

# Material security data sheet

Printed : 19/07/2022

Revised : 001NEW21-1-CLP from 19/07/2022

## HORSERADISH ESS OIL

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### 1.1. Product identifier

HORSERADISH ESS OIL

C.A.S Number : 84775-62-2 ; ;  
C.A.S EINECS Number :  
C.A.S (TSCA) :  
EINECS Number : 283-891-0  
EC Number :  
REACH Registration n° : Exempted (FOOD only)

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Concentrated aromatic raw material.  
Not intended for personal use in this form or concentration.  
For industrial use only, not for retail sale.

USE : **Flavouring substance**

#### 1.3. Details of the supplier of the safety data sheet

Company : SAS DIFFUSIONS AROMATIQUES  
558 allée des Parfums  
Parc d'activités "Les Hauts de Grasse"  
06530 SAINT-CEZAIRE-SUR-SIAGNE  
Tel:+33 (0)4 93 60 82 82  
Fax :+33 (0)4 93 60 82 79  
Web :www.diffusions-aromatiques.fr  
Email :contact@diffusions-aromatiques.fr

#### 1.4. Emergency telephone number

Emergency telephone number 24h/24 - 7d/7: ORFILA (INRS) : +33.(0)1.45.42.59.59

### 2. HAZARD IDENTIFICATION

#### 2.1. Classification of the substance or mixture

##### Classification :

(RegulationCLP)

ED11 Serious eye damage / eye irritation 1  
EHC1 Hazardous to the aquatic environment, long-term hazard 1  
FL3 Flammable Liquids 3  
RS1A Sensitisation, respiratory 1A  
SC11 Skin corrosion / irritation 1  
SS1 Sensitisation skin 1

H226 - Flammable liquid and vapour.  
H301 - Toxic if swallowed.

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H310 - Fatal in contact with skin.  
H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H330 - Fatal if inhaled.  
H335 - May cause respiratory irritation.  
H400 - Very toxic to aquatic life.  
H410 - Very toxic to aquatic life with long lasting effects.

## 2.2. Label elements

### Classification :

(RegulationCLP)



Warning mention : Danger

EDI1 Serious eye damage / eye irritation 1  
EHC1 Hazardous to the aquatic environment, long-term hazard 1  
FL3 Flammable Liquids 3  
RS1A Sensitisation, respiratory 1A  
SCI1 Skin corrosion / irritation 1  
SS1 Sensitisation skin 1

H226 - Flammable liquid and vapour.  
H301 - Toxic if swallowed.  
H310 - Fatal in contact with skin.  
H315 - Causes skin irritation.  
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H330 - Fatal if inhaled.  
H335 - May cause respiratory irritation.  
H400 - Very toxic to aquatic life.  
H410 - Very toxic to aquatic life with long lasting effects.

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 - Wash ... thoroughly after handling.  
P273 - Avoid release to the environment.  
P285 - In case of inadequate ventilation wear respiratory protection.  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

## 2.3. Other hazards

**Contains Allyl isothiocyanate PROHIBE IFRA, 2-Phenylethylisothiocyanate**

No information available.

## 3. COMPOSITION / INFORMATION ON INGREDIENT

### 3.1. Components

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Material	C.A.S	EINECS	Risk Symbol	Percent %
Allyl isothiocyanate PROHIBE IFRA (REACH Number : 01-2120771363-54-****)	57-06-7	200-309-2	ED11, EHC1, FL3, RS1A, SC11, SS1B - H226, H302, H311, H314, H317, H330, H334, H410	[ 30-50 ]
2-Phenylethylisothiocyanate	2257-09-2	218-855-5	ATO4, EDI2 - H302, H319	[ 10-20 ]

## 3.2. Description

BOTANICAL NAME : **Armoracia Rusticana**

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

**General notes:** Take Risk and Safety phrases (section 15) into account.

#### Following inhalation:

Remove from exposure site to fresh air and keep at rest. Obtain medical advice.

#### Following skin contact:

Remove contaminated clothes. Wash thoroughly with water (and soap). Contact physician if symptoms persist.

#### Following eye contact:

Flush immediately with water for at least 15 minutes. Contact physician if symptoms persist.

#### Following ingestion:

Rinse mouth with water and obtain medical advice.

#### Notes for the doctor:

Treat symptomatically and supportively.

Treatment may vary with condition of victim and specifics of incident.

### 4.2. Most important symptoms and effects, both acute and delayed

It presents no significant acute and delayed symptoms.

### 4.3. Indication of any immediate medical attention and special treatment needed

Attending physician should treat exposed patients symptomatically

**Contact with skin :** wash immediately and abundantly with water and soap. Rinse then with clear water.

**Contact with eyes :** Abundant rinsing with water (15 minutes open eyelids) then washing with an ocular lotion standard Dacryoserum. In case of disorder, consult an ophthalmologist.

**In the event of swallowed :** Not make vomit, maintain the patient at rest. Resort to the medical care.

**Soiled clothing :** withdraw soiled clothing and re-use them only after decontamination.

Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material.

