## **Material Safety Data Sheet**

EU Regulation: 1907/2006

1.1					
PRODUCT IDENTIFICATION					
PRODUCT NAME	Lemongrass, Essential Oil				
BIOLOGICAL DEFINITION	CYMBOPOGON CITRATUS LEAF OIL IS AN ESSENTIAL OIL OBTAINED FROM THE LEAVES OF THE LEMON GRASS, CYMBOPOGON CITRATUS, POACEAE. IT CONTAINS CITRAL (75-85%), METHYLHEPTENONE, CITRONELLAL, GERANIOL, LIMONENE				
INCI NAME	CYMBOPOGON CITRATUS LEAF OIL				
SYNONYMS & TRADE NAMES	-				
INTERNAL PRODUCT CODE	K0259				
CAS-No	89998-14-1	EC No.	289-752-0	EINECS No.	289-752-0
1.2 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET					
COMPANY ADDRESS	YouWish Venserweg 21M, 1112 AR Diemen, The Netherlands.				
EMAIL	contact@youwish.nl				
1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DAT	A SHEET				
EMERGENCY CONTACTS	+31 6 83295085				

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)	PHYSICAL AND CHEMICAL HAZARDS: NOT CLASSIFIED.  HUMAN HEALTH ASP: SKIN IRRIT. 2 - H315; EYE DAM. 1 - H318; SKIN SENS. 1 - H317  ENVIRONMENT: AQUATIC CHRONIC 2 - H411
2.2 LABEL ELEMENTS	Label in accordance with Regulation (EC) No 1272/2008.
GHS LABEL	GHS05 GHS07 GHS09
Signal Word	DANGER.
CONTAINS	CITRAL, GERANIOL
HAZARDS STATEMENT	H315 CAUSES SKIN IRRITATION. H317 MAY CAUSE AN ALLERGIC SKIN REACTION. H318 CAUSES SERIOUS EYE DAMAGE. H411 TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS.
Precautionary Statements	P272 CONTAMINATED WORK CLOTHING SHOULD NOT BE ALLOWED OUT OF THE WORKPLACE. P273 AVOID RELEASE TO THE ENVIRONMENT. P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION. P261 AVOID BREATHING VAPOUR/SPRAY. P264 WASH CONTAMINATED SKIN THOROUGHLY AFTER HANDLING. P305+351+338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING.
SUPPLEMENTARY PRECAUTIONARY STATEMENTS	P302+352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER. P310 IMMEDIATELY CALL A POISON CENTER OR DOCTOR/PHYSICIAN. P332+313 IF SKIN IRRITATION OCCURS: GET MEDICAL ADVICE/ATTENTION. P333+313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION. P362 TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE REUSE. P363 WASH CONTAMINATED CLOTHING BEFORE REUSE. P391 COLLECT SPILLAGE. P321 SPECIFIC TREATMENT (SEE MEDICAL ADVICE ON THIS LABEL). P501 DISPOSE OF CONTENTS/CONTAINER TO
	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	NO DATA
SECTION 3: COMPOSITION OF INGREDIEN 3.2 SUBSTANCES	70.0 – 72.0% CITRAL CAS-No.: 5392-40-5 EC No.: 226-394-6 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315, EYE IRRIT. 2 - H319, SKIN SENS. 1 - H317 7.0 – 8.0% GERANIOL CAS-No.: 106-24-1 EC No.: 203-377-1 CLASSIFICATION (EC 1272/2008) SKIN IRRIT. 2 - H315, EYE DAM. 1 - H318, SKIN SENS. 1 - H317
	0.5 – 0.7% 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
1.0 – 1.2% Linalool CAS-No.: 78-70-6 EC No: 201-134-4 Classification (EC 1272/2008) Skin Irrit. 2 - H315, Skin Sens. 1B - H317, Eye Irrit. 2- H319
<1.0% alpha-Pinene CAS-No.: 80-56-8 EC No: 201-291-9 Classification (EC 1272/2008) Flam. Lig. 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
≤1.0% 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, AQUATIC ACUTE 1- H400, AQUATIC CHRONIC 1 - H410

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. 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)	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 IMMEDIATE MEDICAL ATTENTION OR SPECIAL TREATMENT REQUIRED	None expected, see Section 4.1 for further information.	

