SAFETY DATA SHEET

(According to Regulation (EC) No. 1907/2006 (REACH)

1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY / UNDERTAKING

➢ ***Product Identifiers***

Product Code: ***RM0102***
Product Name: ***BITTER ORANGE OIL***
Botanical/Chemical Name: *Citrus aurantium*
Molecular weight: *N/A*
Molecular Formula: *N/A*
CLP Reference number*--*
Reach Registration number: *--*
Reach Pre Registration number: *--*
Application of the substance / preparation: *Flavour/Fragrance Application*

CAS No. (TSCA) : *68916-04-1*
CAS No. (EINECS) : *N/A*
EINEC : *277-143-2*
FEMA No. : *2823*
FDA No : *182.20*

➢ ***Manufacturer / Suuplier Details:***

Ultra International B.V.
Malledijk 3H, 3208 LA Spijkenisse, (Loods 12-15) Netherlands
E-mail:ultra@ultranl.com
www.ultranl.com

➢ ***Information in case of emergency:***

Mr. Prasenjit Mazumdar
Ph.: +91 9810008844
Email : ultra@ultraintl.com

2. HAZARD IDENTIFICATION

➢ ***Classification of the substance / preparation***

Classification according to Regulation (EC) No. 1272/2008
AH1, EH A1, EH C1, FL3, SCI2, SS1, H226-304-315-317-400-410

Classification according to Directive 67/548/EEC or 1999/45/EC
Xn N R10-38-43-65-50/53

➢ ***Label Elements***

Label elements according to Regulation (EC) No. 1272/2008

Label elements according to Directive 67/548/EEC or 1999/45/EC

➢ ***Classification system:***

The classification is according to the latest editions of EU lists, and extended by company and literature data.

➢ ***Additional Information:***

See section 16 for the wordings of listed R-, S- phrases, H-statements and Hazard codes.

3. COMPOSITION / INFORMATION OF INGREDIENTS

➢ ***Product Description:***

Essential Oil; UVCB; Substance of biological origin with variable and partially unknown composition.

➢ ***Hazard Impurities:*** *Not Applicable*

➢ ***Content of R65 classified products:***

➢ ***Dangerous components:***

LIMONENE (CAS No 5989-27-5) Xi N, R10-38-43-50/53; Amount-93-95%
PINENES (CAS No 127-91-3/80-56-8) Xn Xi N, R10-43-50/53-65; Amount-0.2-2%
MYRCENE (CAS No 123-35-3) Xn, R10-65; Amount-1.5-3%
LINALOOL (CAS No 78-70-6) Xi R38; Amount: 0.1-0.4%

4. FIRST AID MEASURES

➢ ***After Inhalation:***

Shift affected person to fresh air and to be sure call for a doctor.
In case of unconsciousness, place patient stably inside position for transportation.

➢ ***After skin contact:*** *Immediately wash with water and soap and rinse thoroughly.*
➢ ***After eye contact:*** *Remove contact lenses if worn. Rinse opened eye for several minutes under running water.*
➢ ***After swallowing:*** *Seek immediate medical attention.*
➢ ***General Information:***

Symptoms of poisoning may even occur after several hours: therefore medical observation for at least 48 hours after the accident.

5. FIRE FIGHTING MEASURES

➢ ***Extinguishing Media:***
Carbon di oxide, powder or water spray, Fight larger fires with water spray or alcohol resistant foam. Do not use a direct water jet on burning material.

➢ ***Special hazards arising from the substance/mixture***
Specific hazards *No data available*
Precautions *Do not smoke. Do not expose to a naked flame.*

➢ ***Advice to the fire-fighters***
- *Do not stay in dangerous zone without self-protective clothing and breathing apparatus.*
- *Spray extinguishing media directly into the base of fire.*
- *Cool containers exposed to flame with water.*
- *Prevent fire fighting water entering surface water/ground water.*

6. ACCIDENTAL RELEASE MEASURES

➢ ***Person-related safety precautions:***
Wear protective equipment, keep unprotected persons away.
Eliminate source of ignition, keep area well-ventilated and isolate the spill.

➢ ***Environmental precautions***
Prevent entry into drains, ground/surface water or sewerage system.
Notify authorities if product enters sewers or public water.

➢ ***Methods and materials for containment and clean up***
- *Absorb with liquid binding material (sand, diatomite, acid binders, universal binders, sawdust etc.)*
- *Dispose contaminated material as waste according to item 13.*
- *Ensure adequate ventilation.*

➢ ***Reference to other sections***
Refer to section 7, 8 &13

7. HANDLING AND STORAGE

➢ ***Handling:***
Technical *Close packing after use, Reproduce labelling if transfer in another container*
Precaution *Avoid any useless exposure, keep away from food and drinks.*
Wash hands and any other zone exposed with soap and water before eating, drinking, to smoke and leaving.
Ensure good ventilation/exhaustion at the workplace.
Prevent entry into drains, ground/surface water or sewerage system
Wear protective clothings Take off contaminated clothing and wash before use.

