

Material Safety Data Sheet

EU Regulation: 2020/878

SECTION 1: IDENTIFICATION OF	THE SUBSTANC	E/MIXTURE A	AND OF THE COMP	ANY/UNDERTAKING			
1.1 PRODUCT IDENTIFICATION							
PRODUCT NAME	Marjoram Sweet, Essential Oil						
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 MAJOR	ana Leaf Oil					
SYNONYMS & TRADE NAMES	-						
INTERNAL PRODUCT CODE	K0286						
CAS-No	84082-58-6	EC No.	282-004-4	EINECS No.	282-004-4		
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET						
COMPANY ADDRESS	O&3 Unit 2, Athelstan E	Business Park, H	anwell Lane, Hutton Co	onyers, Ripon, HG4 5BF, En	gland.		
EMAIL	TECHNICALCREW@	TECHNICALCREW@OAND3.COM					
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET						
EMERGENCY CONTACTS	(07968 200167)						



. 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)				
.2 ABEL ELEMENTS	Flammable liquids Category 3 - (H226) 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 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				
PRECAUTIONARY STATEMENTS	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.				
3 THER 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.				



SECTION 3: COMPOSITION OF INGREDIENTS

Terpinen-4-ol	Present	562-74-3	20 - <30	Aquatic Acute 3
				(H402) (EFFA) Ey Irrit. 2 (H319) (EFF Skin Irrit. 2 (H315 (EFFA) Acute Tox. (H302) (EFFA) Acu Tox. 5 (H313)(EFF
				Flam. Liq. 4
Linalool	Present	78-70-6	10 - <20	(H227)(EFFA) Aquatic Acute 3
				(H402) (EFFA) Ey Irrit. 2 (H319) (EFF Skin Irrit. 2 (H315 (EFFA) Acute Tox. (H303)(EFFA) Flar Liq. 4 (H227)(EFFA Skin Sens. 1B (H31 (EFFA)
gamma-Terpinene	Present	99-85-4	10 - <20	Rep 2 (H361), Flar Liq. 3, Aspir Haz. (H304), Acute Tox (H303), Skin Irrit. (H316)
alpha-Terpinene	Present	99-86-5	1 - <10	Aquatic Acute 2 (H401) (EFFA) Sk Irrit. 3 (H316) (EFF Aquatic Chronic 2 (H411) (EFFA) As; Tox. 1 (H304) (EFF Acute Tox. 4 (H30) (EFFA) Flam. Liq. (H226)(EFFA)
Sabinene	Present	3387-41-5	1 - <10	Aspiration cat 1 (H304), Flam cat: (H226), Skin Irri ca (H315), Skin sensi 1B (H317), Acute aquatic cat 1 (H400 Chronic aquatic cat (H410)
d-Limonene	Present	5989-27-5	1 - <10	Aspiration Hazard (H304)(EFFA) Flar Liq. 3 (H226)(EFF, Skin Irrit. 2 (H315)(EFFA) Ski Sens. 1B (H317)(EFFA) Aquatic 1 (H400)(EFF Aquatic Chronic 1 (H410)(EFFA)
alpha-Terpineol	Present	98-55-5	1 - <10	Aquatic Acute 2 (H401) (EFFA) Ey Irrit. 2 (H319) (EFF Skin Irrit. 2 (H315 (EFFA) Acute Tox. (H303)(EFFA) Flar Liq. 4 (H227)(EFF
Terpinolene	Present	586-62-9	1 - <10	Aquatic Acute 1 (H400) (EFFA) EFF Aquatic Chronic 7 (H410) (EFFA) As Tox. 1 (H304) (EFF Acute Tox. 5 (H303)(EFFA) Flar Liq. 4 (H227)(EFF, Skin Irrit. 3 (H316 (EFFA) Skin Sens.
Linalyl acetate	Present	115-95-7	1 - <10	(H317) (EFFA) Aquatic Acute 3

