



Material Safety Data Sheet

EU Regulation: 1907/2006

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 PRODUCT IDENTIFICATION					
PRODUCT NAME	GARDENIA, CONCENTRATE				
BIOLOGICAL DEFINITION	MIXED NATURAL AND SYNTHETIC FRAGRANCE COMPOSITION.				
INCI NAME	Gardenia Tahitensis Flower Extract (Parfum)				
SYNONYMS & TRADE NAMES	-				
INTERNAL PRODUCT CODE	98401-19				
CAS-No	NA	EC No.	NA	EINECS No.	NA
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
COMPANY ADDRESS	Shay and Company, 10639 SE Fuller Rd, Milwaukie, OR 97222				
EMAIL	orders@shayandcompany.com				
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
EMERGENCY CONTACTS	503-653-1155				

SECTION 2: HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE THE FULL TEXT FOR ALL HAZARD STATEMENTS IS DISPLAYED IN SECTION 16.

CLASSIFICATION (67/548/EEC)	NO ADDITIONAL DATA AVAILABLE.
CLASSIFICATION (EU1272/2008)	SKIN IRRITATION, CATEGORY 2 (SKIN IRRIT. 2, H315). EYE IRRITATION, CATEGORY 2 (EYE IRRIT. 2, H319). SKIN SENSITISATION, CATEGORY 1 (SKIN SENS. 1, H317). HAZARDOUS TO THE AQUATIC ENVIRONMENT - CHRONIC HAZARD, CATEGORY 2 (AQUATIC CHRONIC 2, H411). THIS MIXTURE DOES NOT PRESENT A PHYSICAL HAZARD. REFER TO THE RECOMMENDATIONS REGARDING THE OTHER PRODUCTS PRESENT ON THE SITE..

2.2 LABEL ELEMENTS LABEL IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008.

GHS LABEL	 
	GHS07 GHS09

SIGNAL WORD WARNING.

CONTAINS	EC 204-541-5 AMYL CINNAMIC ALDEHYDE EC 204-262-9 BENZYL SALICYLATE EC 202-589-1 EUGENOL EC 225-004-1 FARNESOL
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HAZARDS STATEMENT	H315 CAUSES SKIN IRRITATION. H317 MAY CAUSE AN ALLERGIC SKIN REACTION. H319 CAUSES SERIOUS EYE IRRITATION. H411 TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
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PRECAUTIONARY STATEMENTS	P261 AVOID BREATHING DUST/FUME/GAS/MIST/VAPOURS/SPRAY. P264 WASH WITH WATER AND SOAP THOROUGHLY AFTER HANDLING. P272 CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE. P273 AVOID RELEASE TO THE ENVIRONMENT.. P333 + P313 IF SKIN IRRITATION OR RASH OCCURS. GET MEDICAL ATTENTION. P337 + P313 IF EYE IRRITATION, GET MEDICAL ATTENTION. P363 WASH CONTAMINATED CLOTHING BEFORE REUSE. P391 COLLECT SPILLAGE
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SUPPLEMENTARY PRECAUTIONARY STATEMENTS	P302 + P352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER. P501 DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATIONS
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SECTION 16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.

2.3 OTHER HAZARDS

ADVERSE PHYSIO-CHEMICAL PROPERTIES	NO DATA.
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ADVERSE EFFECTS ON HUMAN HEALTH	NO DATA.
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PBT OR VPVB ACCORDING TO ANNEX XIII	THE MIXTURE SATISFIES NEITHER THE PBT NOR THE VPVB CRITERIA FOR MIXTURES IN ACCORDANCE WITH ANNEXE XIII OF THE REACH REGULATIONS EC 1907/2006.
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SECTION 3: COMPOSITION OF INGREDIENTS

3.1 MIXTURES	≤ 15.0% TERPINEOL CAS-No.: 8000-41-7 EC No.: 232-268-1 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2, H315, EYE IRRIT. 2, H319
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≤ **12.9% AMYL CINNAMIC ALDEHYDE** CAS-No.: 122-40-7 EC No.: 204-541-5
 CLASSIFICATION (EC 1272/2008) SKIN SENS. 1, H317, AQUATIC CHRONIC 2, H411

≤ **8.9% BENZYL SALICYLATE** CAS-No.: 118-58-1 EC No.: 204-262-9
 CLASSIFICATION (EC 1272/2008) SKIN SENS. 1, H317, AQUATIC CHRONIC 2, H411