➢ ***Storage:***
- *Preserve only in containers of origin in a fresh place and broken down well.*
- *Keep the containers closed out of their use.*
- *Store away from foodstuff/oxidizing agent and incompatible materials*
- *Store in cool, dry conditions in well-sealed receptacles*

➢ ***Specific end use(s):***
No data available

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

➢ ***Exposure controls***

Appropriate engineering controls

Engineering controls should be used as the primary means to control exposures

Personal protective equipments

Skin protection	***Eye protection***	***Body protection***	***Respiratory protection***
			
Safety gloves	*Tight safety goggles*	*Protective clothing*	*Dust mask*

➢ ***Environmental exposure controls***

Prevent entry into drains, ground/surface water or sewerage system.

9. PHYSICAL AND CHEMICAL PROPERTIES

➢ ***General Information***
- ***Form*** : *Liquid*
- ***Colour*** : *Pale yellow to Brownish green*
- ***Odour*** : *Characteristic of bitter orange peel*
- ***Odour Threshold*** : *N/A*

➢ ***Change in Condition***
- ***Melting Point ℃*** : *N/A*
- ***Boiling Point ° C*** : *N/A*

➢	***Flash Point (Closed Cup) °C***	:	*47ºC*
➢	***Specific Gravity/Relative Density***	:	*0.840-0.860 @20ºC*
➢	***Refractive Index***	:	*1.472-1.476 @20ºC*
➢	***Vapour Density***	:	*N/A*
➢	***Vapour Pressure***	:	*N/A*
➢	***Solubility:***		
	• ***Water***	:	*Insoluble*
	• ***Alcohol***	:	*Soluble*
➢	***Flammability***	:	*N/A*
➢	***Auto Ignition Temperature***	:	*N/A*
➢	***Explosive Limits:***		
	• ***Lower Explosion Limits***	:	*N/A*
	• ***Upper Explosion Limits***	:	*N/A*
➢	***pH value***	:	*N/A*
➢	***Optical Rotation***	:	*+88º to+98º*
➢	***Surface Tension***	:	*N/A*
➢	***Partition Coefficient***	:	*N/A*
➢	***Granulometry***	:	*N/A*
➢	***Oxidising Properties***	:	*N/A*

10. STABILITY AND REACTIVITY

➢	***Reactivity***	*Not reactive, stable at room temperature.*
➢	***Chemical stability***	*Stable*
➢	***Possibility of hazardous reactions***	*Reactions with strong oxidizers*
➢	***Conditions to avoid***	*No decomposition if stored and handled properly*
➢	***Incompatible materials***	*Avoid strong acids strong bases and all oxidising agents*
➢	***Hazardous decomposition products***	*No dangerous decomposition products expected by intended us*

11. TOXICOLOGICAL INFORMATION

➢	***Toxicological Information Acute***	
	Oral	*No data available*
	Inhalation	*No data available*
	Skin	*No data available*
➢	***Skin Irritation/Corrosion***	*No data available*
➢	***Eye irritation/Corrosion***	*No data available*
➢	***Skin Sensitization***	*No data available*
➢	***Respiratory sensitization***	*No data available*
➢	***CMR Effects***	
	Carcinogen	*No data available*
	Mutagen	*No data available*
	Reprotoxic	*No data available*
➢	***Exposure Limits***	*No data available*

Note : There is a blanket recommendation of 10 mg/m3 for inspirable dusts or mists when limits have not otherwise been established.

12. ECOLOGICAL INFORMATION

➢	***Toxicity***	
	PNEC Oral	No data available
	EC50 (48hrs)	No data available
	LC50 (96hrs)	No data available
➢	***Persistence and degradability***	*Not Determined*
➢	***Mobility in Soil***	*Not Determined*
➢	***Results of PBT and vPvB assessment***	*No data available*
➢	***Other adverse effects***	*Not Determined*

13. DISPOSAL CONSIDERATION

➢ ***Waste treatment methods:***

▪ ***Product/packaging disposal***
Handle in accordance with official provisions

▪ ***Waste treatment options***
Recycling is preferred to disposal or burning

▪ ***Disposal conditions***
Dispose of in accordance with all federal, state and local environmental regulations.