3.2 MIXTURES



				Skin Irrit. 2 (H: (EFFA) Flam. I (H227)(EFFA) Sensitization (H317)(EFF
Caryophyllene	Present	87-44-5	1 - <10	Skin Sens. 1B ((EFFA) Asp. T (H304) (EFF Chronic Aqua (H413) (EFF
Myrcene	Present	123-35-3	1 - <10	Eye Irrit. 2 (H: (EFFA) Skin Ir (H315) (EFFA) Tox. 1 (H304) (I Flam. Liquid 3 ((EFFA) Acute A 1 (H400) (EF Chronic Aqua (H411) (EFF
beta-Phellandrene	Present	555-10-2	1 - <10	Asp. Tox. 1 (H (EFFA) Flam. I (H226) (EFF
para-Cymene	Present	99-87-6	0.1 - <1	Rep Tox. 2 (H: Aquatic Acut (H401), Skin Ir (H316), Aqua Chronic 2 (H4 Asp. Tox. 1 (H: Acute Tox. (H303),Flam. L (H226)
alpha-Pinene	Present	80-56-8	0.1 - <1	Acute Aquati (H400) (EFF Chronic Aqua (H410) (EFFA). Tox. 4 (H302) (I Skin Sens. 1B ((EFFA) Skin Ir (H315) (EFFA) Tox. 1 (H304) (I Flam. Liq.: (H226)(EFF
beta-Pinene	Present	127-91-3	0.1 - <1	Acute Aquati (H400) (EFF Chronic Aqua (H410) (EFFA) Sens. 1 (H3 (EFFA) Skin II (H315) (EFFA) Tox. 1 (H304) (I Flam. Liq. (H226)(EFF
alpha-Phellandrene	Present	99-83-2	0.1 - <1	Skin Irrit. 3 (H (EFFA) Asp. T (H304) (EFFA) Liq. 3 (H226)(E
trans beta-Ocimene	Present	3779-61-1	0.01 - <0.1	Acute Tox. 5 (t (EFFA) Asp. T (H304) (EFFA) Irrit. 2 (H315) (i Acute Aquat (H400) (EFF Chronic Aqua (H411) (EFFA) Liq. 3 (H226) (t
Camphene	Present	79-92-5	0.01 - <0.1	Aquatic Acut (H400) (EFFA Irrit. 2B (H320) (Aquatic Chron



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.			
I.2 MOST IMPORTANT SYMPTOMS & EFFECTS (ACUTE & DELAYED)	None known.			
.3 NDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR PECIAL TREATMENT REQUIRED	TTREAT SYMPTOMATICALLY.			
SECTION 5: FIRE FIGHTING MEASURES				
i.1 Extinguishing material	FOAM, CO2, DRY CHEMICAL POWDER.			
5.2 PECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	BURNING PRODUCES IRRITATING, TOXIC AND OBNOXIOUS FUMES			
5.3	SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS:			
ADVICE FOR FIRE-FIGHTERS	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING.			
Advice for fire-fighters SECTION 6: ACCIDENTAL RELEASE MEAS 5.1	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING. URES Ensure adequate ventilation of the working area, evacuate personnel to safe area, wear suitable protective			
ADVICE FOR FIRE-FIGHTERS SECTION 6: ACCIDENTAL RELEASE MEAS 5.1 PERSONAL PRECAUTIONS	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING. URES 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.			
ADVICE FOR FIRE-FIGHTERS SECTION 6: ACCIDENTAL RELEASE MEAS 6.1 PERSONAL PRECAUTIONS 6.2	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING. URES 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			
ADVICE FOR FIRE-FIGHTERS SECTION 6: ACCIDENTAL RELEASE MEAS 6.1 PERSONAL PRECAUTIONS 6.2 ENVIRONMENTAL PRECAUTIONS 6.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING. URES 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. DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES. REMOVE IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. AVOID EXCESSIVE INHALATION OF VAPOURS. CONTAIN			
ADVICE FOR FIRE-FIGHTERS SECTION 6: ACCIDENTAL RELEASE MEAS 5.1 PERSONAL PRECAUTIONS 6.2 ENVIRONMENTAL PRECAUTIONS 6.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING JP 6.4	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING. URES 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. DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES. 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. REFER & CONSIDER SECTION 8.			
SECTION 6: ACCIDENTAL RELEASE MEAS 6.1 PERSONAL PRECAUTIONS 6.2 ENVIRONMENTAL PRECAUTIONS 6.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING UP 6.4 REFERENCES TO OTHER SECTIONS	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING. URES 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. DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES. 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.			
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SECTION 6: ACCIDENTAL RELEASE MEAS 6.1 PERSONAL PRECAUTIONS 6.2 ENVIRONMENTAL PRECAUTIONS 6.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING JP 6.4 REFERENCES TO OTHER SECTIONS SECTION 7: HANDLING & STORAGE	WEAR POSITIVE-PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) AND APPROPRIATE PROTECTIVE CLOTHING. URES 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. DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES. 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. REFER & CONSIDER SECTION 8. REFER & CONSIDER SECTION 13. 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 O			



