elements, including pre	cautionary statements
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/vapours/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

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2.4. Unknown acute toxicity (GHS US)

Not applicable

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	25 - 50	Acute Tox. 4 (Oral), H302
CINNAMIC ALDEHYDE	(CAS-No.) 104-55-2	10 - 25	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317
ETHYL VANILLIN	(CAS-No.) 121-32-4	5 - 10	Eye Irrit. 2B, H320
VANILLIN	(CAS-No.) 121-33-5	1 - 5	Eye Irrit. 2, H319
PIPERONAL	(CAS-No.) 120-57-0	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
COUMARIN	(CAS-No.) 91-64-5	1 - 5	Acute Tox. 4 (Oral), H302 Skin Sens. 1B, H317
BENZYL ALCOHOL	(CAS-No.) 100-51-6	1 - 5	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2A, H319
CASSIA OIL	(CAS-No.) 8007-80-5	1 - 5	Flam. Liq. 4, H227 Acute Tox. 3 (Dermal), H311 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
CINNAMIC ALCOHOL	(CAS-No.) 104-54-1	0.1 - 1	Skin Sens. 1, H317
CLOVE TERPENES	(CAS-No.) 68917-29-3	0.1 - 1	Flam. Liq. 4, H227 Skin Sens. 1, H317 Asp. Tox. 1, H304

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	ets (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 special treatment, if necessary		
Treat symptomatically.		
SECTION 5: Fire-fighting measures		
5.1. Suitable (and unsuitable) extinguish	ing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Specific hazards arising from the chemical		
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.	

5.3. Special protective equipment and precautions for fire-fighters

Protection 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 release mea			
	uipment and emergency procedures		
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/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	ent 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/vapours/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, includi	ng any incompatibilities		
Storage conditions	: Store in a well-ventilated place. Keep cool.		
SECTION 8: Exposure controls/pers	onal protection		
8.1. Control parameters			
BENZYL BENZOATE (120-51-4)			
Not applicable			
CINNAMIC ALDEHYDE (104-55-2)			
Not applicable			
COUMARIN CRYSTALS (91-64-5) Not applicable			
CINNAMIC ALCOHOL (104-54-1)			
Not applicable			
ETHYL VANILLIN NF (121-32-4)			
Not applicable			
CLOVE TERPENES (68917-29-3)			
Not applicable			
VANILLIN (121-33-5)			
Not applicable			
BENZYL ALCOHOL (100-51-6)			
Not applicable			
CASSIA REDISTILLED CHINESE OIL (8007-	80-5)		
Not applicable			
HELIOTROPINE CRYSTALS (120-57-0) Not applicable			

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8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls Ensure good ventilation of the work station.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	d chemical properties	
Physical state	: Liquid	
	: PALE YELLOW TO YELLOW	
Odor	: CHARACTERISTIC, MATCHING RETAINER SAMPLE	
Odor threshold	: No data available	
рН	: No data available	
Melting point	: Not applicable	
Freezing point	: No data available	
Boiling point	: No data available	
Flash point	: 127 °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	: 1.051 (1.041 - 1.061)	
Solubility	: Insoluble.	
Log Pow	: No data available	
Auto-ignition temperature	: No data available	
Decomposition temperature	: No data available	
Viscosity, kinematic	: No data available	
Viscosity, dynamic	: No data available	
Explosion limits	: No data available	
Explosive properties	: No data available	
Oxidizing properties	: No data available	
9.2. Other information		
Refrective index		

Refractive index

: 1.535 (1.525 - 1.545)

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. 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 toxicological effects

Acute toxicity

: Not classified

BENZYL BENZOATE (120-51-4)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male/female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2 ml/kg (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
CINNAMIC ALDEHYDE (104-55-2)	
LD50 oral rat	2220 mg/kg (Rat, Oral)
LD50 dermal rabbit	1260 ml/kg (24 h, Rabbit, Male/female, Experimental value, Dermal)
ATE US (oral)	2220 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
COUMARIN CRYSTALS (91-64-5)	
ATE US (oral)	500 mg/kg body weight
CINNAMIC ALCOHOL (104-54-1)	
LD50 oral rat	> 2000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)
ATE US (oral)	2500 mg/kg body weight
ETHYL VANILLIN NF (121-32-4)	
ATE US (oral)	3000 mg/kg body weight
VANILLIN (121-33-5)	
LD50 oral rat	3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value, Dermal, 14 day(s))
ATE US (oral)	3300 mg/kg body weight
BENZYL ALCOHOL (100-51-6)	
LD50 oral rat	1620 mg/kg bw/day (Rat, Male, Experimental value, Oral)
LD50 dermal rabbit	> 2000 mg/kg (Rabbit, Inconclusive, insufficient data, Dermal)
LC50 inhalation rat (mg/l)	> 4.178 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Experimental value, Inhalation (aerosol))
ATE US (oral)	1620 mg/kg body weight
ATE US (dermal)	2500 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
CASSIA REDISTILLED CHINESE OIL	(8007-80-5)
ATE US (oral)	2260 mg/kg body weight
ATE US (dermal)	340 mg/kg body weight
HELIOTROPINE CRYSTALS (120-57-0	
LD50 oral rat	2700 mg/kg (Rat, Oral)
LD50 dermal rat	> 5000 mg/kg (Rat, Dermal)
ATE US (oral)	2700 mg/kg body weight
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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 CRYSTALS (91-64-5)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.

