

BOMAR

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	MARJORAM SWEET, ESSENTIAL OIL ORGANIC				
BIOLOGICAL DEFINITION	ORIGANUM MAJORANA LEAF OIL IS THE VOLATILE OIL DISTILLED FROM THE LEAVES OF THE SWEET MARJORAM, ORIGANUM MAJORANA L., LABIATAE.				
INCI NAME	ORIGANUM MAJORANA LEAF OIL				
SYNONYMS & TRADE NAMES	-				
INTERNAL PRODUCT CODE	K0287				
CAS-No	84082-58-6	EC No.	282-004-4	EINECS No.	282-004-4
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
COMPANY ADDRESS	Bomar Ltd Sea Road, Kilcoole, Co. Wicklow				
EMAIL	INFO@BOMAR.IE				
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
EMERGENCY CONTACTS	John Byrne 012875110				

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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)	THE FULL TEXT FOR ALL R-PHRASES AND HAZARD STATEMENTS ARE DISPLAYED IN SECTION 16.
CLASSIFICATION (EU1272/2008)	ASPIRATION TOXICITY CATEGORY 1 - (H304) SKIN CORROSION/IRRITATION CATEGORY 2 - (H315) SERIOUS EYE DAMAGE/EYE IRRITATION CATEGORY 2 - (H319) SKIN SENSITIZATION CATEGORY 1B - (H317) REPRODUCTIVE TOXICITY CATEGORY 2 - (H361) CHRONIC AQUATIC TOXICITY CATEGORY 2 - (H411) FLAMMABLE LIQUIDS CATEGORY 3 - (H226)
2.2 LABEL ELEMENTS	LABEL IN ACCORDANCE WITH REGULATION (EC) NO 1272/2008.
GHS LABEL	    GHS02 GHS07 GHS08 GHS09
SIGNAL WORD	DANGER.
CONTAINS	GAMMA-TERPINENE, ALPHA-TERPINENE, SABINENE, D-LIMONENE
HAZARDS STATEMENT	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 H361 - SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD H411 - TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS H226 - FLAMMABLE LIQUID AND VAPOR CONTAINS ALPHA-PINENE, BETA-PINENE EUH208 - CONTAINS (?). MAY PRODUCE AN ALLERGIC REACTION
PRECAUTIONARY STATEMENTS	P210 - KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES. - NO SMOKING P280 - WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION P202 - DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE BEEN READ AND UNDERSTOOD P302 + P352 - IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER P305 + P351 + P338 - IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING P308 + P313 - IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ATTENTION P301 + P310 - IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR P331 - DO NOT INDUCE VOMITING P263 - AVOID CONTACT DURING PREGNANCY/WHILE NURSING P273 - AVOID RELEASE TO THE ENVIRONMENT P501 - DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL, REGIONAL, NATIONAL, AND INTERNATIONAL REGULATIONS AS APPLICABLE
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	H303 - MAY BE HARMFUL IF SWALLOWED H401 - TOXIC TO AQUATIC LIFE
SECTION 16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.	
2.3 OTHER HAZARDS	
ADVERSE PHYSIO-CHEMICAL PROPERTIES	NO DATA
ADVERSE EFFECTS ON HUMAN HEALTH	NO DATA.
PBT OR VPVB ACCORDING TO ANNEX XIII	THE SUBSTANCE DOES NOT SATISFY THE PBT OR VPVP CRITERIA IN ACCORDANCE WITH ANNEXE XIII OF THE REACH REGULATIONS EC 1907/2006.

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SECTION 3: COMPOSITION OF INGREDIENTS