≤ **7.8% BENZYL BENZOATE** CAS-No.: 120-51-4 EC No.: 204-402-9
 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 4, H302, AQUATIC CHRONIC 2, H411

≤ **7.5% PHENYLETHYLALCOHOL** CAS-No.: 60-12-8 EC No.: 200-456-2
 CLASSIFICATION (EC 1272/2008) EYE IRRIT. 2, H319

≤ **4.4% EUGENOL** CAS-No.: 97-53-0 EC No.: 202-589-1
 CLASSIFICATION (EC 1272/2008) SKIN SENS. 1, H317, EYE IRRIT. 2, H319

≤ **3.1% FARNESOL** CAS-No.: 4602-84-0 EC No.: 225-004-1
 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2, H315, EYE IRRIT. 2, H319, SKIN SENS. 1, H317

≤ **3.0% CEDROL** CAS-No.: 77-53-2 EC No.: 201-035-6
 CLASSIFICATION (EC 1272/2008) AQUATIC CHRONIC 2, H411

≤ **3.0% LINALOOL** CAS-No.: 78-70-6 EC No.: 201-134-4
 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 5 - H303, SKIN IRRIT. 2 - H315, AQUATIC ACUTE 3 -H402

≤ **3.0% BENZOIC ACID** CAS-No.: 65-85-0 EC No.: 200-618-2
 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 4, H302, SKIN IRRIT. 2, H315, EYE IRRIT. 2, H319

≤ **3.0% METHYL BENZOATE** CAS-No.: 93-58-3 EC No.: 202-259-7
 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 4, H302

≤ **3.0% OCIMENE** CAS-No.: 13877-91-3 EC No.: 237-641-2
 CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3, H226, ASP. TOX. 1, H304

≤ **0.45% GAMMA-UNDECALACTONE** CAS-No.: 104-67-6 EC No.: 203-225-4
 CLASSIFICATION (EC 1272/2008) AQUATIC CHRONIC 2, H411

≤ **0.45% P-TERT-BUTYL DIHYDROCINNAMALDEHYDE** CAS-No.: 18127-01-0 EC No.: 242-016-2
 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 3, H301, SKIN SENS. 1, H317, REPR. 2, H361, AQUATIC CHRONIC 2, H411

≤ **0.45% EUGENYL METHYL ETHER (METHYL EUGENOL)** CAS-No.: 93-15-2 EC No.: 202-223-0 CLASSIFICATION (EC 1272/2008) ACUTE TOX. 4, H302, SKIN IRRIT. 2, H315, EYE IRRIT. 2, H319, STOT SE 3, H335 CARC. 2, H351

≤ **0.45% LINALYL ACETATE** CAS-No.: 115-95-7 EC No.: 204-116-4
 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2, H315, SKIN SENS. 1, H317, AQUATIC CHRONIC 3, H412

≤ **0.45% BENZYL CINNAMATE** CAS-No.: 103-41-3 EC No.: 203-109-3
 CLASSIFICATION (EC 1272/2008) SKIN SENS. 1, H317, AQUATIC CHRONIC 2, H411

≤ **0.45% PHYTOL** CAS-No.: 150-86-7 EC No.: 205-776-6
 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2, H315, AQUATIC ACUTE 1, H400, M ACUTE = 1, AQUATIC CHRONIC 1, H410
 M CHRONIC = 1

≤ **0.45% ISOPHYTOL** CAS-No.: 505-32-8 EC No.: 208-008-8
 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2, H315, AQUATIC ACUTE 1, H400, M ACUTE = 1, AQUATIC CHRONIC 1, H410
 M CHRONIC = 1

0.45% ETHANOL CAS-No.: 64-17-5 EC No.: 200-578-6
 CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 2, H225

≤ **0.45% ETHYL ACETATE** CAS-No.: 141-78-6 EC No.: 205-500-4
 CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 2, H225, EYE IRRIT. 2, H319, STOT SE 3, H336, EUH:066

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES	
GENERAL INFORMATION	ALWAYS REMOVE CONTAMINATED CLOTHING IMMEDIATELY.
INHALATION	GET MEDICAL ATTENTION IMMEDIATELY. REMOVE FROM EXPOSURE SITE TO FRESH AIR, KEEP AT REST, AND OBTAIN MEDICAL ATTENTION.
INGESTION	GET MEDICAL ATTENTION IMMEDIATELY. IMMEDIATELY CALL THE DOCTOR. RINSE MOUTH WITH WATER AND OBTAIN MEDICAL ATTENTION.
SKIN CONTACT	REMOVE CONTAMINATED CLOTHES. WASH THOROUGHLY WITH SOAP AND WATER. CONTACT PHYSICIAN IF IRRITATION PERSISTS.
EYE CONTACT	FLUSH IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES. CONTACT PHYSICIAN IF SYMPTOMS PERSIST.
4.2 MOST IMPORTANT SYMPTOMS & EFFECTS (ACUTE & DELAYED)	OBSERVE RISK OF ASPIRATION IF VOMITING OCCURS.
4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	TREAT SYMPTOMATICALLY.

