SAFETY DATA SHEET

according to regulation (EC) 1907/2006
according to regulation (EU) 2020/878

2490 Black Pepper

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

1.1 Product identifier

Product form:	Substance (UVCB – substance with unknown or variable composition)
Trade Name:	Black Pepper
Botanical Name:	Piper nigrum
INCI:	Piper nigrum Fruit Oil
CAS TSCA-No:	8006-82-4
CAS-No:	84929-41-9
EINECS-No:	284-524-7
FEMA-No:	2845
REACH registration No:	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration.

1.2 Relevant identified uses of the substance and uses advised against

1.2.1 Substance use:	Perfumery and/or aromatic uses
1.2.2 Uses advised against:	No additional information available

1.3 Details of the supplier of the safety data sheet

Supplier name:	AYUS GmbH
Address:	Am Dreschschopf 1, 77815 Bühl, Deutschland
Phone:	+49 7227 600 99-0
Fax:	+49 7227 600 99-99
E-mail:	info@ayus.team

1.4 Emergency telephone number

Poison emergency number: +49 89-19240

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance according to regulation (EG) 1272/2008 (CLP)

Hazard class and Hazard category	Code	Hazard statement
Flammable liquids, category 3	H226	Flammable liquid and vapour.
Aspiration hazard, category 1	H304	May be fatal if swallowed and enters airways.
Skin corrosion/irritation, category 2	H315	Causes skin irritation.
Respiratory/skin sensitisation, skin sensitisation category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic category 2	H411	Toxic to aquatic life with long lasting effects.

2.2 Label elements

Hazard pictogram and signal word

WARNING

H-Statements:

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.
H411	Toxic to aquatic life with long lasting effects.

P-Statements:

Prevention:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical /ventilating /lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust /fume /gas /mist /vapours /spray.
P262	Do not get in eyes, on skin, or on clothing.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/...

Response:

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor /physician.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P321	Specific treatment (see on this label).
P331	Do NOT induce vomiting.
P332+P313	If skin irritation occurs: Get medical advice /attention.
P333+P313	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.
P370+P378	In case of fire: Use CO2 for extinction.
P391	Collect spillage.

Storage:

P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

2.3 Other Hazards

Allergens (according to regulation (EC) No 1223/2009 on cosmetic products)

Allergens	Concentration
Linalool	< 1 %
Limonene	14 - 31 %

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Identification: Piper nigrum

(100% natural essential oil)

Hazardous constituent: according to EG-Regulation 1272/2008 (CLP)

Ingredient	Concentration	Registration-N.	CLP-Classification
alpha-Humulene	< 2 %	CAS-No: 6753-98-6 EINECS-No: 229-816-7	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335
alpha-Phellandrene	1 - 4 %	CAS-No: 99-83-2 EINECS-No: 202-792-5	Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 STOT SE 3 - H335
alpha-Pinene	7 - 12 %	CAS-No: 80-56-8 EINECS-No: 201-291-9	Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Asp. Tox. 1 - H304 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410
beta-Caryophyllene	18 - 30 %	CAS-No: 87-44-5 EINECS-No: 201-746-1	Asp. Tox. 1 - H304 Skin Sens. 1 - H317
beta-Pinene	2 - 12 %	CAS-No: 127-91-3 EINECS-No: 204-872-5	Flam. Liq. 3 - H226 Asp. Tox. 1 - H304 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Acute 1 - H400
delta-3-Carene	9 - 18 %	CAS-No: 13466-78-9 EINECS-No: 236-719-3	Flam. Liq. 3 - H226 Asp. Tox. 1 - H304 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412
Limonene	14 - 31 %	CAS-No: 138-86-3 EINECS-No: 205-341-0	Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 1 - H410 Aquatic Acute 1 - H400
Linalool	< 1 %	CAS-No: 78-70-6 EINECS-No: 201-134-4	Skin Sens. 1 - H317
Myrcene	1 - 3 %	CAS-No: 123-35-3 EINECS-No: 204-622-5	Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Asp. Tox. 1 - H304
Sabinene	6 - 10 %	CAS-No: 3387-41-5 EINECS-No: 222-212-4	Flam. Liq. 3 - H226 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H335

4. FIRST AID MEASURES

4.1 Description of first aid measures

Excessive inhalation: Remove to fresh air environment – summon a physician immediately.

Skin contact: Wash contaminated skin with copious amounts of water and soap. Remove contaminated clothes and wash them before reuse. Summon a physician, if an irritation appears.