3.2 MIXTURES

Terpinen-4-ol	Present	562-74-3	20 - <30	Aquatic Acute 3 (H402) (EFFA) Eye Irrit. 2 (H319) (EFFA) Skin Irrit. 2 (H315) (EFFA) Acute Tox. 4 (H302) (EFFA) Acute Tox. 5 (H313)(EFFA) Flam. Liq. 4 (H227)(EFFA)
Linalool	Present	78-70-6	10 - <20	Aquatic Acute 3 (H402) (EFFA) Eye Irrit. 2 (H319) (EFFA) Skin Irrit. 2 (H315) (EFFA) Acute Tox. 5 (H303)(EFFA) Flam. Liq. 4 (H227)(EFFA) Skin Sens. 1B (H317) (EFFA)
gamma-Terpinene	Present	99-85-4	10 - <20	Rep 2 (H361), Flam. Liq. 3, Aspir Haz. 1 (H304), Acute Tox 5 (H303), Skin Irrit. 3 (H316)
alpha-Terpinene	Present	99-86-5	1 - <10	Aquatic Acute 2 (H401) (EFFA) Skin Irrit. 3 (H316) (EFFA) Aquatic Chronic 2 (H411) (EFFA) Asp. Tox. 1 (H304) (EFFA) Acute Tox. 4 (H302) (EFFA) Flam. Liq. 3 (H226)(EFFA)
Sabinene	Present	3387-41-5	1 - <10	Aspiration cat 1 (H304), Flam cat 3 (H226), Skin Irri cat 2 (H315), Skin sensi cat 1B (H317), Acute aquatic cat 1 (H400), Chronic aquatic cat 1 (H410)
d-Limonene	Present	5989-27-5	1 - <10	Aspiration Hazard 1 (H304)(EFFA) Flam. Liq. 3 (H226)(EFFA) Skin Irrit. 2 (H315)(EFFA) Skin Sens. 1B (H317)(EFFA) Aquatic Acute 1 (H400)(EFFA) Aquatic Chronic 1 (H410)(EFFA)
alpha-Terpineol	Present	98-55-5	1 - <10	Aquatic Acute 2 (H401) (EFFA) Eye Irrit. 2 (H319) (EFFA) Skin Irrit. 2 (H315) (EFFA) Acute Tox. 5 (H303)(EFFA) Flam. Liq. 4 (H227)(EFFA)
Terpinolene	Present	586-62-9	1 - <10	Aquatic Acute 1 (H400) (EFFA) EFFA) Aquatic Chronic 1 (H410) (EFFA) Asp. Tox. 1 (H304) (EFFA) Acute Tox. 5 (H303)(EFFA) Flam. Liq. 4 (H227)(EFFA) Skin Irrit. 3 (H316) (EFFA) Skin Sens. 1 (H317) (EFFA)
Linalyl acetate	Present	115-95-7	1 - <10	Aquatic Acute 3 (H402) (EFFA) Eye

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				Irrit. 2 (H320) (EFFA) Skin Irrit. 2 (H315) (EFFA) Flam. Liq. 4 (H227)(EFFA) Skin Sensitization 1 (H317)(EFFA)
Caryophyllene	Present	87-44-5	1 - <10	Skin Sens. 1B (H317) (EFFA) Asp. Tox. 1 (H304) (EFFA) Chronic Aquatic 4 (H413) (EFFA)
Myrcene	Present	123-35-3	1 - <10	Eye Irrit. 2 (H319) (EFFA) Skin Irrit. 2 (H315) (EFFA) Asp. Tox. 1 (H304) (EFFA) Flam. Liquid 3 (H226) (EFFA) Acute Aquatic 1 (H400) (EFFA) Chronic Aquatic 2 (H411) (EFFA)
beta-Phellandrene	Present	555-10-2	1 - <10	Asp. Tox. 1 (H304) (EFFA) Flam. Liq. 3 (H226) (EFFA)
para-Cymene	Present	99-87-6	0.1 - <1	Rep Tox. 2 (H361), Aquatic Acute 2 (H401), Skin Irrit. 3 (H316), Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Acute Tox. 5 (H303),Flam. Liq. 3 (H226)
alpha-Pinene	Present	80-56-8	0.1 - <1	Acute Aquatic 1 (H400) (EFFA) Chronic Aquatic 1 (H410) (EFFA) Acute Tox. 4 (H302) (EFFA) Skin Sens. 1B (H317) (EFFA) Skin Irrit. 2 (H315) (EFFA) Asp. Tox. 1 (H304) (EFFA) Flam. Liq. 3 (H226)(EFFA)
beta-Pinene	Present	127-91-3	0.1 - <1	Acute Aquatic 1 (H400) (EFFA) Chronic Aquatic 1 (H410) (EFFA) Skin Sens. 1 (H317) (EFFA) Skin Irrit. 2 (H315) (EFFA) Asp. Tox. 1 (H304) (EFFA) Flam. Liq. 3 (H226)(EFFA)
alpha-Phellandrene	Present	99-83-2	0.1 - <1	Skin Irrit. 3 (H316) (EFFA) Asp. Tox. 1 (H304) (EFFA) Flam. Liq. 3 (H226)(EFFA)
trans beta-Ocimene	Present	3779-61-1	0.01 - <0.1	Acute Tox. 5 (H303) (EFFA) Asp. Tox. 1 (H304) (EFFA) Skin Irrit. 2 (H315) (EFFA) Acute Aquatic 1 (H400) (EFFA) Chronic Aquatic 2 (H411) (EFFA) Flam. Liq. 3 (H226) (EFFA)
Camphene	Present	79-92-5	0.01 - <0.1	Aquatic Acute 1 (H400) (EFFA) Eye Irrit. 2B (H320) (EFFA) Aquatic Chronic 1

