



THE OIL FAMILY

## Material Safety Data Sheet

EU Regulation: 1907/2006

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

#### 1.1 PRODUCT IDENTIFICATION

<b>PRODUCT NAME</b>	MANDARIN (RED), ESSENTIAL OIL				
<b>BIOLOGICAL DEFINITION</b>	CITRUS NOBILIS PEEL OIL EXPRESSED IS AN ESSENTIAL OIL EXPRESSED FROM THE EPICARPS OF THE MANDARIN, CITRUS NOBILIS, RUTACEAE.				
<b>INCI NAME</b>	CITRUS NOBILIS PEEL OIL EXPRESSED				
<b>SYNONYMS &amp; TRADE NAMES</b>	-				
<b>INTERNAL PRODUCT CODE</b>	K0278				
<b>CAS-No</b>	84929-38-4	<b>EC No.</b>	284-521-0	<b>EINECS No.</b>	284-521-0

#### 1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

<b>COMPANY ADDRESS</b>	O&3 Unit 2, Athelstan Business Park, Hanwell Lane, Hutton Conyers, Ripon, HG4 5BF, England.				
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#### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET





<b>EMERGENCY CONTACTS</b>	MRS. ELEANOR WADE (07968 200167)				
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SECTION 2: HAZARDS IDENTIFICATION	
<b>2.1</b> 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 HAZARD STATEMENTS DISPLAYED IN SECTION 16.
CLASSIFICATION (EU1272/2008)	<b>PHYSICAL HAZARDS:</b> FLAM. LIQ. 3 H226 <b>HEALTH HAZARDS:</b> ASP. TOX. 1 H304, SKIN IRRIT. 2 H315, SKIN SENS. 1 H317 <b>ENVIRONMENTAL HAZARDS:</b> AQUATIC ACUTE 1 H400, AQUATIC CHRONIC 1 H410
<b>2.2</b> LABEL ELEMENTS	LABEL IN ACCORDANCE WITH REGULATION (EC) No 1272/2008.
GHS LABEL	   
SIGNAL WORD	DANGER.
CONTAINS	D-LIMONENE, MYRCENE
HAZARDS STATEMENT	H226: FLAMMABLE LIQUID AND VAPOUR. H315: CAUSES SKIN IRRITATION. H317: MAY CAUSE AN ALLERGIC SKIN REACTION. H304: MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H410: VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
PRECAUTIONARY STATEMENTS	P210: KEEP AWAY FROM HEAT, HOT SURFACES, SPARKS, OPEN FLAMES AND OTHER IGNITION SOURCES. NO SMOKING. P241: USE EXPLOSION-PROOF ELECTRICAL/VENTILATING/LIGHTING EQUIPMENT. P261: AVOID BREATHING MIST/VAPOURS/SPRAY. P273: AVOID RELEASE TO THE ENVIRONMENT. P280: WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION. P301+P310: IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER/ DOCTOR. P303+P361+P353: IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER. P331: DO NOT INDUCE VOMITING. P501: DISPOSE OF CONTENTS/CONTAINER IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATIONS.
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	NONE.
SECTION 16 (OTHER INFORMATION): RISK & SAFETY PHRASES IN FULL.	
<b>2.3</b> OTHER HAZARDS	
ADVERSE PHYSIO-CHEMICAL PROPERTIES	NO APPLICABLE.
ADVERSE EFFECTS ON HUMAN HEALTH	NO ADDITIONAL DATA AVAILABLE.
PBT OR vPvB ACCORDING TO ANNEX XIII	CAN CAUSE DRY SKIN, ALLERGIC CONTACT DERMATITIS.
SECTION 3: COMPOSITION OF INGREDIENTS	
<b>3.2 MIXTURES</b>	<p>≤ <b>97.0% D-LIMONENE</b> CAS No: 5989-27-5; EC No: 227-813-5            CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3, H226; ASP. TOX. 1, H304; SKIN IRRIT. 2, H315; SKIN SENS.1, H317;            AQUATIC ACUTE 1, H400; AQUATIC CHRONIC 1, H410;</p> <p>≤ <b>2.5% MYRCENE (7-METHYL-3-METHYLENEOCTA-1,6-DIENE)</b> CAS No:123-35-3; EC No: 204-622-5            CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3, H226; ASP. TOX. 1, H304, SKIN IRRIT. 2, H315; EYE IRRIT. 2, H319;            AQUATIC ACUTE 1, H400; AQUATIC CHRONIC 1 H410</p> <p>≤ <b>3.0% GAMMA- TERPINENE</b> CAS No: 99-85-4; EC No: 202-794-6            CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3, H226; ASP. TOX. 1, H304</p>