THE OIL FAMILY

Chemical Name	European Union	United Kingdom	France	Spain	Germany
gamma-Terpinene	-	-	TWA: 1000 mg/m ³	-	-
99-85-4			STEL: 1500 mg/m ³		
alpha-Terpinene	-	-	TWA: 1000 mg/m ³	-	- 1
99-86-5			STEL: 1500 mg/m ³		
Sabinene	-	-	TWA: 1000 mg/m ³	-	-
3387-41-5			STEL: 1500 mg/m ³		
d-Limonene	-	-	TWA: 1000 mg/m ³	S*	TWA: 5 ppm
5989-27-5			STEL: 1500 mg/m ³	TWA: 30 ppm	TWA: 28 mg/m ³
				TWA: 168 mg/m ³	Ceiling / Peak: 20 ppm
					Ceiling / Peak: 112

					Celling / Feak. 112
					mg/m³ Skin
Terpinolene 586-62-9	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	-
Myrcene 123-35-3	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	-
beta-Phellandrene 555-10-2	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	-
para-Cymene 99-87-6	-	-	TWA: 150 mg/m ³ TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	-
alpha-Pinene 80-56-8	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	TWA: 20 ppm TWA: 113 mg/m ³	
beta-Pinene 127-91-3	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	TWA: 20 ppm TWA: 113 mg/m ³	-
alpha-Phellandrene 99-83-2	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	i
trans beta-Ocimene 3779-61-1	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	-
Camphene 79-92-5	-	-	TWA: 1000 mg/m ³ STEL: 1500 mg/m ³	-	-
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/m³ Skin STEL: 37.5 ppm STEL: 175 mg/m³	-
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	-	-	-

8.1 CONTROL PARAMETERS





EYE PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.		
HAND PROTECTION	WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.		
	Under normal conditions of use and where adequate ventilation is available to prevent build up of excessive		
RESPIRATORY EQUIPMENT	VAPOUR, THIS MATERIAL SHOULD NOT REQUIRE SPECIAL ENGINEERING CONTROLS. HOWEVER, IN CONDITIONS OF HIGH OR		
RESTRATORT EQUITMENT	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		



	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 & CHE PROPERTIES	MICAL	
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
	IVE INDEX @ 20 °C	1.4700 – 1.4750 @ 20°C
	IN WATER @ 20 °C	NO DATA.
9.2 Other Information		NO DATA.
9.2.1 INFORMATION WITH REGARD TO PHYSICAL	. HAZARD CLASSES	NO DATA.
9.2.2 OTHER SAFETY CHARACTERISTICS		NO DATA.
SECTION 10: STABILITY & RE	ACTIVITY	
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 OXIDISNING 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 SV	VALLOWED	,			
	Causes skin irritation.						
EYE DAMA	Causes serious eye irritation						
RESPIRATORY C	MAY CAUSE SEN	ISITISATIO	N BY SKIN CONTACT				
GERM C	CELL MUTAGENICITY	NOY CLASSIFIED.					
	CARCINOGENICITY	NOY CLASSIFIED.					
REPRODUCTIVE TOXICITY NOY CLASSIFIED.							
STOT -	- SINGLE EXPOSURE	NOY CLASSIFIED.					
STOT – R	EPEATED EXPOSURE	NOY CLASSIFIED).				
As	SPIRATION HAZARD	MAY BE FATAL II	F SWALLO	WED AND ENTERS AIRWAY	S.		
11.2 INFORMATION ON OTHER HAZARDS		NO DATA.					
SECTION 12: ECOLOGICAL INFORMATION		Toyle to soll	ATIC LIEE VA	ITH LONG LASTING EFFEC	rc		
		_			DRAINS OR WATERWAYS		
		Chemical N	lame	Crustacea 48hr EC50 - 59mg/L (Daphnia	Algae/aquatic plants	Fish	
		Linaloo		magna)	96hr EC50 - 156.7 mg/L; EC10 or NOEC - 54.3 mg/L (Desmodesmus subspicatus)	96hr LC50 - 27.8mg/L (Salmo gairdneri)	
12.1		d-Limone		48hr EC50 - 0.4 mg/L (Daphnia magna)	96 hr NOEC - 4mg/L (Green algae)	96hr LC50 - 0.7mg/L (Pimephales promelas)	
TOXICITY		alpha-Terpi para-Cym		48hr EC50 - 73 mg/l (Daphnia) 72hr ErC50 - 4.03 mg/L, NOErC - 1.4 mg/L (Scenedesmus capricornutum)	72hr EC50 - 68mg/l 48hr EC50 - 100 mg/L	96hr LC50 - 62 to 80 mg/L 96hr LC50 - 48 mg/L (Cyprinodon variegatus)	
		alpha-Pine	ene	41: 48 h Daphnia magna mg/L LC50		0.28: 96 h Pimephales promelas mg/L LC50 static	
		Campher	ne	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 ENDOCRINE DISRUPTING PROPERTIES		DO NOT ALLOW PRODUCT TO ENTER STREAMS, SEWERS OR OTHER WATERWAYS.					
12.7 OTHER ADVERSE EFFECTS		NO DATA.					
SECTION 13: DISPOSAL INFORMATION							
13.1 WASTE TREATMENT METHODS					TE MATERIAL WITH AUTHO		