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SECTION 4: FIRST AID MEASURES	
4.1 DESCRIPTION OF FIRST AID MEASURES	
GENERAL INFORMATION	ALWAYS REMOVE CONTAMINATED CLOTHING IMMEDIATELY.
INHALATION	IMMEDIATE MEDICAL ATTENTION IS NOT REQUIRED. IF SYMPTOMS PERSIST, CALL A PHYSICIAN. MOVE TO FRESH AIR IN CASE OF ACCIDENTAL INHALATION OF VAPORS OR DECOMPOSITION PRODUCTS.
INGESTION	GET MEDICAL ATTENTION IMMEDIATELY. RINSE MOUTH WITH WATER AND OBTAIN MEDICAL ATTENTION. DO NOT INDUCE VOMITING.
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)	NONE KNOWN.
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.
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.
6.4 REFERENCES TO OTHER SECTIONS	REFER & CONSIDER SECTION 8. REFER & CONSIDER SECTION 13.
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	KEEP THE PRODUCT CONTAINER TIGHTLY CLOSED, IN A DRY, VENTILATED AREA. KEEP AWAY FROM POTENTIAL SOURCES OF IGNITION AND PROTECTED FROM LIGHT. MAINTAIN LIMITED CONTACT WITH OXYGEN.
7.3 SPECIFIC END USE(S)	NO DATA.
SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION	

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8.1 CONTROL PARAMETERS

Chemical Name	European Union	United Kingdom	France	Spain	Germany
gamma-Terpinene 99-85-4	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	-
alpha-Terpinene 99-86-5	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	-
Sabinene 3387-41-5	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	-
d-Limonene 5989-27-5	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	S* TWA: 30 ppm TWA: 168 mg/m ³	TWA: 5 ppm TWA: 28 mg/m ³ Ceiling / Peak: 20 ppm Ceiling / Peak: 112

Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
d-Limonene 5989-27-5	-	-	-	TWA: 25 ppm TWA: 140 mg/m ³ STEL: 50 ppm STEL: 280 mg/m ³	-
para-Cymene 99-87-6	-	-	-	-	TWA: 25 ppm TWA: 135 mg/m ³
alpha-Pinene 80-56-8	-	TWA: 20 ppm	-	-	-
beta-Pinene 127-91-3	-	TWA: 20 ppm	-	-	-
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
d-Limonene 5989-27-5	-	STEL: 14 ppm STEL: 80 mg/m ³ TWA: 7 ppm TWA: 40 mg/m ³	-	TWA: 25 ppm TWA: 140 mg/m ³ STEL: 37.5 ppm STEL: 175 mg/m ³	-
Myrcene 123-35-3	-	-	-	TWA: 40 ppm TWA: 275 mg/m ³ STEL: 60 ppm STEL: 343.75 mg/m ³	-
alpha-Pinene 80-56-8	-	Skin STEL: 40 ppm STEL: 224 mg/m ³ TWA: 20 ppm TWA: 112 mg/m ³	-	TWA: 25 ppm TWA: 140 mg/m ³ Skin STEL: 37.5 ppm STEL: 175 mg/m ³	-
beta-Pinene 127-91-3	-	Skin STEL: 40 ppm STEL: 224 mg/m ³ TWA: 20 ppm TWA: 112 mg/m ³	-	TWA: 25 ppm TWA: 140 mg/m ³ STEL: 37.5 ppm STEL: 175 mg/m ³	-
Camphene 79-92-5	-	Skin STEL: 40 ppm STEL: 224 mg/m ³ TWA: 20 ppm TWA: 112 mg/m ³	-	-	-

8.2 EXPOSURE CONTROLS



EYE PROTECTION

WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.

