

Material Safety Data Sheet

EU Regulation: 1907/2006

SECTION 1: IDENTIFICATION OF		.,		, 6.1.2 = 1.1.1.1		
PRODUCT IDENTIFICATION						
PRODUCT NAME	GRAPEFRUIT, ESSENTIAL OIL					
BIOLOGICAL DEFINITION	CITRUS PARADISI PEEL OIL IS THE VOLATILE OIL EXPRESSED FROM THE PEEL OF THE GRAPEFRUIT, CITRUS PARADISI, RUTACEAE.					
INCI NAME	CITRUS PARADISI PEEL					
SYNONYMS & TRADE NAMES	-					
INTERNAL PRODUCT CODE	K0207					
CAS-No	8016-20-4	EC No.	289-904-6	EINECS N	о.	289-904-6
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET						
COMPANY ADDRESS	O&3 5 Unit 2, Athelstan Business Park, Hanwell Lane, Hutton Conyers, Ripon, HG4 5BF, England.					
EMAIL	ThomasKerfoot@Oand3.com					
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET						
EMERGENCY CONTACTS	Mrs. Eleanor Wade (07968 200167)					



ASSIFICATION 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)	FLAMMABLE LIQUID, HAZARD CATEGORY 3 - H226 SKIN CORROSION / IRRITATION CATEGORY 2 - H315 SENSITIZATION - SKIN CATEGORY 1 - H317 ASPIRATION HAZARD CATEGORY 1 - H304 HAZARDOUS TO THE AQUATIC ENVIRONMENT — AQUATIC CHRONIC CATEGORY 1 - H410	
2 ABEL ELEMENTS	Label in accordance with Regulation (EC) No 1272/2008.	
GHS LABEL	GHS02 GHS08 GHS07 GHS09	
Signal Word	DANGER.	
Contains	LIMONENE, MYRCENE,	
Hazards Statement	H226, Flammable liquid and vapour. H304, May be fatal if swallowed and enters airways. H315, Causes skin irritation. H317, May cause an allergic skin reaction. H410, Very toxic to aquatic life with long lasting effects.	
Precautionary Statements	P210, KEEP AWAY FROM HEAT, SPARKS, OPEN FLAMES AND HOT SURFACES NO SMOKING. P241, USE EXPLOSION-PROOF ELECTRICAL, VENTILATING AND LIGHTING EQUIPMENT. P261, AVOID BREATHING VAPOUR. P273, AVOID RELEASE TO THE ENVIRONMENT. P280, WEAR PROTECTIVE GLOVES/EYE PROTECTION/FACE PROTECTION. P301/310, IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. P303/361/353, IF ON SKIN (OR HAIR): REMOVE/TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER. P370+P378 IN CASE OF FIRE: USE FOAM, CARBON DIOXIDE, DRY POWDER OR WATER FOG TO EXTINGUISH. P331, DO NOT INDUCE VOMITING.	
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	P501, DISPOSE OF CONTENTS/CONTAINER TO APPROVED DISPOSAL SITE, IN ACCORDANCE WITH LOCAL REGULATIONS. P261, AVOID BREATHING DUST/FUME/GAS/MIST/VAPOURS/SPRAY. P333+P313, IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION. P362+P364, TAKE OFF CONTAMINATED CLOTHING. AND WASH IT BEFORE REUSE. P302+P352, IF ON SKIN: WASH WITH PLENTY OF WATER. P273, AVOID RELEASE TO THE ENVIRONMENT. P391, COLLECT SPILLAGE.	
	Section 16 (Other Information): Risk & Safety phrases in full.	
3 THER HAZARDS		
Adverse Physio-Chemical Properties	Combustible but should not self-ignite.	
Adverse effects on human health	SKIN CONTACT MAY CAUSE IRRITATION/SENSITISATION.	
PBT OR VPVB ACCORDING TO ANNEX XIII	None	

SECTION 3: COMPOSITION OF INGREDIENTS



	≤ 95.0% Limonene CAS-No: 5989-27-5; EC No.: 227-813-5
	CLASSIFICATION (EC 1272/2008) FLAM. LIQ. 3 - H226, SKIN IRRIT. 2 - H315, SKIN SENS. 1 - H317, ASP. TOX. 1 - H304, AQUATIC ACUTE 1 - H400, AQUATIC CHRONIC 1 - H410
3.2 MIXTURES	≤ 3.0% MYRCENE 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

SECTION 4: FII	RST AID MEASURES		
4.1 DESCRIPTION OF FIRST	AID MEASURES		
GENERAL INFORMATION		ALWAYS REMOVE CONTAMINATED CLOTHING IMMEDIATELY.	
	INHALATIO	GET MEDICAL ATTENTION IMMEDIATELY. REMOVE FROM EXPOSURE SITE TO FRESH AIR, KEEP AT REST, AND OBTAIN MEDICAL ATTENTION.	
	INGESTION	GET MEDICAL ATTENTION IMMEDIATELY. 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 CONTAC	FLUSH IMMEDIATELY WITH WATER FOR AT LEAST 1.5 MINUTES. CONTACT PHYSICIAN IF SYMPTOMS PERSIST.	
4.2 MOST IMPORTANT SYM DELAYED)	PTOMS & EFFECTS (ACUTE &	INHALATION MAY CAUSE COUGHING AND DIFFICULTIES IN BREATHING. INGESTION IRRITATING TO THE RESPIRATORY TRACT AND MAY CAUSE DAMAGE TO THE CENTRAL NERVOUS SYSTEM. SKIN CONTACT TOXIC IN CONTACT WITH SKIN. EYE CONTACT MAY CAUSE EYE IRRITATION.	
4.3 INDICATION OF ANY II SPECIAL TREATMENT R	MMEDIATE MEDICAL ATTENTION OF	None expected, see Section 4.1 for further information.	