SECTION 14: Transport Information	
14.1 TRANSPORT INFORMATION	
UN NUMBER	ROAD: 1197
	RAIL: 1197



	AIR: 1197						
14.2 UN SHIPPING NAME	UN1169=	UN1169=EXTRACTS, AROMATIC, LIQUID					
14.3 TRANSPORT HAZARD CLASS(ES)	IMDG CLA	SS/DIVISION LABELS	3	: Flammable Lig	ānid		
14.4	/						
PACKING GROUP	NONE.	AAENITA I I V	HAZARDOUS ,	/ AAA DINIE DOI	HITANIT		
14.5 ENVIROMENTAL HAZARDS	(¥	MENTALLY		MARINE POL			
	ADR/RID		IMDG		IATA		
	Class:	3	Class:	3	Class:	3	
	Code:	F1	2°Label:	-	2°Label:	-	
	Pack Grp:	III	Pack Grp:	III	Pack Grp:	III	
	Label:	3	LQ	5L	Passager:	355	Y344
	Ident:	-	EMS	F-E, S-D	Passager:	60L	10L
	LQ	5L	Provis:	223 955	Cargo:	366	-
14.6	Provis.	601	EQ	E1	Cargo:	220L	-
SPECIAL PRECAUTIONS FOR USER	EQ	E1			Note:	А3	A3
	Cat	3			EQ:	E1	E1
	Tunnel	E					
	For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG. For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.						
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	DECEMBER 2	2006. CON (REACH), ES	CERNING THE REC	JISTRATION, EVA JROPEAN CHEM	PARLIAMENT AND OF ALUATION, AUTHORIZ IICALS AGENCY, AME EEC) NO793/93 &	ATION 8	& restriction of Directive

The attached information is considered to be correct at the time the client received this information. Please be aware that detail can change and we encourage clients to update their records with O&3 regularly. The information is not and should not be considered a guarantee or warranty, or a part of our contractual or other legal obligations. The information is not to be disclosed to others, reproduced or transmitted in whole or in part without permission from O&3.



	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	-

SECTION 16: OTHER INFORMATION		
SECTION 10. OTHER INFORMATION		
Hazard and/ or Precautionary Statements in full	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 H315 - CAUSES SKIN IRRITATION H315 - CAUSES SKIN IRRITATION H316 - CAUSES MILD SKIN IRRITATION H317 - MAY CAUSE AN ALLERGIC SKIN REACTION H319 - CAUSES SERIOUS EYE IRRITATION H320 - CAUSES SERIOUS EYE IRRITATION H341 - 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	
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 MERCHANDISES DANGEREUSES PAR ROUTE (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD).	
RID	INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY RAIL.	
ICAO	O INTERNATIONAL CIVIL AVIATION ORGANIZATION.	
AND	D INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS.	
GHS	HS GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION & LABELLING OF CHEMICALS.	
Trem Card	TREM CARD TRANSPORT EMERGENCY CARD.	
STOT SPECIFIC TARGET ORGAN TOXICITY.		

DOCUMENTATION REVISION	
DATE	CHANGE DESCRIPTION



10 [™] April 2018	Data Launch
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2021	Review
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