HAND PROTECTION

WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.

RESPIRATORY EQUIPMENT

UNDER NORMAL CONDITIONS OF USE AND WHERE ADEQUATE VENTILATION IS AVAILABLE TO PREVENT BUILD UP OF EXCESSIVE VAPOUR, THIS MATERIAL SHOULD NOT REQUIRE SPECIAL ENGINEERING CONTROLS. HOWEVER, IN CONDITIONS OF HIGH OR PROLONGED USE, OR HIGH TEMPERATURE OR OTHER CONDITIONS WHICH INCREASE EXPOSURE, THE FOLLOWING ENGINEERING CONTROLS CAN BE USED TO MINIMISE EXPOSURE TO PERSONNEL: A) INCREASE VENTILATION OF THE AREA WITH LOCAL EXHAUST

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	VENTILATION. B) PERSONNEL CAN USE AN APPROVED, APPROPRIATELY FITTED RESPIRATOR WITH ORGANIC VAPOUR CARTRIDGE OR CANISTERS AND PARTICULATE FILTERS. C) USE CLOSED SYSTEMS FOR TRANSFERRING AND PROCESSING THIS MATERIAL. ALSO REFER TO SECTIONS 2 AND 7.
HYGIENE MEASURES	GOOD PERSONAL HYGIENE PRACTICES ARE ALWAYS ADVISABLE, ESPECIALLY WHEN WORKING WITH CHEMICALS / OILS.
ENGINEERING MEASURES	PROVIDE ADEQUATE VENTILATION.
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.
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.
ENVIROMENTAL EXPOSURE CONTROLS	AVOID DISCHARGING INTO DRAINAGE WATER.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

9.1 PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE	CLEAR
COLOUR	COLOURLESS – ALMOST COLOURLESS
ODOUR	CHARACTERISTIC
RELATIVE DENSITY	0.890 - 0.906 @ 25°C
FLASH POINT (°C)	59°C
REFRACTIVE INDEX @ 20 °C	1.4700 – 1.4750 @ 20°C
SOLUBILITY IN WATER @ 20 °C	NO DATA.

9.2 OTHER INFORMATION

NO DATA.

SECTION 10: STABILITY & REACTIVITY

10.1 REACTIVITY	NO HAZARDOUS REACTIONS IF STORED AND HANDLED AS PRESCRIBED / INDICATED.
10.2 CHEMICAL STABILITY	STABLE UNDER SUGGESTED STORAGE CONDITIONS (<15°C).
10.3 POSSIBILITY OF HAZARDOUS REACTIONS	NOT EXPECTED UNDER NORMAL CONDITIONS OF USE.
10.4 CONDITIONS TO AVOID	HEAT, FLAMES AND SPARKS.
10.5 INCOMPATIBLE MATERIALS	STRONG OXIDISING SUBSTANCES.
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	HARMFUL IF SWALLOWED
SKIN IRRITATION	CAUSES SKIN IRRITATION.

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EYE DAMAGE OR IRRITATION	CAUSES SERIOUS EYE IRRITATION
RESPIRATORY OR SKIN SENSITIVITY	MAY CAUSE SENSITISATION BY SKIN CONTACT
GERM CELL MUTAGENICITY	NOY CLASSIFIED.
CARCINOGENICITY	NOY CLASSIFIED.
REPRODUCTIVE TOXICITY	NOY CLASSIFIED.
STOT – SINGLE EXPOSURE	NOY CLASSIFIED.
STOT – REPEATED EXPOSURE	NOY CLASSIFIED.
ASPIRATION HAZARD	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.
OTHER INFORMATION	NO DATA.