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	<p>≤ <b>3.0% ALPHA-PINENE</b> CAS No: 80-56-8; EC No: 201-291-9 CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3, H226; ACUTE TOX. 4, H302; ASP. TOX. 1, H304; SKIN IRRIT. 2, H315; SKIN SENS.1, H317; AQUATIC ACUTE 1, H400; AQUATIC CHRONIC 1, H410</p> <p>≤ <b>1.0% BETA-PINENE</b> CAS No:127-91-3; EC No: 204-872-5 CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3, H226; ASP. TOX. 1, H304; SKIN IRRIT. 2, H315; SKIN SENS.1, H317; AQUATIC ACUTE 1, H400; AQUATIC CHRONIC 1, H410</p> <p>≤ <b>1.0% LINALOOL</b> CAS No: 78-70-6; EC No: 201-134-4 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2, H315; SKIN SENS.1, H317; EYE IRRIT. 2, H319</p> <p>≤ <b>0.185% CITRAL</b> CAS No: 5392-40-5; EC No: 226-394-6 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2, H315; SKIN SENS.1, H317</p>
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#### SECTION 4: FIRST AID MEASURES

<b>4.1</b> <b>DESCRIPTION OF FIRST AID MEASURES</b>	
<b>GENERAL INFORMATION</b>	ALWAYS REMOVE CONTAMINATED CLOTHING IMMEDIATELY.
<b>INHALATION</b>	EVACUATE PERSON TO UNCONTAMINATED AREA. BREATHE FRESH AIR. IF BREATHING DIFFICULTIES PERSIST, CONSULT A DOCTOR. IF UNCONSCIOUS, PLACE THE PERSON IN RECOVERY POSITION AND CALL A DOCTOR.
<b>INGESTION</b>	RINSE MOUTH THOROUGHLY WITH WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. DO NOT INDUCE VOMITING. CONSULT A DOCTOR. IF VOMITING OCCURS, KEEP HEAD DOWN TO PREVENT THE PASSAGE OF VOMIT INTO THE LUNGS. IN CASE OF PERSISTENT OR WORSENING SYMPTOMS CONSULT A DOCTOR. IF UNCONSCIOUS, PLACE THE PERSON IN RECOVERY POSITION (SLP) AND CALL A DOCTOR.
<b>SKIN CONTACT</b>	WASH THE CONTAMINATED SKIN WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND SHOES. WASH THOROUGHLY WITH WATER. BEFORE REMOVING CONTAMINATED CLOTHING WEAR GLOVES.
<b>EYE CONTACT</b>	RINSE IMMEDIATELY WITH CLEAN WATER OR ANY SOLUTION PROVIDED FOR THIS PURPOSE FOR 15 MINUTES HOLDING THE EYE OPEN. CHECK IF THE VICTIM IS WEARING CONTACT LENSES AND REMOVE IF POSSIBLE. CONSULT OPHTHALMOLOGIST IMMEDIATELY.
<b>4.2</b> MOST IMPORTANT SYMPTOMS & EFFECTS (ACUTE & DELAYED)	NO ADDITIONAL DATA AVAILABLE.
<b>4.3</b> INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	NO ADDITIONAL DATA AVAILABLE.