SECTION 5: FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MATERIAL	FOAM, CO ₂ , DRY CHEMICAL POWDER.
5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	BURNING PRODUCES IRRITATING, TOXIC AND OBNOXIOUS FUMES
5.3 ADVICE FOR FIRE-FIGHTERS	SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS	ENSURE ADEQUATE VENTILATION OF THE WORKING AREA, EVACUATE PERSONNEL TO SAFE AREA, WEAR SUITABLE PROTECTIVE EQUIPMENT. NO SMOKING, SPARKS, FLAMES OR OTHER SOURCES OF IGNITION NEAR SPILLAGE. AVOID CONTACT WITH SKIN, EYES AND CLOTHING. AVOID INHALATION.
6.2 ENVIRONMENTAL PRECAUTIONS	DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES.
6.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING UP	REMOVE IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. AVOID EXCESSIVE INHALATION OF VAPOURS. CONTAIN SPILLAGE IMMEDIATELY BY USE OF SAND OR INERT POWDER. DISPOSE OF ACCORDING TO LOCAL REGULATIONS. COVER WITH AN INERT, INORGANIC, NON-COMBUSTIBLE ABSORBENT MATERIAL (E.G DRY-LIME, SAND, SODA ASH).
6.4 REFERENCES TO OTHER SECTIONS	REFER & CONSIDER SECTION 12.

SECTION 7: HANDLING & STORAGE

7.1 PRECAUTIONS FOR SAFE-HANDLING	HANDLE IN ACCORDANCE WITH GOOD HYGIENE AND SAFETY PRACTICE. KEEP AWAY FROM HEAT, SPARKS, OPEN FLAMES AND HOT SURFACES. - NO SMOKING. USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED. USE IN ACCORDANCE WITH GOOD MANUFACTURING AND INDUSTRIAL HYGIENE PRACTICES. USE IN AREAS WITH ADEQUATE VENTILATION DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT.
7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	STORAGE CLASS: FLAMMABLE LIQUID STORAGE. STORE ONLY IN THE ORIGINAL RECEPTACLE. KEEP CONTAINER TIGHTLY SEALED. KEEP IN COOL, DRY, VENTILATED STORAGE AND CLOSED CONTAINERS. KEEP AWAY FROM HEAT.
7.3 SPECIFIC END USE(S)	THE INFORMATION REQUIRED IS CONTAINED IN THIS MATERIAL SAFETY DATA

SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS :

- ACGIH TLV (AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS, THRESHOLD LIMIT VALUES, 2010) :

CAS	TWA :	STEL :	CEILING :	DEFINITION :	CRITERIA :
64-17-5	1000 PPM	-	-	-	-
141-78-6	400 PPM	-	-	-	-

- GERMANY - AGW (BAUA - TRGS 900, 21/06/2010) :

CAS	VME :	VME :	EXCESS	NOTES
64-17-5	500 ML/M3	960 MG/M3	2(II)	DFG, Y
141-78-6	400 ML/M3	1500 MG/M3	2(I)	DFG, Y

- FRANCE (INRS - ED984 :2008) :

CAS	VME-PPM :	VME-MG/M3 :	VLE-PPM :	VLE-MG/M3 :	NOTES :	TMP No :
64-17-5	1000	1900	5000	9500	-	84
141-78-6	400	1400	-	-	-	84

- UK / WEL (WORKPLACE EXPOSURE LIMITS, EH40/2005, 2007) :

CAS	TWA :	STEL :	CEILING :	DEFINITION :	CRITERIA :
64-17-5	1000 PPM	-	-	-	-
141-78-6	200 PPM	400 PPM	-	-	-

DERIVED NO EFFECT LEVEL (DNEL) OR DERIVED MINIMUM EFFECT LEVEL (DMEL):

LINALOOL (CAS: 78-70-6)

FINAL USE: WORKERS.

EXPOSURE METHOD: DERMAL CONTACT.

POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.

DNEL : 5 MG/KG BODY WEIGHT/DAY

EXPOSURE METHOD: DERMAL CONTACT.

POTENTIAL HEALTH EFFECTS: SHORT TERM LOCAL EFFECTS.

DNEL : 15 MG OF SUBSTANCE/CM2

EXPOSURE METHOD: DERMAL CONTACT.

POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.

DNEL : 2.5 MG/KG BODY WEIGHT/DAY

EXPOSURE METHOD: DERMAL CONTACT.

POTENTIAL HEALTH EFFECTS: LONG TERM LOCAL EFFECTS.

DNEL : 15 MG OF SUBSTANCE/CM2

EXPOSURE METHOD: INHALATION.

POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.

DNEL : 16.5 MG OF SUBSTANCE/M3

EXPOSURE METHOD: INHALATION.

POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.

DNEL : 2.8 MG OF SUBSTANCE/M3

FINAL USE: CONSUMERS.

EXPOSURE METHOD: INGESTION.

POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.

DNEL : 1.2 MG/KG BODY WEIGHT/DAY

EXPOSURE METHOD: INGESTION.

POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.

DNEL : 0.2 MG/KG BODY WEIGHT/DAY

EXPOSURE METHOD: DERMAL CONTACT.

POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.

DNEL : 2.5 MG/KG BODY WEIGHT/DAY

EXPOSURE METHOD: DERMAL CONTACT.

POTENTIAL HEALTH EFFECTS: SHORT TERM LOCAL EFFECTS.

DNEL : 15 MG OF SUBSTANCE/CM2

EXPOSURE METHOD: DERMAL CONTACT.

POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.