5.1 EXTINGUISHING MATERIAL	FOAM, CO2, DRY CHEMICAL POWDER.
5.2 Special 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.
SECTION 6: ACCIDENTAL RELEASE MEASU	Ensure adequate ventilation of the working area, evacuate personnel to safe area, wear suitable protective
6.1	
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.
6.1 PERSONAL PRECAUTIONS 6.2 ENVIRONMENTAL 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,
6.1 PERSONAL PRECAUTIONS 6.2	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
6.1 PERSONAL PRECAUTIONS 6.2 ENVIRONMENTAL PRECAUTIONS 6.3 METHODS & MATERIAL FOR CONTAINMENT AND CLEANING	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



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	
8.1 CONTROL PARAMETERS	NO DATA.
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 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	NONE.
Skin Protection	
PERSONAL PROTECTION	WEAR PROTECTIVE CLOTHING TO REDUCE THE RISK OF SKIN AND EYE CONTACT.
OTHER PROTECTION	AVOID INHALATION OF THE PRODUCT. AVOID CONTACT WITH SKIN AND EYES.
PROCESS CONDITIONS	WEAR SUITABLE PROTECTION TO AVOID CONTACT WITH SKIN AND EYES. DO NOT INHALE VAPOURS.
ENVIROMENTAL EXPOSURE CONTROLS	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	LIQUID
COLOUR	YELLOW - ORANGE
ODOUR	
RELATIVE DENSITY	0.846 @ 20℃
FLASH POINT (°C)	47°C.
Refractive Index @ 20 °C	APPROX. 1.473 @ 20°C
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).	
10.3 POSSIBILITY OF HAZARDOUS REACTIONS	No.	
10.4 CONDITIONS TO AVOID	Storage at high temperatures. Do not store above $15^\circ\mathrm{C}$.	
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	LD50: > 5.0 G/KG (SOURCE RIFM).
SKIN IRRITATION	Causes Skin Iritation
EYE DAMAGE OR IRRITATION	NOT APPLICABLE.
RESPIRATORY OR SKIN SENSITIVITY	MAY CAUSE AN ALLERGIC SKIN REACTION.
GERM CELL MUTAGENICITY	NOT APPLICABLE.
CARCINOGENICITY	NOT APPLICABLE.
REPRODUCTIVE TOXICITY	NOT APPLICABLE.
STOT – SINGLE EXPOSURE	NOT APPLICABLE.
STOT — REPEATED EXPOSURE	NOT APPLICABLE.
ASPIRATION HAZARD	MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.
OTHER INFORMATION	NOT APPLICABLE.
SECTION 12: ECOLOGICAL INFORMATION	
12.1 TOXICITY	AQUATIC LIFE: VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS. FISH/AQUATIC VERTEBRATES: NO ADDITIONAL DATA AVAILABLE. PNECS: NO ADDITIONAL DATA AVAILABLE.
12.2 PERSISTENCE & DEGRADABILITY	THIS MATERIAL IS CONSIDERED READILY BIODEGRADABLE, THEREFORE DOES NOT FULFIL THE CRITERIA FOR PERSISTENCE.
12.3 BIO- ACCUMULATIVE POTENTIAL	VERY TOXIC TO AQUATIC LIFE WITH LONG
12.4 MOBILITY IN SOIL	THIS MATERIAL IS CONSIDERED READILY BIODEGRADABLE, THEREFORE SIMULATION TESTS IN SURFACE WATER, SEDIMENT AND SOIL ARE NOT REQUIRED IN ACCORDANCE WITH COLUMN 2 OF REACH ANNEX IX.
12.5 RESULTS OF PBT & VPVB ASSESSMENT	This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

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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 SEA: 1169 AIR: 1169
14.2 UN SHIPPING NAME	EXTRACTS, AROMATIC, LIQUID.
14.3 TRANSPORT HAZARD CLASS(ES)	ADR/RID/ADN CLASS: 3 FLAMMABLE LIQUID. IMDG CLASS: 3 FLAMMABLE LIQUID. ICAO CLASS/DIVISION: 3 FLAMMABLE LIQUID. TRANSPORT LABELS
	FLAMMABLE 3
14.4 PACKING GROUP	ADR/RID/ADN PACKING GROUP III IMDG PACKING GROUP III ICAO PACKING GROUP III
14.5 ENVIROMENTAL HAZARDS	ENVIRONMENTALLY HAZARDOUS SUBSTANCE/MARINE POLLUTANT.
14.6 SPECIAL PRECAUTIONS FOR USER	SEE SECTIONS 6-8.
14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE.	NOT APPLICABLE.
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

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	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).
	DIRECTIVE 71/133/ECC, 73/07/ECC, 73/103/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	ASSESSMENT HAS NOT BEEN CARRIED OUT AS THIS IS A NON-HAZARDOUS MATERIAL ACCORDING TO ARTICLE 31 OF REACH 1907/2006.

SECTION 16: OTHER INFORMATION	
Hazard and/ or Precautionary Statements in full	H226, FLAMMABLE LIQUID AND VAPOUR. H304, MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS. H315, CAUSES SKIN IRRITATION. H317, MAY CAUSE AN ALLERGIC SKIN REACTION. H410, VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
TRAINING INSTRUCTIONS: REFER TO POSSIBLE HAZARD BEFORE USE OF THIS PRODUCT.	11410, VERT TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
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	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 [™] April 2018	Data Launch