#### SECTION 5: FIRE FIGHTING MEASURES

<b>5.1</b> EXTINGUISHING MATERIAL	FOAM, CO <sub>2</sub> , DRY CHEMICAL POWDER.
<b>5.2</b> SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	IN CASE OF FIRE, THE FOLLOWING CAN BE RELEASED: CARBON MONOXIDE (CO) CARBON DIOXIDE (CO <sub>2</sub> ) SMOKE AND SOOT TO PREVENT FIRE SPREADING; DO NOT USE WATER WITH FULL JET.
<b>5.3</b> ADVICE FOR FIRE-FIGHTERS	COOL NEARBY CONTAINERS WITH WATER SPRAY. COLLECT CONTAMINATED FIRE FIGHTING WATER SEPARATELY. IT MUST NOT ENTER THE SEWAGE SYSTEM. DISPOSE OF FIRE DEBRIS AND CONTAMINATED FIRE FIGHTING WATER IN ACCORDANCE WITH OFFICIAL REGULATIONS.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>6.1</b> PERSONAL PRECAUTIONS	CONSULT THE SAFETY MEASURES LISTED UNDER HEADINGS 7 AND 8. FOR NON EMERGENCY PERSONNEL
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	<p>NO ACTION SHALL BE TAKEN IN THE ABSENCE OF PROPER TRAINING OR IF IT INVOLVES PERSONAL RISK. PREVENT ACCESS TO PERSONS NOT REQUIRED AND NOT WEARING PROTECTIVE CLOTHING. DO NOT TOUCH OR WALK THROUGH SPILLED MATERIAL. AVOID BREATHING VAPOUR OR MIST. ENSURE ADEQUATE VENTILATION. IF THE VENTILATION IS INADEQUATE, WEAR APPROPRIATE RESPIRATORY PROTECTION. WEAR PROTECTIVE EQUIPMENT.</p> <p>FOR EMERGENCY RESPONDER</p> <p>IF SPECIALIZED CLOTHING IS NEEDED TO ADDRESS THE SPILL, SEE SECTION 8 FOR APPROPRIATE AND INAPPROPRIATE MATERIALS. SEE ALSO THE INFORMATION IN "FOR NON-EMERGENCY PERSONNEL".</p>
<p><b>6.2</b> ENVIRONMENTAL PRECAUTIONS</p>	<p>DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY GUIDELINES.</p>
<p><b>6.3</b> METHODS &amp; MATERIAL FOR CONTAINMENT AND CLEANING UP</p>	<p>SMALL ACCIDENTAL SPILL</p> <p>STOP LEAK IF WITHOUT RISK. REMOVE CONTAINERS FROM SPILL AREA. DILUTE WITH WATER AND MOP UP IF WATER SOLUBLE. OTHERWISE, OR IF THE MATERIAL IS INSOLUBLE IN WATER, ABSORB WITH AN INERT DRY MATERIAL AND PLACE IN APPROPRIATE WASTE CONTAINER. DISPOSE OF VIA A LICENSED WASTE COLLECTION COMPANY.</p> <p>LARGE ACCIDENTAL SPILL</p> <p>STOP LEAK IF WITHOUT RISK. REMOVE CONTAINERS FROM SPILL AREA. PREVENT ENTRY INTO SEWERS, RIVERS, EXHAUST DUCTS, BASEMENTS OR CONFINED AREAS. WASH SPILLAGES INTO AN EFFLUENT TREATMENT PLANT OR PROCEED AS FOLLOWS. DISPOSE OF VIA A LICENSED WASTE COLLECTION COMPANY. CONTAIN LEAKS AND PICK UP THE PRODUCT USING ABSORBENT NON-COMBUSTIBLE MATERIALS SUCH AS SAND, EARTH, VERMICULITE OR DIATOMACEOUS EARTH. THEN PLACE IN A CONTAINER ACCORDING TO LOCAL REGULATIONS. DISPOSE OF VIA A LICENSED WASTE COLLECTION COMPANY.</p> <p>*CONTAMINATED ABSORBENT MATERIAL MAY POSE THE SAME HAZARDS AS THE SPILLED PRODUCT.</p>
<p><b>6.4</b> REFERENCES TO OTHER SECTIONS</p>	<p>REFER &amp; CONSIDER SECTION 8.</p> <p>REFER &amp; CONSIDER SECTION 13.</p>
<p><b>SECTION 7: HANDLING &amp; STORAGE</b></p>	
<p><b>7.1</b> PRECAUTIONS FOR SAFE-HANDLING</p>	<p><b>PROTECTIVE MEASURES</b></p> <p>WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (SEE SECTION 8). PEOPLE WITH A HISTORY OF SKIN SENSITIZATION SHOULD NOT INTERVENE IN THE PROCESSES USING THIS PRODUCT. PROTECT AGAINST ELECTROSTATIC CHARGE. DO NOT ALLOW CONTACT WITH EYES, SKIN OR CLOTHING. DO NOT INGEST. AVOID BREATHING VAPOUR OR MIST. AVOID RELEASE TO THE ENVIRONMENT. KEEP IN ORIGINAL CONTAINER OR IN A CONTAINER APPROVED ALTERNATIVE MADE FROM A COMPATIBLE MATERIAL, KEPT TIGHTLY CLOSED WHEN NOT IN USE. EMPTY CONTAINERS RETAINING PRODUCT RESIDUE CAN BE DANGEROUS. DO NOT REUSE THIS CONTAINER.</p> <p><b>GENERAL ADVICE ON OCCUPATIONAL HEALTH</b></p> <p>IT IS FORBIDDEN TO EAT, DRINK OR SMOKE IN AREAS WHERE THIS MATERIAL IS HANDLED, STORED OR USED. IT IS RECOMMENDED THAT STAFF WASH THEIR HANDS AND FACE BEFORE EATING, DRINKING OR SMOKING. REMOVE CONTAMINATED CLOTHING AND PROTECTIVE EQUIPMENT BEFORE ENTERING A FOOD COURT. SEE ALSO SECTION 8 FOR MORE INFORMATION ON HYGIENE MEASURES.</p>
<p><b>7.2</b> CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES</p>	<p>STORE IN ACCORDANCE WITH LOCAL REGULATIONS. STORE IN ORIGINAL CONTAINER PROTECTED FROM DIRECT SUNLIGHT IN A DRY, COOL AND WELL VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS (SEE SECTION 10). KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. CONTAINERS THAT HAVE BEEN OPENED MUST BE CAREFULLY RESEALED AND KEPT UPRIGHT TO PREVENT LEAKAGE. DO NOT STORE IN UNLABELLED CONTAINERS. USE APPROPRIATE CONTAINER TO AVOID ENVIRONMENTAL CONTAMINATION.</p>
<p><b>7.3</b> SPECIFIC END USE(S)</p>	<p>NO DATA.</p>
<p><b>SECTION 8: EXPOSURE CONTROLS &amp; PERSONAL PROTECTION</b></p>	
<p><b>8.1</b> CONTROL PARAMETERS</p>	<p>INGREDIENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE: CAS NO:5989-27-5 (R)-P-MENTHA-1,8-DIENE (D-LIMONENE) AGW (GERMANY) LONG-TERM VALUE: 28 MG/M<sup>3</sup>, 5 PPM 4(II);DFG, H, SH, Y</p>
<p><b>8.2</b> EXPOSURE CONTROLS</p>	
<p><b>EYE PROTECTION</b></p>	<p>WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.</p>
<p><b>HAND PROTECTION</b></p>	<p>WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION.</p>