DNEL : 1.25 MG/KG BODY WEIGHT/DAY

8.1 CONTROL PARAMETERS

EXPOSURE METHOD: DERMAL CONTACT.
 POTENTIAL HEALTH EFFECTS: LONG TERM LOCAL EFFECTS.
 DNEL : 1.5 MG OF SUBSTANCE/CM²

EXPOSURE METHOD: INHALATION.
 POTENTIAL HEALTH EFFECTS: SHORT TERM SYSTEMIC EFFECTS.
 DNEL : 4.1 MG OF SUBSTANCE/M³

EXPOSURE METHOD: INHALATION.
 POTENTIAL HEALTH EFFECTS: LONG TERM SYSTEMIC EFFECTS.
 DNEL : 0.7 MG OF SUBSTANCE/M³

PREDICTED NO EFFECT CONCENTRATION (PNEC):
 LINALOOL (CAS: 78-70-6)
 ENVIRONMENTAL COMPARTMENT: SOIL.
 PNEC : 0.327 MG/KG

ENVIRONMENTAL COMPARTMENT: FRESH WATER.
 PNEC : 0.2 MG/L

ENVIRONMENTAL COMPARTMENT: SEA WATER.
 PNEC : 0.02 MG/L

ENVIRONMENTAL COMPARTMENT: INTERMITTENT WASTE WATER
 PNEC : 2 MG/L

ENVIRONMENTAL COMPARTMENT: FRESH WATER SEDIMENT.
 PNEC : 2.22 MG/KG

ENVIRONMENTAL COMPARTMENT: MARINE SEDIMENT.
 PNEC : 0.222 MG/KG

ENVIRONMENTAL COMPARTMENT: WASTE WATER TREATMENT PLANT.
 PNEC : 10 MG/L

8.2
EXPOSURE CONTROLS



EYE PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION. AVOID CONTACT WITH EYES. WEAR APPROVED SAFETY GOGGLES. (EN166)
HAND PROTECTION	AVOID CONTACT WITH SKIN. WASH HANDS BEFORE BREAKS AND AT END OF WORK. WEAR PROTECTIVE GLOVES. DIN/EN 374. THE GLOVE MATERIAL HAS TO BE IMPERMEABLE AND RESISTANT TO THE PRODUCT/ THE SUBSTANCE/ THE PREPARATION. PENETRATION TIME OF GLOVE MATERIAL: THE EXACT BREAK THROUGH TIME HAS TO BE FOUND OUT BY THE MANUFACTURER OF THE PROTECTIVE GLOVES AND HAS TO BE OBSERVED.
RESPIRATORY EQUIPMENT	DO NOT INHALE GASES / FUMES / AEROSOLS. CERTIFIED RESPIRATORY PROTECTIVE DEVICE RECOMMENDED.
HYGIENE MEASURES	GOOD PERSONAL HYGIENE PRACTICES ARE ALWAYS ADVISABLE, ESPECIALLY WHEN WORKING WITH CHEMICALS / OILS.
ENGINEERING MEASURES	NONE.
SKIN PROTECTION	WEAR PROTECTIVE CLOTHING TO REDUCE THE RISK OF SKIN AND EYE CONTACT.
PERSONAL PROTECTION	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES. AVOID CONTACT WITH SKIN AND EYES. USE PERSONAL PROTECTION ACCORDING TO DIRECTIVE 89/686/EEC.
OTHER PROTECTION	WEAR SUITABLE PROTECTION TO AVOID CONTACT WITH SKIN AND EYES. DO NOT INHALE VAPOURS.
PROCESS CONDITIONS	ENSURE AREA IS WELL VENTILATED. AVOID VAPOUR INHALATION. SAFETY SHOWER & EYE BATH.
ENVIRONMENTAL EXPOSURE CONTROLS	AVOID DISCHARGING INTO DRAINAGE WATER.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES	
9.1 PHYSICAL & CHEMICAL PROPERTIES	
APPEARANCE	LIMPID LIQUID
COLOUR	GREENISH - YELLOW
ODOUR	CHARACTERISTIC
RELATIVE DENSITY @ 20°C	1.013
FLASH POINT (°C)	96°C.
REFRACTIVE INDEX @ 20 °C	1.523
SOLUBILITY IN WATER @ 20 °C	INSOLUBLE IN WATER.
9.2 OTHER INFORMATION	NO DATA.
SECTION 10: STABILITY & REACTIVITY	
10.1 REACTIVITY	NOT APPLICABLE.
10.2 CHEMICAL STABILITY	STABLE UNDER SUGGESTED STORAGE CONDITIONS (<15°C). STABLE UNDER NORMAL CONDITIONS.
10.3 POSSIBILITY OF HAZARDOUS REACTIONS	NONE UNDER NORMAL PROCESSING.
10.4 CONDITIONS TO AVOID	STORAGE AT HIGH TEMPERATURES. DO NOT STORE ABOVE 15°C. AVOID HEAT, FLAMES AND OTHER SOURCES OF IGNITION.
10.5 INCOMPATIBLE MATERIALS	AVOID CONCENTRATED ACIDS, ALKALIS & OXIDISING AGENTS.
10.6 HAZARDOUS DECOMPOSITION PRODUCTS	THIS PRODUCT DOES NOT DECOMPOSE UNDER NORMAL CONDITIONS. UNDER FIRE CONDITIONS THE PRODUCT WILL PRODUCE A MIXTURE OF IRRITATING FUMES & SMOKE & CARBON MONOXIDE.

SECTION 11: TOXICOLOGICAL INFORMATION	
11.1 TOXICOLOGICAL EFFECTS	
ACUTE TOXICITY	<p>BENZYL CINNAMATE (CAS: 103-41-3) ORAL ROUTE : LD50 = 3280 MG/KG</p> <p>LINALYL ACETATE (CAS: 115-95-7) ORAL ROUTE : LD50 = 13900 MG/KG SPECIES : RAT OTHER GUIDELINE</p> <p>EUGENYL METHYL ETHER (METHYL EUGENOL) (CAS: 93-15-2) ORAL ROUTE : LD50 = 810 MG/KG</p> <p>P-TERT-BUTYL DIHYDROCINNAMALDEHYDE (CAS: 18127-01-0) ORAL ROUTE : LD50 = 250 MG/KG</p> <p>METHYL BENZOATE (CAS: 93-58-3) ORAL ROUTE : LD50 = 1300 MG/KG</p>

