

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY.

Product name: **Garlic Oil**

Product code: **AS**

Supplier: **Herbal Family Group, Piece 203 Industrial zones B&C, Obour, Cairo, Egypt**

Emergency Tel No: **01001465607** Emergency Contact: **Amr S. El-Samman**

2. COMPOSITION / INFORMATION ON INGREDIENTS.

Definition/Botanical Origin: The essential oil obtained by steam distillation of *Allium sativum bulbs*

CAS No: **8000-78-0** Status: **Natural Additives**

FEMA: **2503**

IFRA: **not restricted** EINECS: **92874-94-7**

INCI name: *Allium sativum* essential oil

3. HAZARDS IDENTIFICATION:

Hazard Category 1: **H304**

4. FIRST-AID MEASURES:

Inhalation: Remove from exposure site to fresh air. Keep at rest. Obtain medical attention.

Eye contact: Rinse immediately with plenty of water for at least 15 mins. Contact a doctor if symptoms persist.

Skin contact: Remove contaminated clothes. Wash thoroughly with soap & water, flush with plenty of water. If irritation persists, seek medical advice.

Ingestion: Rinse mouth out with water. Drink water or milk to dilute. Seek medical advice **immediately**.

Other: When assessing action take Risk & Safety Phrases into account (Section 15)

5. FIRE FIGHTING MEASURES.

Extinguishing media Use CO₂, Dry Powder or Foam type Extinguishers, spraying recommended: extinguishing media to base of flames. Do not use direct water jet on burning material.

Special measures: Avoid vapor inhalation. Keep away from sources of ignition. Do not smoke. Wear positive pressure self-contained breathing apparatus & protective clothing.

Extinguishing procedures: Closed containers may build up pressure when exposed to heat and should be cooled with water spray.

6. ACCIDENTAL RELEASE MEASURES.

Personal precautions: Avoid inhalation & direct contact with skin & eyes. Use individual protective equipment (safety glasses, waterproof-boots, suitable protective clothing) in case of major spillages.

Environment precautions: Keep away from drains, soils, surface & groundwater.

Cleaning up methods Remove all potential ignition sources. Contain spilled material. Cover for spillages: with an inert or non-combustible inorganic absorbent material, sweep up and remove to an approved disposal container. Observe state, federal & local disposal regulations.

7. HANDLING & STORAGE.

Precautions in handling: Apply good manufacturing practice & industrial hygiene practices, ensuring proper ventilation. Observe good personal hygiene, and do not eat, drink or smoke whilst handling.

Storage conditions: Store in tightly closed original container, in a cool, dry & ventilated area away from heat sources & protected from light. Keep air contact to a minimum.

Fire protection: Keep away from ignition sources & naked flames. Take precautions to avoid static discharges in working area.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION.

Respiratory protection: Avoid breathing product vapor. Apply local ventilation where possible.

Ventilation: Ensure good ventilation of working area.

Hand protection: Avoid all skin contact. Use chemically resistant gloves if required.

Eye protection: Use safety glasses.

Work/Hygiene practices: Wash hands with soap & water after handling.

9. PHYSICAL & CHEMICAL PROPERTIES.

Color: Amber yellow to orange

Appearance: Liquid

Odor: Strong, pungent, characteristic aroma

Flash point °C: 70

Specific gravity @ 20°C: 0.890 – 0.960

Solubility in 85% Ethanol @ 20°C

10. STABILITY & REACTIVITY.

Reactivity: It presents no significant reactivity hazards, by itself or in contact with water. Avoid contact with strong acids, alkali or oxidizing agents.

Decomposition: Liable to cause smoke & acrid fumes during combustion: carbon monoxide, carbon dioxide & other non-identified organic compounds may be formed.

11. TOXICOLOGICAL INFORMATION.

Found to be relatively non-toxic, non- sensitizing (however see section 16), and non-phototoxic; see *FCT* 1974, 12, 853

12. ECOLOGICAL INFORMATION.

Biodegradability: Data not available

Precautions: Prevent surface contamination of soil, ground & surface water.

13. DISPOSAL CONSIDERATIONS.

Avoid disposing to drainage systems and into the environment. Seek expert advice.

14. TRANSPORT REGULATIONS.

Road (ADR/RID): Not subject to ADR

Air (IATA): N/A

Sea (IMDG): N/A

CHIP: N/A

15. REGULATORY INFORMATION. According to Directive 88/379/EEC

Hazards: Not available

Symbols: Not available

Risk Phrases: N/A

Safety Phrases: N/A

16. OTHER INFORMATION.

Cosmetics Directive 7th Amendment: Restrictions may apply. A source of Limonene and Linalool, listed as sensitizers. Check maximum usage levels for skin care products.

PACKAGING:

Type	Suitability
Glass	Yes
Lacquer lined steel/tin	Yes
Aluminium	Yes
HPPE	No
F/HDPE	Yes
Other plastic	No

SHELF LIFE

When stored within advised conditions, re-test after 12 months, then at 3 monthly intervals up to a maximum shelf life of 36 months.

Q.C. REQUIREMENTS.

In-line with general product specification. Always satisfy suitability for specific application. The data provided in this material safety data sheet is meant to represent typical data/analysis for this product and is correct to the best of our knowledge. The data was obtained from current and reliable sources, but is supplied without warranty, expressed or implied, regarding its' correctness or accuracy. It is the user's responsibility to determine safe conditions for the use of this product, and to assume liability for loss, injury, damage or expense arising from improper use of this product. The information provided does not constitute a contract to supply to any specification, or for any given application, and buyers should seek to verify their requirements and product use.

DECLARATION OF ALLERGENS

PRODUCT	Garlic essential oil
SUPPLIER	Herbal Family Group

MATERIAL	CAS NUMBER	TOTAL ALLERGEN INCLUSION LEVEL (%)
AMYL CINNAMAL	122-40-7	-
BENZYL ALCOHOL	100-51-6	-
CINNAMYL ALCOHOL	104-54-1	-
CITRAL	5392-40-5	-
EUGENOL	97-53-0	-
HYDROXYCITRONELLAL	107-75-5	-
ISO EUGENOL	97-54-1	-
AMYL CINNAMYL ALCOHOL	101-85-9	-
BENZYL SALICYLATE	118-58-1	-
CINNAMAL	104-55-2	-
COUMARIN	91-64-5	-
GERANIOL	106-24-1	-
HYDROXYISOHEXYL 3-CYCLOHEXENE CARBOXALDEHYDE	31906-04-4	-
ANISE ALCOHOL	105-13-5	-
BENZYL CINNAMATE	103-41-3	-
FARNESOL	4602-84-0	-
BUTYLPHENYL METHYLPROPIONAL	80-54-6	-
LINALOOL	78-70-6	-
BENZYL BENZOATE	120-51-4	-
CITRONELLOL	106-22-9	-
HEXYL CINNAMAL	101-86-0	-
LIMONENE	5989-27-5	-
METHYL 2-OCTYNOATE	111-12-6	-
ALPHA-ISOMETHYL IONONE	127-51-5	-
EVERNIA PRUNASTRI EXTRACT	90028-68-5	-
EVERNIA FURFURACEA EXTRACT	90028-67-4	-

Amr S. El-Samman

Quality Control, Head