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<b>RESPIRATORY EQUIPMENT</b>	SUITABLE RESPIRATORY PROTECTION: FILTER CLASS A2 (BROWN COLOUR). USE THE RULES FOR APPLICATION OF RESPIRATORY PROTECTION SYSTEMS. IN CASE OF BRIEF EXPOSURE OR LOW POLLUTION USE RESPIRATORY FILTER DEVICE. IN CASE OF INTENSIVE OR LONGER EXPOSURE USE SELF-CONTAINED RESPIRATORY PROTECTIVE DEVICE.
<b>HYGIENE MEASURES</b>	THOROUGHLY WASH HANDS, FOREARMS AND FACE AFTER HANDLING CHEMICAL PRODUCTS, BEFORE EATING, SMOKING AND AT THE END OF THE WORKDAY. IT IS RECOMMENDED TO USE APPROPRIATE TECHNIQUES TO REMOVE POTENTIALLY CONTAMINATED WORK CLOTHES. CONTAMINATED WORK CLOTHING SHOULD NOT LEAVE THE WORKPLACE. WASH CONTAMINATED CLOTHING BEFORE REUSE. ENSURE THAT EYEWASH STATIONS AND SAFETY SHOWERS ARE NEAR THE LOCATION OF WORKSTATIONS.
<b>ENGINEERING MEASURES</b>	ENSURE ADEQUATE VENTILATION.
<b>SKIN PROTECTION</b>	THE PERSONAL PROTECTIVE EQUIPMENT FOR THE BODY SHOULD BE SELECTED ACCORDING TO THE TASK PERFORMED AND THE RISKS INVOLVED.
<b>PERSONAL PROTECTION</b>	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES.
<b>OTHER PROTECTION</b>	THE PROPER FOOTWEAR AND ANY MEASURE OF SKIN PROTECTION SHOULD BE CHOSEN ACCORDING TO THE TASK PERFORMED AND THE RISKS INVOLVED. IT IS RECOMMENDED TO VALIDATE THE EQUIPMENT BY A SPECIALIST BEFORE HANDLING THIS PRODUCT..
<b>PROCESS CONDITIONS</b>	ENSURE AREA IS WELL VENTILATED. AVOID VAPOUR INHALATION. SAFETY SHOWER & EYE BATH.
<b>ENVIROMENTAL EXPOSURE CONTROLS</b>	IT IS IMPORTANT TO TEST EMISSIONS FROM VENTILATION SYSTEMS OR MANUFACTURING EQUIPMENT TO ENSURE THEY COMPLY WITH LEGISLATIVE REQUIREMENTS ON ENVIRONMENTAL PROTECTION.

## SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

<b>9.1 PHYSICAL &amp; CHEMICAL PROPERTIES</b>	
<b>APPEARANCE</b>	LIQUID
<b>COLOUR</b>	PALE ORANGE TO DARK ORANGE
<b>ODOUR</b>	CHARACTERISTIC, CITRUS
<b>RELATIVE DENSITY</b>	APPROX. 0.845 @ 20°C
<b>FLASH POINT (°C)</b>	>53.0°C
<b>REFRACTIVE INDEX @ 20 °C</b>	APPROX. 1.475 @ 20°C
<b>SOLUBILITY IN WATER @ 20 °C</b>	NOT MISCIBLE IN WATER OR DIFFICULT TO MIX.
<b>BOILING POINT ( °C )</b>	> 35.0
<b>VAPOUR PRESSURE</b>	2.3 hPa. @ 20°C.
<b>9.2 OTHER INFORMATION</b>	AUTO-IGNITION: PRODUCT IS NOT SELF-IGNITING; BUT IN CASE OF UNPROFITIOUS STORING CONDITIONS (AIR ADMISSION, HEAT ACCUMULATION) SELF-IGNITION IS POSSIBLE FOR MOISTENED SOLIDS (E.G. CLOTH, PULP, FILTER PANELS, BINDER).

## SECTION 10: STABILITY & REACTIVITY

<b>10.1 REACTIVITY</b>	NO ADDITIONLA DATA AVAILABLE.
<b>10.2 CHEMICAL STABILITY</b>	STABLE UNDER SUGGESTED STORAGE CONDITIONS (<15°C).
<b>10.3 POSSIBILITY OF HAZARDOUS REACTIONS</b>	FORMATION OF EXPLOSIVE GAS MIXTURE WITH AIR POSSIBLE. PRODUCT IS NOT SELF-IGNITING; BUT IN CASE OF UNPROFITIOUS STORING CONDITIONS (AIR ADMISSION, HEAT ACCUMULATION) SELF-IGNITION IS POSSIBLE FOR MOISTENED SOLIDS (E.G. CLOTH, PULP, FILTER PANELS, BINDER). REACTS VIOLENTLY WITH OXIDISING AGENTS.
<b>10.4 CONDITIONS TO AVOID</b>	AVOID ANY SOURCE OF IGNITION, HEAT, SPARKS OR FLAMES.
<b>10.5 INCOMPATIBLE MATERIALS</b>	NO ADDITIONAL DATA AVAILABLE.
<b>10.6 HAZARDOUS DECOMPOSITION PRODUCTS</b>	HEATING CAUSES VAPORISATION AND FORMATION OF IGNITABLE ATMOSPHERE IS POSSIBLE.