<b>SECTION 5:</b> FIRE FIGHTING MEASURES	
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 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** ENSURE ADEQUATE VENTILATION OF THE WORKING AREA, EVACUATE PERSONNEL TO SAFE AREA, WEAR SUITABLE PROTECTIVE 6.1 EQUIPMENT. NO SMOKING, SPARKS, FLAMES OR OTHER SOURCES OF IGNITION NEAR SPILLAGE. AVOID CONTACT WITH SKIN, PERSONAL PRECAUTIONS EYES AND CLOTHING. 6.2 DO NOT DISCHARGE INTO DRAINS, WATER COURSES OR ONTO THE GROUND. DISPOSE OF IN LINE WITH LOCAL AUTHORITY **ENVIRONMENTAL PRECAUTIONS** REMOVE IGNITION SOURCES. PROVIDE ADEQUATE VENTILATION. AVOID EXCESSIVE INHALATION OF VAPOURS. CONTAIN **METHODS & MATERIAL FOR CONTAINMENT AND CLEANING** SPILLAGE IMMEDIATELY BY USE OF SAND OR INERT POWDER. DISPOSE OF ACCORDING TO LOCAL REGULATIONS. UP 6.4 REFER & CONSIDER SECTION 8. REFERENCES TO OTHER SECTIONS REFER & CONSIDER SECTION 13.

## **SECTION 7: HANDLING & STORAGE** HANDLE IN ACCORDANCE WITH GOOD HYGIENE AND SAFETY PRACTICE, KEEP AWAY FROM HEAT, SPARKS, OPEN FLAMES AND 7.1 HOT SURFACES. - NO SMOKING. USE PERSONAL PROTECTIVE EQUIPMENT AS REQUIRED. USE IN ACCORDANCE WITH GOOD PRECAUTIONS FOR SAFE-HANDLING MANUFACTURING AND INDUSTRIAL HYGIENE PRACTICES. USE IN AREAS WITH ADEQUATE VENTILATION DO NOT EAT, DRINK OR SMOKE WHEN USING THIS PRODUCT. 7.2 KEEP THE PRODUCT CONTAINER TIGHTLY CLOSED, IN A DRY, VENTILATED AREA. KEEP AWAY FROM POTENTIAL SOURCES OF **CONDITIONS FOR SAFE STORAGE, INCLUDING ANY** IGNITION AND PROTECTED FROM LIGHT, MAINTAIN LIMITED CONTACT WITH OXYGEN. INCOMPATIBILITIES 7.3 NO DATA. SPECIFIC END USE(S) **SECTION 8: EXPOSURE CONTROLS & PERSONAL PROTECTION** 8.1 LINALOOL (CAS: 78-70-6) INGREDIENT COMMENTS: NO EXPOSURE LIMITS NOTED FOR INGREDIENT(S). **CONTROL PARAMETERS** EUGENOL (CAS: 97-53-0) INGREDIENT COMMENTS: WEL = WORKPLACE EXPOSURE LIMITS 8.2 **EXPOSURE CONTROLS 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 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 RESPIRATORY EQUIPMENT 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** 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 LIQUID

COLOUR

ODOUR

RELATIVE DENSITY

CLEAR - YELLOW

CHARACTERISTIC

APPROX 0.899 @ 20°C

FLASH POINT (°C)	71.0 - 85.0 °C	
SOLUBILITY IN WATER @ 20 °C	1:10 v/v Ethanol 90%	
9.2 OTHER INFORMATION	No Data.	
SECTION 10: STABILITY & REACTIVITY		
10.1 REACTIVITY	Presents no significant reactivity hazards, by itself or in contact with water. Stable under normal temperature and storage conditions and recommended use.	
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°C.	
10.5 INCOMPATIBLE MATERIALS	P.V.C	
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	No Data	
Skin irritation	MAY CAUSE SENSITISATION BY SKIN CONTACT.	
EYE DAMAGE OR IRRITATION	SPRAY AND VAPOUR IN THE EYES MAY CAUSE IRRITATION AND SMARTING.	
RESPIRATORY OR SKIN SENSITIVITY	IN HIGH CONCENTRATIONS, VAPOURS MAY IRRITATE THROAT AND RESPIRATORY SYSTEM AND CAUSE COUGHING.	
GERM CELL MUTAGENICITY	NEGATIVE. (SOURCE CSR).	
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 (H304).	
OTHER INFORMATION	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC	
	ENVIRONMENT.	
SECTION 12: ECOLOGICAL INFORMATION		
12.1 Toxicity	DANGEROUS FOR THE ENVIRONMENT: MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.	
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.

14.1 Transport Information	
<b>UN N</b> umber	ROAD: 3082 RAIL: 3082
14.2	AIR: 3082
14.2 UN SHIPPING NAME	ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID N.O.S.
	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
14.3 Fransport Hazard Class(es)	MISCELLANEOUS DANGEROUS GOODS  9
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	EMS F-A-S-F EMERGENCY ACTION CODE 3Z HAZARD NO. (ADR) 90 ENVIRONMENTALLY HAZARDOUS SUBSTANCE; MISCELLANEOUS DANGEROUS SUBSTANCES. TUNNEL RESTRICTION CODE (E)
14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL73/78 & THE IBC CODE.	NO ADDITIONAL 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 $18^{\text{th}}$

STATUTORY INSTRUMENTS	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).  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 TO: 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. H318: CAUSES SERIOUS EYE DAMAGE. H319: CAUSES SERIOUS EYE IRRITATION. 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.
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	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
2021	Review