Eye contact: Wash contaminated skin with copious amounts of water for at least 10 minutes – open eyelids forcibly. Summon a physician immediately.

Ingestion: Dilute with water. Do not induce vomiting. Contact physician.

4.2 Most important symptoms and effects, both acute and delayed

No further details.

4.3 Indication of any immediate medical attention and special treatment needed

Contact a poison specialist immediately if large quantities have been ingested or inhaled.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Advised extinguisher: Use CO_2, dry powder, fire extinguisher or foam.

Unadvisable extinguisher: Direct jet of water.

5.2 Special hazards arising from the substance or mixture

Vapors may form explosive mixtures with air.Containers may explode with the heat of fire.
Burning will cause strong smoke and soot.
Avoid breathing vapours and smokes produced by fire.

5.3 Advice for firefighters

Do not attempt to fight the fire with water, which tends to feed rather than smother the flames. Essential oils have the ability to float on water and this causes the fire to propagate more quickly.
Small fires can be smothered by covering with earth, sand or a blanket.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid skin, eye and clothes contact. There is a risk of sliding caused by the leaked product. Ventilate well spilling area. Keep away from sources of ignition.

6.2 Environmental precautions

Avoid dispose into drainage, sewer system or in any natural environment. Dispose binding material, cloths and sponges according to the national law.

6.3 Methods and material for containment and cleaning up

Use of absorbent material (e.g. sand, diatomaceous earth).

6.4 Reference to other sections

Please see section 8 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Ventilate the storage and preparation warehouse/laboratory. Avoid eating, drinking and smoking in the places where products are stored and treated. Manipulate with caution to avoid any projection particularly in eyes and on mucous membranes. Do not expose vapors to the flame or quite other source of ignition. Do not inhale warm vapors.

7.2 Conditions for safe storage, including any incompatibilities

It is recommended to keep the product in a water-tight and air-tight container. Keep away from heat and sunlight. Store in a cool and good ventilated area.

7.3 Specific end uses

No specific.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Please pay attention to the usual precautionary measures with the contact of essential oils. Use good hygiene practice: Please wash before contact, before eating and at the end of the working day.

8.2 Exposure controls

Personal protective equipment:

Breathing protection:	Use in well aired areas.
Eye protection:	Safety glasses.
Hand protection:	Protecting gloves.
Skin protection:	Avoid skin contact. Protective suit should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Color:	colorless to light yellow
Appearance:	oily liquid
Odor:	fresh, woody, spicy
pH-value:	4,5-5
Flash point:	47°C
Water solubility:	Insoluble
Steam pressure:	Unavailable
Initial boiling point and boiling range:	Unavailable
Density at 20 °C:	0,864 - 0,886
Refractive index at 20 °C:	1,478 - 1,491
Optical rotation at 20 °C:	- 18° to + 2°

9.2 Other information:
Main components: Piper nigrum Fruit Oil

10. STABILITY AND REACTIVITY

10.1 Reactivity
This product is stable under normal usage conditions.

10.2. Chemical stability
This product is stable under normal usage conditions.

10.3 Possibility of hazardous reactions
None according to our knowledge.

10.4 Conditions to avoid
Do not expose to high temperature or ignition.

10.5 Incompatible materials
Avoid flammable materials, PVC.

10.6 Hazardous decompositions products
Nothing in proper storage conditions.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Toxicological specifications of the important substances:

Chemical description	Oral LD50	Dermal LD50	Inhalation LC50
alpha-Copaene	/	/	/
alpha-Humulene	/	/	/
alpha-Phellandrene	/	/	/
alpha-Pinene	3.700 mg/kg (rat)	> 5.000 mg/kg (rabbit)	/
alpha-Thujene	/	/	/
beta-Bisabolene	/	/	/
beta-Caryophyllene	/	/	/
beta-Phellandrene	/	/	/
beta-Pinene	4.700 mg/kg (rat)	/	/
delta-3-Carene	4.800 mg/kg (rat)	/	/
Limonene	5.300 mg/kg (rat)	/	/
Linalool	2.790 mg/kg (rat)	5.610 mg/kg (rabbit)	/
Myrcene	> 11.390 mg/kg (rat)	> 5.000 mg/kg (rabbit)	/
Sabinene	/	/	/

Skin corrosion/irritation:
H315 Causes skin irritation.

Serious eye damage/irritation:
No significant effects or critical hazards.