SECTION 12. ECOlOgical Informa	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
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 Daphnia 1	3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
CINNAMIC ALDEHYDE (104-55-2)	
LC50 fish 1	105.76 mg/l (96 h, Pimephales promelas, Flow-through system, Fresh water, QSAR, Estimated value)
EC50 Daphnia 1	119.56 mg/l (48 h, Daphnia magna, Static system, Fresh water, QSAR, Estimated value)
	·
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)

	system, Fresh water, Experimental value)	
EC50 Daphnia 1	36.79 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)	
ErC50 (algae)	120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)	
BENZYL ALCOHOL (100-51-6)		
LC50 fish 1	460 mg/l (EPA OPP 72-1, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, Nominal concentration)	
EC50 Daphnia 1	230 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Fresh water, Experimental value, GLP)	
ErC50 (algae)	770 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)	

Readily biodegradable in water.		
CINNAMIC ALDEHYDE (104-55-2)		
Readily biodegradable in water.		

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CINNAMIC ALCOHOL (104-54-1)	
Persistence and degradability	Readily biodegradable in water.
VANILLIN (121-33-5)	
Persistence and degradability	Readily biodegradable in water.
BENZYL ALCOHOL (100-51-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.6 g O ₂ /g substance
Chemical oxygen demand (COD)	2.4 g O ₂ /g substance
ThOD	2.5 g O ₂ /g substance
HELIOTROPINE CRYSTALS (120-57-0)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
ThOD	1.71 g O ₂ /g substance
2.3. Bioaccumulative potential	
BENZYL BENZOATE (120-51-4)	
BCF fish 1	2.286 (BCFBAF v3.00, Pisces, QSAR)
Log Pow	3.97 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
CINNAMIC ALDEHYDE (104-55-2)	
Log Pow	1.84 (Calculated)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
CINNAMIC ALCOHOL (104-54-1)	
Log Pow	1.95
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
VANILLIN (121-33-5)	
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).
BENZYL ALCOHOL (100-51-6)	
Log Pow	1 - 1.1 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
HELIOTROPINE CRYSTALS (120-57-0)	
Log Pow	1.05
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

BENZYL BENZOATE (120-51-4)	
Surface tension	0.027 N/m (210 °C)
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)
Ecology - soil	Low potential for mobility in soil.
CINNAMIC ALDEHYDE (104-55-2)	
Surface tension	45.3 mN/m (20 °C, Experimental value)
Log Koc	1.57 (log Koc, Other, Calculated value)
Ecology - soil	Highly mobile in soil.

VANILLIN (121-33-5)	
Log Koc	3.438 (log Koc, Experimental value)
Ecology - soil	Low potential for mobility in soil.
BENZYL ALCOHOL (100-51-6)	
Surface tension	39 mN/m (20 °C)
Ecology - soil	No (test)data on mobility of the substance available.

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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

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

BENZYL BENZOATE (120-51-4)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
CINNAMIC ALDEHYDE (104-55-2)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
COUMARIN CRYSTALS (91-64-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
CINNAMIC ALCOHOL (104-54-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
ETHYL VANILLIN NF (121-32-4)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
CLOVE TERPENES (68917-29-3)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
VANILLIN (121-33-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Listed on the United States TSCA (Toxic Substances Control Act) inventory BENZYL ALCOHOL (100-51-6)		
BENZYL ALCOHOL (100-51-6)		
BENZYL ALCOHOL (100-51-6) Listed on the United States TSCA (Toxic Substances Control Act) inventory		
BENZYL ALCOHOL (100-51-6) Listed on the United States TSCA (Toxic Substances Control Act) inventory CASSIA REDISTILLED CHINESE OIL (8007-80-5)		

15.2. International regulations

CANADA

BENZYL BENZOATE (120-51-4)
Listed and the Osma dian DOL (Demostic Oshatana a

Listed on the Canadian DSL (Domestic Substances List)

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CINNAMIC ALDEHYDE (104-55-2)		
Listed on the Canadian DSL (Domestic Substances List)		
COUMARIN CRYSTALS (91-64-5)		
Listed on the Canadian DSL (Domestic Substances List)		
CINNAMIC ALCOHOL (104-54-1)		
Listed on the Canadian DSL (Domestic Substances List)		
ETHYL VANILLIN NF (121-32-4)		
Listed on the Canadian DSL (Domestic Substances List)		
CLOVE TERPENES (68917-29-3)		
Listed on the Canadian DSL (Domestic Substances List)		
VANILLIN (121-33-5)		
Listed on the Canadian DSL (Domestic Substances List)		
BENZYL ALCOHOL (100-51-6)		
Listed on the Canadian DSL (Domestic Substances List)		
CASSIA REDISTILLED CHINESE OIL (8007-80-5)		
Listed on the Canadian DSL (Domestic Substances List)		
HELIOTROPINE CRYSTALS (120-57-0)		
Listed on the Canadian DSL (Domestic Substances List)		

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. US State regulations

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 infor	mation
Revision date	: 11/16/2018
Full text of H-phrases:	
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H332	Harmful if inhaled

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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.