	<p>BENZOIC ACID (CAS: 65-85-0) ORAL ROUTE : LD50 = 1700 MG/KG</p> <p>LINALOOL (CAS: 78-70-6) ORAL ROUTE : LD50 = 2200 MG/KG SPECIES : MOUSE OECD GUIDELINE 401 (ACUTE ORAL TOXICITY) DERMAL ROUTE: LD50 = 5610 MG/KG. SPECIES : RABBIT OECD GUIDELINE 402 (ACUTE DERMAL TOXICITY)</p> <p>EUGENOL (CAS: 97-53-0) ORAL ROUTE : LD50 = 2300 MG/KG</p> <p>PHENYLETHYLALCOHOL (CAS: 60-12-8) ORAL ROUTE : LD50 = 2500 MG/KG</p> <p>BENZYL SALICYLATE (CAS: 118-58-1) ORAL ROUTE : LD50 = 2200 MG/KG</p> <p>AMYL CINNAMIC ALDEHYDE (ACA) X (CAS: 122-40-7) ORAL ROUTE : LD50 = 3730 MG/KG</p> <p>TERPINEOL (CAS: 8000-41-7) ORAL ROUTE : LD50 = 4300 MG/KG</p> <p>MIXTURE ACUTE TOXICITY : ORAL ROUTE: NO OBSERVED EFFECT. SPECIES : RAT (RECOMMENDED BY THE CLP) LD50 = 7286 MG/KG SPECIES : RABBIT (RECOMMENDED BY THE CLP) LD50 > 10000 MG/KG</p> <p>INHALATION ROUTE (VAPOURS) : NO EFFECT. DURATION OF EXPOSURE</p>
SKIN IRRITATION	<p>LINALOOL (CAS: 78-70-6) IRRITATION : AVERAGE SCORE = 1.85 EFFECT OBSERVED : ERYTHEMA SCORE SPECIES : RABBIT DURATION OF EXPOSURE : 24 H OECD GUIDELINE 404 (ACUTE DERMAL IRRITATION / CORROSION).</p>
EYE DAMAGE OR IRRITATION	<p>LINALOOL (CAS: 78-70-6) CORNEAL HAZE : AVERAGE SCORE = 1 SPECIES : RABBIT DURATION OF EXPOSURE : 24 H OECD GUIDELINE 405 (ACUTE EYE IRRITATION / CORROSION)</p> <p>IRITIS : AVERAGE SCORE = 0.6 SPECIES : RABBIT DURATION OF EXPOSURE : 24 H OECD GUIDELINE 405 (ACUTE EYE IRRITATION / CORROSION)</p> <p>CONJUNCTIVAL REDNESS : AVERAGE SCORE = 2.3 SPECIES : RABBIT DURATION OF EXPOSURE : 24 H OECD GUIDELINE 405 (ACUTE EYE IRRITATION / CORROSION).</p>
RESPIRATORY OR SKIN SENSITIVITY	NO DATA.
GERM CELL MUTAGENICITY	<p>LINALOOL (CAS: 78-70-6) MUTAGENESIS (IN VIVO) : NEGATIVE. SPECIES : MOUSE OECD GUIDELINE 474 (MAMMALIAN ERYTHROCYTE MICRONUCLEUS TEST) OECD GUIDELINE 471 (BACTERIAL REVERSE MUTATION ASSAY)</p> <p>AMES TEST (IN VITRO) : NEGATIVE. WITH OR WITHOUT METABOLIC ACTIVATION. SPECIES : S. TYPHIMURIUM TA1535.</p>

CARCINOGENICITY	LINALOOL (CAS: 78-70-6) CARCINOGENICITY TEST : NEGATIVE. NO CARCINOGENIC EFFECT. SPECIES : RAT
REPRODUCTIVE TOXICITY	LINALOOL (CAS: 78-70-6) NO TOXIC EFFECT FOR REPRODUCTION STUDY ON DEVELOPMENT : SPECIES : RAT OECD GUIDELINE 421 (REPRODUCTION / DEVELOPMENTAL TOXICITY SCREENING TEST).
STOT – SINGLE EXPOSURE	NO DATA.
STOT – REPEATED EXPOSURE	NO DATA.
ASPIRATION HAZARD	NO DATA.
OTHER INFORMATION	MAY CAUSE IRREVERSIBLE DAMAGE TO THE SKIN; NAMELY INFLAMMATION OF THE SKIN OR THE FORMATION OF ERYTHEMA AND ESCHAR OR OEDEMA FOLLOWING EXPOSURE UP TO FOUR HOURS. MAY HAVE REVERSIBLE EFFECTS ON THE EYES, SUCH AS EYE IRRITATION WHICH IS TOTALLY REVERSIBLE BY THE END OF OBSERVATION AT 21 DAYS. MAY CAUSE AN ALLERGIC REACTION BY SKIN CONTACT.