Respiratory or skin sensitization:
H317 May cause an allergic skin reaction.

Aspiration hazard:
H304 May be fatal if swallowed and enters airways.

Germ cell mutagenicity:
No significant effects or critical hazards.

Carcinogenicity:
No significant effects or critical hazards.

Reproductive toxicity:
No significant effects or critical hazards.

STOT-single exposure
Unavailable data.

STOT-repeated exposure
Unavailable data.

Information on likely routes of exposure
Unavailable data.

Symptoms related to the physical, chemical and toxicological characteristics
Unavailable data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Unavailable data.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
Use product only referred of good laboratory practice (GLP) to insure that it is not released into the environment.
According to regulation 1272/2008:

H411 Toxic to aquatic life with long lasting effects.

Daphnies toxicity (EC50):
No further relevant information available.

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
Bioconcentration factor (BCF):
No further relevant information available.

Partition coefficient n-octanol / water (log KO/W)
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

12.5 Results of PBT and vPvB assessment
No further relevant information available.

12.6 Other adverse effects
No further relevant information available.

13. DISPOSAL CONSIDERATION

13.1 Waste treatment methods

Waste should be recycled or disposed of according to the legislation in force, preferably by an approved recycling or waste treatment company.

14. TRANSPORT INFORMATION

14.1 UN-number

1266

14.2 UN proper shipping name

Land transport:	ADR/RID; PERFUMERY PRODUCTS with flammable solvents
Transport by sea:	IMDG/IMO; PERFUMERY PRODUCTS with flammable solvents
Transport by air:	ICAO/IATA; PERFUMERY PRODUCTS with flammable solvents

14.3 Transport hazard class

ADR/RID:	Class 3
IMDG/IMO:	Class 3
ICAO/IATA:	Class 3

14.4 Packing group

ADR/RID:	Packing group III
IMDG/IMO:	Packing group III
ICAO/IATA:	Packing group III

14.5 Environmental hazards

IMDG - Sea pollutant: Yes

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code

Not applicable.

15. REGULATORY INFORMATION

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

Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances and its subsequent amendments.
Directive 1999/45/EC of the European Parliament concerning the approximation of the laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous preparations and its subsequent amendments.
Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work preparations.
Directive 2003/15/EC
Directive 2006/8/EC
Directive 91/322/EEC
Directive 2000/39/EC
Regulation (EC) No 1907/2006 (REACH) and its subsequent amendments
Regulation (EC) No 1272/2008 (CLP)
Regulation (EC) No 790/2009
Directive 2003/105/EC - Protection of workers - Control of major-accident hazards involving dangerous substances and its subsequent amendments
German Regulation on Substances Hazardous to Water 2005 (VwVwS),

15.2 Chemical safety assessment

Not relevant.

16. OTHER INFORMATION

Latest changes

This data sheet replaces all previous editions. The content of the SDS is regulated by the Regulation (EC) n°1907/2006 (REACH).

Common shortened form:

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
CLP:	Classification, Labeling, Packaging
EINECS:	European Inventory of Existing Commercial Chemical Substances
FEMA:	Federal Emergency Management Agency
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
IATA:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA)
ICAO:	Technical Instructions by the "International Civil Aviation Organization" (ICAO)
IMDG:	International Maritime Code for Dangerous Goods
IMO:	International Maritime Organization
INCI:	International Nomenclature of Cosmetic Ingredients
LC50:	Lethal Concentration for 50 percent of the test population
LD50:	Lethal Dose for 50 percent of the test population
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals
PBT:	Persistent Bioaccumulating Toxicants
vPvB:	Very Persistent and Very Bioaccumulative Substance
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail
STOT:	Specific Target Organ Toxicity
TSCA:	Toxic Substances Control Act

Hazard statements according to regulation (EC) 1272/2008 (CLP):

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Precaution statements according to regulation (EC) 1272/2008 (CLP):

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P240	Ground/bond container and receiving equipment.
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Storage:

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P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Disposal:

P501 Dispose of contents/container in accordance with local regulation.

Training advice:

Possible hazards:	see section 2
First aid measures:	see section 4
Firefighting measures:	see section 5
Personal protection equipment:	see section 8
Waste treatment methods:	see section 13

The information this contains is based on the state of our knowledge about the product concerned at the time of update. They are given in good faith. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other Materials or in any process, unless specified in the text. Even though precaution has been taken to ensure accuracy of data, no guarantee can be given. Because data's are taken partly from other sources.

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