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<b>SECTION 11: TOXICOLOGICAL INFORMATION</b>	
<b>11.1 TOXICOLOGICAL EFFECTS</b>	
<b>ACUTE TOXICITY</b>	BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.
<b>SKIN IRRITATION</b>	CAUSES SKIN IRRITATION.
<b>EYE DAMAGE OR IRRITATION</b>	BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.
<b>RESPIRATORY OR SKIN SENSITIVITY</b>	MAY CAUSE AN ALLERGIC SKIN REACTION.
<b>GERM CELL MUTAGENICITY</b>	BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.
<b>CARCINOGENICITY</b>	BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.
<b>REPRODUCTIVE TOXICITY</b>	BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.
<b>STOT – SINGLE EXPOSURE</b>	BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.
<b>STOT – REPEATED EXPOSURE</b>	BASED ON AVAILABLE DATA, THE CLASSIFICATION CRITERIA ARE NOT MET.
<b>ASPIRATION HAZARD</b>	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. ASPIRATION MAY CAUSE LUNG DAMAGE.
<b>OTHER INFORMATION</b>	NO ADDITIONAL INFORMATION AVAILABLE.
<b>SECTION 12: ECOLOGICAL INFORMATION</b>	
<b>12.1 TOXICITY</b>	VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. AQUATIC TOXICITY: LIMONENE (CICAD05; <a href="http://WWW.INCHEM.ORG/DOCUMENTS/CICADS/CICADS/CICAD05.HTM">WWW.INCHEM.ORG/DOCUMENTS/CICADS/CICADS/CICAD05.HTM</a> ): - PIMPHALES PROMELAS / LC50 (96H): 0.7 MG/L - DAPHNIA MAGNA / EC50 (48H): 0.4 MG/L
<b>12.2 PERSISTENCE &amp; DEGRADABILITY</b>	NO ADDITIONAL DATA AVAILABLE.
<b>12.3 BIO- ACCUMULATIVE POTENTIAL</b>	NO ADDITIONAL DATA AVAILABLE.
<b>12.4 MOBILITY IN SOIL</b>	NO ADDITIONAL DATA AVAILABLE.
<b>12.5 RESULTS OF PBT &amp; VPVB ASSESSMENT</b>	NO ADDITIONAL DATA AVAILABLE.
<b>12.6 OTHER ADVERSE EFFECTS</b>	WATER HAZARD CLASS 3 (GERMAN REGULATION) (VwVWS 3822; CAS 84929-38-4): SEVERE HAZARDOUS FOR WATER. DO NOT ALLOW PRODUCT TO REACH GROUND WATER, WATER COURSE OR SEWAGE SYSTEM. DANGER TO DRINKING WATER IF EVEN SMALL QUANTITIES LEAK INTO THE GROUND. ALSO POISONOUS FOR FISH AND PLANKTON IN WATER BODIES. VERY TOXIC FOR AQUATIC ORGANISMS.
<b>SECTION 13: DISPOSAL INFORMATION</b>	
<b>13.1 WASTE TREATMENT METHODS</b>	DO NOT ALLOW ENTRY INTO DRAINS OR WATERWAYS. RECYCLE OR DISPOSE OF WASTE IN COMPLIANCE WITH CURRENT LEGISLATION, PREFERABLY VIA A CERTIFIED COLLECTOR OR COMPANY. DO NOT CONTAMINATE THE GROUND OR WATER WITH WASTE. DO NOT DISPOSE OF WASTE INTO THE ENVIRONMENT. <b>WASTE PACKAGING:</b> EMPTY CONTAMINATED PACKAGING THOROUGHLY. THEY MAY BE RECYCLED AFTER THOROUGH AND PROPER CLEANING. PACKAGING THAT MAY NOT BE CLEANED IS TO BE DISPOSED OF IN THE SAME MANNER AS THE PRODUCT. MOISTENED SOLIDS (E.G. CLOTH, PULP, FILTER PANELS, BINDER) CAN BE BURNT AFTER CONSULTING WITH THE WASTE DISPOSAL FACILITY OPERATOR AND THE PERTINENT AUTHORITIES AND ADHERING TO THE NECESSARY TECHNICAL REGULATIONS.