SECTION 12: ECOLOGICAL INFORMATION



12.1 TOXICITY	TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. THE PRODUCT MUST NOT BE ALLOWED TO RUN INTO DRAINS OR WATERWAYS.																											
	<table border="1"> <thead> <tr> <th>Chemical Name</th> <th>Crustacea</th> <th>Algae/aquatic plants</th> <th>Fish</th> </tr> </thead> <tbody> <tr> <td>Linalool</td> <td>48hr EC50 - 59mg/L (Daphnia magna)</td> <td>96hr EC50 - 156.7 mg/L; EC10 or NOEC - 54.3 mg/L (Desmodesmus subspicatus)</td> <td>96hr LC50 - 27.8mg/L (Salmo gairdneri)</td> </tr> <tr> <td>d-Limonene</td> <td>48hr EC50 - 0.4 mg/L (Daphnia magna)</td> <td>96 hr NOEC - 4mg/L (Green algae)</td> <td>96hr LC50 - 0.7mg/L (Pimephales promelas)</td> </tr> <tr> <td>alpha-Terpineol</td> <td>48hr EC50 - 73 mg/l (Daphnia)</td> <td>72hr EC50 - 68mg/l</td> <td>96hr LC50 - 62 to 80 mg/L</td> </tr> <tr> <td>para-Cymene</td> <td>72hr ErC50 - 4.03 mg/L, NOErC - 1.4 mg/L (Scenedesmus capricornutum)</td> <td>48hr EC50 - 100 mg/L</td> <td>96hr LC50 - 48 mg/L (Cyprinodon variegatus)</td> </tr> <tr> <td>alpha-Pinene</td> <td>41: 48 h Daphnia magna mg/L LC50</td> <td></td> <td>0.28: 96 h Pimephales promelas mg/L LC50 static</td> </tr> <tr> <td>Camphene</td> <td>22: 48 h Daphnia magna mg/L EC50</td> <td></td> <td>0.72: 96 h Brachydanio rerio mg/L LC50 flow-through 150: 96 h Brachydanio rerio mg/L LC50 static</td> </tr> </tbody> </table>	Chemical Name	Crustacea	Algae/aquatic plants	Fish	Linalool	48hr EC50 - 59mg/L (Daphnia magna)	96hr EC50 - 156.7 mg/L; EC10 or NOEC - 54.3 mg/L (Desmodesmus subspicatus)	96hr LC50 - 27.8mg/L (Salmo gairdneri)	d-Limonene	48hr EC50 - 0.4 mg/L (Daphnia magna)	96 hr NOEC - 4mg/L (Green algae)	96hr LC50 - 0.7mg/L (Pimephales promelas)	alpha-Terpineol	48hr EC50 - 73 mg/l (Daphnia)	72hr EC50 - 68mg/l	96hr LC50 - 62 to 80 mg/L	para-Cymene	72hr ErC50 - 4.03 mg/L, NOErC - 1.4 mg/L (Scenedesmus capricornutum)	48hr EC50 - 100 mg/L	96hr LC50 - 48 mg/L (Cyprinodon variegatus)	alpha-Pinene	41: 48 h Daphnia magna mg/L LC50		0.28: 96 h Pimephales promelas mg/L LC50 static	Camphene	22: 48 h Daphnia magna mg/L EC50	
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alpha-Pinene	41: 48 h Daphnia magna mg/L LC50		0.28: 96 h Pimephales promelas mg/L LC50 static																									
Camphene	22: 48 h Daphnia magna mg/L EC50		0.72: 96 h Brachydanio rerio mg/L LC50 flow-through 150: 96 h Brachydanio rerio mg/L LC50 static																									
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	DO NOT ALLOW PRODUCT TO ENTER STREAMS, SEWERS OR OTHER WATERWAYS.																											
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.																											

SECTION 14: TRANSPORT INFORMATION

14.1 TRANSPORT INFORMATION	
UN NUMBER	ROAD: 1169 RAIL: 1169 AIR: 1169
14.2 UN SHIPPING NAME	UN1169=EXTRACTS, AROMATIC, LIQUID
14.3 TRANSPORT HAZARD CLASS(ES)	ADR/RID/ADN CLASS: 3: FLAMMABLE LIQUID IMDG CLASS: 3 ICAO CLASS/DIVISION: 3