➢ ***Recommendations:***

▪ *Empty contaminated packing thoroughly as they may be recycled*

▪ *Moistened solids to be dispose-off adhering to necessary technical regulations after consulting concerned authorities*

14. TRANSPORT INFORMATION

- ***Land Transport (ADR/RID/GGVSE)***
  - ***UN Number*** *1993*
  - ***DG Class*** *3*
  - ***Packing Group*** *III*
  - ***Proper Shipping Name*** *Flammable Liquid, N.O.S.*
  - ***Classification code*** *3Y*

- ***Sea Transport (IMDG-Code/GGVSE)***
  - ***UN Number*** *1993*
  - ***DG Class*** *3*
  - ***Packing Group*** *III*
  - ***Proper Shipping Name*** *Flammable Liquid, N.O.S.*
  - ***Marine Pollutant*** *Yes*

- ***Air Transport (ICAO-TI/IATA-DGR)***
  - ***UN Number*** *1993*
  - ***DG Class*** *3*
  - ***Packing Group*** *III*
  - ***Proper Shipping Name*** *Flammable Liquid, N.O.S.*

- ***ADR/IMDG/IATA Labels:***

- ***Special precautions for users:***
  Wear protective gloves/protective clothing/eye protection/face protection. Take off contaminated clothing and wash before reuse. Prevent entry into drains, ground/surface water or sewerage system.

- ***Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code***
  N/A
- ***Other Information***
  Custom Tariff Code *3301.12.0000*
  EmS Code *F-E, S-E*

15. REGULATORY INFORMATION

- ***EU regulations:***
  The product has been classified and marked in accordance with EU Directives/ Ordinance on Hazardous Materials.

- ***Water Hazard Class (Germany):*** *WGK 3*
- ***Chemical safety Assessment*** *No data available*

- ***Other Regulations***
  - ***EPA*** *No*
  - ***TSCA*** *Yes*
  - ***DSL*** *Yes*
  - ***Preposition 65*** *No*

16. OTHER INFORMATION

Abbreviations used:

EC	*European Commission*
EU	*European Union*
DG	*Dangerous Goods*
CAS	*Chemical Abstract Service*
EINECS	*European Inventory of Existing Commercial chemical Substances*
GHS	*Globally Harmonized System*
CMR	*Carcinogen, Mutagen, Reprotoxic*
PNEC	*Predicted No Effect Concentration*
EC50	*Effective Concentration 50 percent*
LC50	*Lethal Concentration 50 percent*
PBT	*Persistent Bioaccumulative and Toxic*
vPvB	*Very Persistent Very Bioaccumulative*
EWC	*European Waste Catalogue*
EmS	*Emergency Medical Services*
ADR	*Transport of Dangerous Goods by Road*
RID	*International Carriage of Dangerous Goods by Rail*
GGVSE	*German Regulation on the Transport of Dangerous Goods by Road and Rail*
MDG	*International Maritime Dangerous Goods*
ICAO-TI	*International Civil Aviation Organization-Technical Instructions*
IATA-DGR	*International Air Transport Association-Dangerous Goods Regulation*
WGK	*Wassergefährdungsklassen*
EPA	*Environmental Protection Agency*
TSCA	*Toxic Substance Control Act*
DSL	*Dangerous Substance List*

Relevant R- and S- phrases

R10	FLAMMABLE.
R38	IRRITATING TO SKIN.
R43	MAY CAUSE SENSITIZATION BY SKIN CONTACT.
R65	HARMFUL:MAY CAUSE LUNG DAMAGE IF SWALLOWED.
R50/53	VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
S24	AVOID CONTACT WITH SKIN.
S61	AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/SAFETY DATA SHEET.
S62	IF SWALLOWED, DO NOT INDUCE VOMITTING: SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL.
S36/37	WEAR SUITABLE PROTECTIVE CLOTHING AND GLOVES.

➢ ***Relevant H-, P- Statements and Hazard Codes***

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
H400	VERY TOXIC TO AQUATIC LIFE
H410	VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING EFFECTS
P210	KEEP AWAY FROM HEAT/SPARKS/OPEN FLAMES/HOT SURFACES – NO SMOKING
P241	USE EXPLOSION-PROOF ELECTRICAL/VENTILATING/LIGHT/…/EQUIPMENT
P261	AVOID BREATHING DUST/FUME/GAS/MIST/VAPOURS/SPRAY
P273	AVOID RELEASE TO THE ENVIRONMENT
P280	WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION/FACE PROTECTION
P331	DO NOT INDUCE VOMITING
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
P405	STORE LOCKED UP
P501	DISPOSE OF CONTENTS/CONTAINER TO … (IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATION)

FL 3	FLAMMABLE LIQUID 3
SCI 2	SKIN IRRITANT 2
SS 1	SKIN SENSITISATION 1
AH 1	ASPIRATION HAZARD CATEGORY 1
EH A1	ACUTE AQUATIC TOXICITY 1
EH C1	CHRONIC AQUATIC TOXICITY 1

➢ ***Quality Declaration***

The information contained herein is based on the present state of our knowledge. It characterizes the product with regards to the appropriate safety precaution.