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SECTION 14: TRANSPORT INFORMATION	
<b>14.1 TRANSPORT INFORMATION</b>	
<b>UN NUMBER</b>	ROAD: 1169 RAIL: 1169 AIR: 1169
<b>14.2 UN SHIPPING NAME</b>	EXTRACTS, AROMATIC, LIQUID
<b>14.3 TRANSPORT HAZARD CLASS(ES)</b>	ADR/RID/ADN CLASS 3 IMDG CLASS 3 ICAO CLASS/DIVISION 3  TRANSPORT LABELS  
<b>14.4 PACKING GROUP</b>	ADR/RID/ADN PACKING GROUP III IMDG PACKING GROUP III ICAO PACKING GROUP III
<b>14.5 ENVIROMENTAL HAZARDS</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT  
<b>14.6 SPECIAL PRECAUTIONS FOR USER</b>	SEE SECTION 6 TO 8.
<b>14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 &amp; THE IBC CODE.</b>	NO ADDITIONAL DATA AVAILABLE. TUNNEL RESTRICTION CODE D/E
SECTION 15: REGULATORY INFORMATION	
<b>15.1 PRODUCT SPECIFIC SAFETY, HEALTH &amp; ENVIRONMENTAL REGULATIONS &amp; LEGISLATION</b>	
<b>EU DIRECTIVES</b>	REGULATION (EC) NO 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 18 <sup>TH</sup> 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).
<b>STATUTORY INSTRUMENTS</b>	THE CHEMICALS (HAZARD INFORMATION & PACKAGING FOR SUPPLY REGULATIONS 2009 (S.I.2009 NO 716).
<b>APPROVED CODE OF PRACTICE</b>	CLASSIFICATION & LABELLING OF SUBSTANCES & PREPARATIONS DANGEROUS FOR SUPPLY. SAFETY DATA

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THE OIL FAMILY

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

## SECTION 16: OTHER INFORMATION

HAZARD AND/ OR PRECAUTIONARY STATEMENTS IN FULL	H226: FLAMMABLE LIQUID AND VAPOUR. 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. H400: VERY TOXIC TO AQUATIC LIFE. H410: VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
<b>TRAINING INSTRUCTIONS: REFER TO POSSIBLE HAZARD BEFORE USE OF THIS PRODUCT.</b>	
<b>ABBREVIATIONS &amp; ACRONYMS:</b>	
<b>MSDS</b>	MATERIAL SAFETY DATA SHEET.
<b>INCI</b>	INTERNATIONAL NOMENCLATURE OF COSMETIC INGREDIENTS.
<b>CAS</b>	CHEMICAL ABSTRACT SERVICE.
<b>IMDG</b>	INTERNATIONAL MARITIME CODE FOR DANGEROUS GOODS.
<b>ADR</b>	ACCORD EUROPEAN SUR LE TRANSPORT DES MARCHANDISES DANGEREUSES PAR ROUTE (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD).
<b>RID</b>	INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY RAIL.
<b>ICAO</b>	INTERNATIONAL CIVIL AVIATION ORGANIZATION.
<b>ADN</b>	INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS.
<b>GHS</b>	GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION & LABELLING OF CHEMICALS.
<b>TREM CARD</b>	TRANSPORT EMERGENCY CARD.
<b>STOT</b>	SPECIFIC TARGET ORGAN TOXICITY.

## DOCUMENTATION REVISION

DATE	CHANGE DESCRIPTION
10 <sup>TH</sup> APRIL 2018	DATA LAUNCH
FEBRUARY 2021	REVIEW

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