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	<p>TRANSPORT LABELS</p> 																																																																		
14.4 PACKING GROUP	NONE.																																																																		
14.5 ENVIROMENTAL HAZARDS	<p>ENVIRONMENTALLY HAZARDOUS / MARINE POLLUTANT.</p> 																																																																		
14.6 SPECIAL PRECAUTIONS FOR USER	<table border="0"> <tr> <td>ADR/RID</td> <td>3</td> <td>IMDG</td> <td>3</td> <td>IATA</td> <td>3</td> </tr> <tr> <td>Class</td> <td>3</td> <td>Class</td> <td>3</td> <td>Class</td> <td>3</td> </tr> <tr> <td>Code</td> <td>F1</td> <td>2^oLabel</td> <td>-</td> <td>2^oLabel</td> <td>-</td> </tr> <tr> <td>PackGrp</td> <td>III</td> <td>PackGrp</td> <td>III</td> <td>PackGrp</td> <td>III</td> </tr> <tr> <td>Label</td> <td>3</td> <td>LQ</td> <td>5L</td> <td>Passager</td> <td>355 Y344</td> </tr> <tr> <td>Ident</td> <td>-</td> <td>EMS</td> <td>F-E, S-D</td> <td>Passager</td> <td>60L 10L</td> </tr> <tr> <td>LQ</td> <td>5L</td> <td>Provis</td> <td>223, 55</td> <td>Cargo</td> <td>366 -</td> </tr> <tr> <td>Provis</td> <td>601</td> <td>EQ</td> <td>E1</td> <td>Cargo</td> <td>220L -</td> </tr> <tr> <td>EQ</td> <td>E1</td> <td></td> <td></td> <td>Note</td> <td>A3 A3</td> </tr> <tr> <td>Cat</td> <td>3</td> <td></td> <td></td> <td>EQ</td> <td>E1 E1</td> </tr> <tr> <td>Tunnel</td> <td>E</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>For limited quantities, see part 2.7 of the DACI/IATA and chapter 3.4 of the ADR and IMDG.</p> <p>For excepted quantities, see part 2.6 of the DACI/IATA and chapter 3.5 of the ADR and IMDG.</p>	ADR/RID	3	IMDG	3	IATA	3	Class	3	Class	3	Class	3	Code	F1	2 ^o Label	-	2 ^o Label	-	PackGrp	III	PackGrp	III	PackGrp	III	Label	3	LQ	5L	Passager	355 Y344	Ident	-	EMS	F-E, S-D	Passager	60L 10L	LQ	5L	Provis	223, 55	Cargo	366 -	Provis	601	EQ	E1	Cargo	220L -	EQ	E1			Note	A3 A3	Cat	3			EQ	E1 E1	Tunnel	E				
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Cat	3			EQ	E1 E1																																																														
Tunnel	E																																																																		
14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE.	NO DATA																																																																		
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																																																																		

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	SHEETS FOR SUBSTANCES & PREPARATIONS.
GUIDANCE NOTES	WORKPLACE EXPOSURE LIMITS EH40. CHIP FOR EVERYONE HSG 108.
15.2 CHEMICAL SAFETY ASSESSMENT	-

SECTION 16: OTHER INFORMATION

HAZARD AND/ OR PRECAUTIONARY STATEMENTS IN FULL	<p>H226 - FLAMMABLE LIQUID AND VAPOR H227 - COMBUSTIBLE LIQUID H228 - FLAMMABLE SOLID H302 - HARMFUL IF SWALLOWED H303 - MAY BE HARMFUL IF SWALLOWED H304 - MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS H313 - MAY BE HARMFUL IN CONTACT WITH SKIN H315 - CAUSES SKIN IRRITATION H316 - CAUSES MILD SKIN IRRITATION H317 - MAY CAUSE AN ALLERGIC SKIN REACTION H319 - CAUSES SERIOUS EYE IRRITATION H320 - CAUSES EYE IRRITATION H361 - SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD H400 - VERY TOXIC TO AQUATIC LIFE H401 - TOXIC TO AQUATIC LIFE H402 - HARMFUL TO AQUATIC LIFE H410 - VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS H411 - TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS H413 - MAY CAUSE LONG LASTING HARMFUL EFFECTS TO AQUATIC LIFE</p>
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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.
AND	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
OCTOBER 2020	REVIEWED
2021	REVIEW

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