SECTION 12: ECOLOGICAL INFORMATION

12.1 TOXICITY	<p>SUBSTANCES LINALOOL (CAS: 78-70-6) FISH TOXICITY : DURATION OF EXPOSURE : 96 H LC50 = 27.8 MG/L SPECIES : ONCORHYNCHUS MYKISS OECD GUIDELINE 203 (FISH, ACUTE TOXICITY TEST) CRUSTACEAN TOXICITY : DURATION OF EXPOSURE : 48 H</p> <p>EC50 = 59 MG/L SPECIES : DAPHNIA MAGNA OECD GUIDELINE 202 (DAPHNIA SP. ACUTE IMMOBILISATION TEST)</p> <p>ALGAE TOXICITY : DURATION OF EXPOSURE : 96 H ECr50 = 88.3 MG/L SPECIES : DESMODESMUS SUBSPICATUS OTHER GUIDELINE.</p> <p>MIXTURES NO AQUATIC TOXICITY DATA AVAILABLE FOR THE MIXTURE.</p>
12.2 PERSISTENCE & DEGRADABILITY	NO DATA.
12.3 BIO- ACCUMULATIVE POTENTIAL	NO DATA.
12.4 MOBILITY IN SOIL	NO DATA
12.5 RESULTS OF PBT & VPVB ASSESSMENT	NO DATA.
12.6 OTHER ADVERSE EFFECTS	NO DATA.

SECTION 13: DISPOSAL INFORMATION

13.1 WASTE TREATMENT METHODS	ALWAYS RECOVER SPILLED PRODUCT. DISCARD WASTE MATERIAL WITH AUTHORIZED WASTE MANAGEMENT SERVICES. ACT IN ACCORDANCE WITH LOCAL & NATIONAL WASTE REGULATIONS.
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SECTION 14: TRANSPORT INFORMATION

14.1 TRANSPORT INFORMATION																																																																																																		
UN NUMBER	ROAD: 3082 RAIL: 3082 AIR: 3082																																																																																																	
14.2 UN SHIPPING NAME	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (AMYL CINNAMIC ALDEHYDE (ACA) X																																																																																																	
14.3 TRANSPORT HAZARD CLASS(ES)	ADR/RID/ADN CLASS: 9 MISCELLANEOUS DANGEROUS SUBSTANCES AND ARTICLES. IMDG CLASS: 9 MISCELLANEOUS DANGEROUS SUBSTANCES AND ARTICLES. ICAO CLASS/DIVISION: 9 MISCELLANEOUS DANGEROUS SUBSTANCES AND ARTICLES. TRANSPORT LABELS. 																																																																																																	
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14.5 ENVIROMENTAL HAZARDS	ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT 																																																																																																	
14.6 SPECIAL PRECAUTIONS FOR USER	ADR/RID <table border="1"> <thead> <tr> <th>Class</th> <th>Code</th> <th>Pack gr.</th> <th>Label</th> <th>Ident.</th> <th>LQ</th> <th>Provis.</th> <th>EQ</th> <th>Cat.</th> <th>Tunnel</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>M6</td> <td>III</td> <td>9</td> <td>90</td> <td>5 L</td> <td>274 335 375 601</td> <td>E1</td> <td>3</td> <td>E</td> </tr> </tbody> </table> Not subject to this regulation if Q <= 5 l / 5 kg (ADR 3.3.1 - DS 375) IMDG <table border="1"> <thead> <tr> <th>Class</th> <th>2" Label</th> <th>Pack gr.</th> <th>LQ</th> <th>EMS</th> <th>Provis.</th> <th>EQ</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>-</td> <td>III</td> <td>5 L</td> <td>F-A,S-F</td> <td>274 335 969</td> <td>E1</td> </tr> </tbody> </table> Not subject to this regulation if Q <= 5 l / 5 kg (IMDG 3.3.1 - 2.10.2.7) IATA <table border="1"> <thead> <tr> <th>Class</th> <th>2"Label</th> <th>Pack gr.</th> <th>Passager</th> <th>Passager</th> <th>Cargo</th> <th>Cargo</th> <th>note</th> <th>EQ</th> </tr> </thead> <tbody> <tr> <td>9</td> <td>-</td> <td>III</td> <td>964</td> <td>450 L</td> <td>964</td> <td>450 L</td> <td>A97</td> <td>E1</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>A158</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>A197</td> <td></td> </tr> <tr> <td>9</td> <td>-</td> <td>III</td> <td>Y964</td> <td>30 kg G</td> <td>-</td> <td>-</td> <td>A97</td> <td>E1</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>A158</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>A197</td> <td></td> </tr> </tbody> </table>	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel	9	M6	III	9	90	5 L	274 335 375 601	E1	3	E	Class	2" Label	Pack gr.	LQ	EMS	Provis.	EQ	9	-	III	5 L	F-A,S-F	274 335 969	E1	Class	2"Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ	9	-	III	964	450 L	964	450 L	A97	E1								A158									A197		9	-	III	Y964	30 kg G	-	-	A97	E1								A158									A197	
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14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE.	NONE.																																																																																																	

