Material Safety Data Sheet
Garlic oil

SECTION 1.1 – PRODUCT IDENTIFICATION

Product Name	:	Garlic oil
Molecular Formula	:	Not applicable
Molecular Weight	:	Not applicable
CAS No.	:	8000-78-0

SECTION: 1.2 COMPANY IDENTIFICATION

Company Name: Indenta Chemicals (India) Pvt. Ltd.
Address: 117, The Summit Business Bay, Opp Cinemax, Off. Sir M.V. Road, Near WEH Metro Station, Andheri (E), Mumbai 400 093, India
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SECTION 2: COMPOSITION / INFORMATION ON INGREDIENTS

Name	CAS #	% by Weight
Garlic oil	8000-78-0	100

Toxicological Data on Ingredients: No Data Available

SECTION 3: HAZARD IDENTIFICATION

3.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Flammable liquids (Category 3), H226
Acute toxicity, Oral (Category 4), H302
Skin irritation (Category 2), H315
Skin sensitization (Sub-category 1A), H317
3.2 Label elements
Labelling according Regulation (EC) No

Pictogram
Signal word Warning

Hazard statement(s)
H226 Flammable liquid and vapor.
H302 Harmful if swallowed.

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
Supplemental Hazard Statements	none

3.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 4: FIRST AID MEASURES

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 3.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: FIRE AND EXPLOSION DATA

5.1 Extinguishing media

Suitable extinguishing media

Foam Carbon dioxide (CO2) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

Combustible.

Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air at elevated temperatures.
Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition.
Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®).
Dispose of properly. Clean up affected area.

6.4 Reference to other sections

For disposal see section 13.

SECTION7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.
For precautions see section 3.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Appropriate engineering controls

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

Required

Body Protection
Flame retardant antistatic protective clothing.
Respiratory protection
required when vapours/aerosols are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.
Control of environmental exposure
Do not let product enter drains. Risk of explosion.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance	Form: clear, liquid Color: yellow
b) Odor	pungent
c) Odor Threshold	No data available
d) pH	No data available
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	No data available
g) Flash point	47 °C - closed cup
h) Evaporation rate	No data available
i) Flammability (solid,gas)	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Water solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Autoignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available
s) Explosive properties	No data available
t) Oxidizing properties	No data available

9.2 Other safety information
No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Vapor/air-mixtures are explosive at intense warming.
10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions
No data available
10.4 Conditions to avoid
Heating.
10.5 Incompatible materials
Strong oxidizing agents
10.6 Hazardous decomposition products
Other decomposition products - No data available
Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.
In the event of fire: see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity
LD50 Oral - Rat - 1.360 mg/kg
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitization
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
Additional Information
RTECS: LX3154800
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity
No data available
12.2 Persistence and degradability
No data available
12.3 Bioaccumulative potential
No data available
12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

SECTION 13: DISPOSAL CONSIDERATION

13.1 Waste treatment methods

Product

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR/RID: 1993 IMDG: 1993 IATA: 1993

14.2 UN proper shipping name

ADR/RID: FLAMMABLE LIQUID, N.O.S. (Garlic oil)

IMDG: FLAMMABLE LIQUID, N.O.S. (Garlic oil)

IATA: Flammable liquid, n.o.s. (Garlic oil)

14.3 Transport hazard class(es)

ADR/RID: 3 IMDG: 3 IATA: 3

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

SECTION 15: OTHER REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) :

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Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: ADDITIONAL INFORMATION

This information is provided for documentation purposes only.

The information contained in this Certificate of Analysis and Material Safety Data Sheet is obtained from current and reliable sources. The information contained herein is true and to the best of Indenta Chemicals (India) Pvt. Ltd. knowledge. Nothing herein should be interpreted as a recommendation to infringe existing patents or violate any Laws or Regulation. Final determination of the suitability of the material is the sole responsibility of the user. Customers should purchase products from Indenta Chemicals (India) Pvt. Ltd. with the clear understanding that all products must be used at the customer's own discretion and only after referencing Material Safety Data Sheets (MSDS) and all other relevant technical information specific to the product. Indenta Chemicals (India) Pvt. Ltd. shall not be held responsible for any damages to property or for any adverse physical effects (including injury or bodily harm) caused by insufficient knowledge or the improper use of a product. The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties. As with any manufacturing process, Indenta Chemicals (India) Pvt. Ltd. strongly recommends small lab scale testing for evaluation purposes prior to full commercial manufacturing. The information on the Indenta Chemicals (India) Pvt. Ltd. website is obtained from current and reliable sources but makes no representation as to its comprehensiveness or accuracy. Nothing contained herein should be considered as a recommendation by Indenta Chemicals (India) Pvt. Ltd. as to the fitness for any use. As the ordinary or otherwise use(s) of this product is outside the control of Indenta Chemicals (India) Pvt. Ltd., no representation or warranty, expressed or implied is made as to the effect(s) of such use(s) (including damage or injury), or the results obtained. The liability of Indenta Chemicals (India) Pvt. Ltd. is limited to the value of the goods and does not include any consequential loss. Indenta Chemicals (India) Pvt. Ltd. shall not be liable for any errors or delays in the content, or for any actions taken in reliance thereon.