SECTION 15: REGULATORY INFORMATION	
15.1 PRODUCT SPECIFIC SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS & LEGISLATION	
EU DIRECTIVES	REGULATION (EC) NO 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 18 TH DECEMBER 2006. CONCERNING THE REGISTRATION, EVALUATION, AUTHORIZATION & RESTRICTION OF CHEMICALS (REACH), ESTABLISHING A EUROPEAN CHEMICALS AGENCY, AMENDING DIRECTIVE 1999/45/EC AND REPEALING COUNCIL REGULATION (EEC) NO793/93 & COMMISSION REGULATION (EC) NO1488/94 AS WELL AS COUNCIL DIRECTIVE 76/769/EEC & COMMISSION DIRECTIVE 91/155/ECC, 93/67/ECC, 93/105/EEC & 2000/21/EC (INCLUDING AMENDMENTS).
STATUTORY INSTRUMENTS	THE CHEMICALS (HAZARD INFORMATION & PACKAGING FOR SUPPLY REGULATIONS 2009 (S.I.2009 NO 716).
APPROVED CODE OF PRACTICE	CLASSIFICATION & LABELLING OF SUBSTANCES & PREPARATIONS DANGEROUS FOR SUPPLY. SAFETY DATA SHEETS FOR SUBSTANCES & PREPARATIONS.
GUIDANCE NOTES	WORKPLACE EXPOSURE LIMITS EH40. CHIP FOR EVERYONE HSG 108.
15.2 CHEMICAL SAFETY ASSESSMENT	AN ASSESSMENT HAS NOT BEEN EXECUTED AS THIS IS NOT A HAZARDOUS MATERIAL ACCORDING TO ARTICLE 31 OF REACH 1907/2006.

SECTION 16: OTHER INFORMATION	
HAZARD AND/ OR PRECAUTIONARY STATEMENTS IN FULL	H225 HIGHLY FLAMMABLE LIQUID AND VAPOUR. H226 FLAMMABLE LIQUID AND VAPOUR. H301 TOXIC IF SWALLOWED. H302 HARMFUL IF SWALLOWED. H304 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H315 CAUSES SKIN IRRITATION. H317 MAY CAUSE AN ALLERGIC SKIN REACTION. H319 CAUSES SERIOUS EYE IRRITATION. H335 MAY CAUSE RESPIRATORY IRRITATION. H336 MAY CAUSE DROWSINESS OR DIZZINESS. H351 SUSPECTED OF CAUSING CANCER. H361 SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. H400 VERY TOXIC TO AQUATIC LIFE. H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. H411 TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. H412 HARMFUL TO AQUATIC LIFE WITH LONG LASTING EFFECTS. EUH066 REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.
TRAINING INSTRUCTIONS: REFER TO POSSIBLE HAZARD BEFORE USE OF THIS PRODUCT.	
ABBREVIATIONS & ACRONYMS:	
MSDS	MATERIAL SAFETY DATA SHEET.
INCI	INTERNATIONAL NOMENCLATURE OF COSMETIC INGREDIENTS.
CAS	CHEMICAL ABSTRACT SERVICE.
IMDG	INTERNATIONAL MARITIME CODE FOR DANGEROUS GOODS.
ADR	ACCORD EUROPEAN SUR LE TRANSPORT DES MARCHANDISES DANGEREUSES PAR ROUTE (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD).
RID	INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY RAIL.
ICAO	INTERNATIONAL CIVIL AVIATION ORGANIZATION.
ADN	INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS.
GHS	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION & LABELLING OF CHEMICALS.
TREM CARD	TRANSPORT EMERGENCY CARD.
STOT	SPECIFIC TARGET ORGAN TOXICITY.

DOCUMENTATION REVISION	
DATE	CHANGE DESCRIPTION
10 TH APRIL 2018	DATA LAUNCH

The information provided above is intended only as a guide to the appropriate precautionary handling of the item. It is the responsibility of the customer and user to ensure it has in place provisions for the safe and proper handling of the material. Shay and Company believes the above information to be accurate based on the information available, however, it is the responsibility of the customer and user of the material to perform its own investigation and due diligence prior to use to verify that the product purchased from Shay and Company meets their quality requirements and is appropriate for the use to which the product is to be put.