## 5. FIRE FIGHTING

### 5.1. Extinguishing media

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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## 5.2. Special hazards arising from the substance or mixture

**Flammability :** The product is not flammable..  
**Prévention:** Do not smoke. Do not use flame near.

## 5.3. Advice for firefighters

Never use a direct stream of water.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Use individual protective equipment (waterproof boots, suitable protective clothing, and safety glasses). Prevent any contact with hot surfaces. Do not approach facing the wind. Ensure adequate ventilation. Do not breathe vapour/spray.

### 6.2. Environmental precautions

Do not allow to enter sewers/ surface or ground water.

### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal *binders*, *sawdust*).

### 6.4. Reference to other sections

See Section 7 for information on safe handling.  
See section 8 for information on personal protection equipment.  
See Section 13 for information on disposal

## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Advice on safe handling: Avoid excessive inhalation of concentrated vapors. Follow good manufacturing practices for housekeeping and personal hygiene. Wash any exposed skin immediately after any chemical contact, before breaks and meals, and at the end of each work period. Contaminated clothing and shoes should be thoroughly cleaned before re-use.

If appropriate, procedures used during the handling of this material should also be used when cleaning equipment or removing residual chemicals from tanks or other containers, especially when steam or hot water is used, as this may increase vapor concentrations in the workplace air. Where chemicals are openly handled, access should be restricted to properly trained employees.

Keep all heated processes at the lowest necessary temperature in order to minimize emissions of volatile chemicals into the air.

Advice on protection against fire and explosion: Keep away from ignition sources and naked flame. Close packing after use. Reproduce labelling if transfer in another container.

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## 7.2. Conditions for safe storage, including any incompatibilities

- Avoid any useless exposure. Keep away from food and drinks.
- Preserve only in the container of origin in a fresh place and broken down well. Keep the containers closed out of their use.
- Do not leave it near heat source, direct rays of the sun

## 7.3. Specific end use(s)

Not available

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1. Control parameters

NO CONCERNED

### 8.2. Exposure controls

**General protective and hygienic measures:** Avoid skin and eyes contact. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work.

**Personal Protection :**

- Hand protection: Wear gloves.
- Eye protection: Wear glasses.
- Respiratory protection : Wear a mask.
- Ingestion : Do not use, drink and smoke during use.

**Eye and face protection:** Use tight-fitting goggles, face shield or safety glasses with side shields if eye contact might occur.

**Skin protection:** Wear appropriate dust resistant clothing. Avoid skin contact. Use chemically resistant gloves.

**Protective gloves:** The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Respiratory protection:** See local exhaust ventilation around open tanks and other open sources of potential exposures in order to avoid excessive inhalation, including places where this material is openly weighed or measured.

Thermal hazards: Not available.

**Environmental exposure controls:** Prevent from entering sewers, basements and workpans, or any place where its accumulation can be dangerous.

**Consumer exposure controls:** Avoid breathing directly on the product. Apply local ventilations when appropriate. Wash hands with soap and water after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Shelf life :	<b>24 months in below conditions, after this time it can be used after control.</b>
FREEZING POINT :	<b>ND</b>
POINT D'INFLAMMATION :	<b>ND</b>
IGNITION TEMPERATURE (°C) :	<b>ND</b>

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EXPLOSIVE LIMITS :	<b>ND</b>
Appearance :	<b>Liquid</b>
Color :	<b>Pale yellow to amber yellow</b>
ODOR :	<b>Pungent ; sulfureous ; powerful ; green-vegetal ; rooty ; metallic</b>
Relative density (d20/20) :	<b>[0.990 ; 1.060]</b>
Refractive index to 20°C :	<b>[1.510 ; 1.560]</b>
Flash point :	<b>35°C</b>
Solubility(ies) :	<b>Insoluble in water, soluble in ethanol</b>
OPTICAL ROTATION (°) :	<b>[0° ; +2°]</b>
Vapor pressure :	<b>ND</b>
Partition coef (n-octanol/water) :	<b>ND</b>
FUSION POINT (capillarity) °C :	<b>ND</b>
BOILING POINT (°C) :	<b>ND</b>
PH :	<b>ND</b>

## 9.2. Other information

NO CONCERNED

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

**Dangerous reactions** : No dangerous reactions known.

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

No hazardous reactions known.

### 10.4. Conditions to avoid

Avoid excessive heat for prolonged periods of time.

### 10.5. Incompatible materials

Avoid contact with strong acids, alkali or oxidizing agents.

### 10.6. Hazardous decomposition products

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**Dangerous decomposition products:** Carbon monoxide and unidentified organic compounds may be formed during combustion.

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## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Toxicological Informations Acute :

LD50 (dermal / rat) mg/kg :	<b>ND</b>
LD50 ORAL/RAT (mg/kg) :	<b>ND</b>
LC50 (inhalatoire) :	<b>Allyl isothiocyanate - CAS N° 57-06-7 : Acute toxicity estimate: 0,5 mg/l - Exposure time: 4 h - Test atmosphere: vapour - Method: Calculation method</b>
TOXICITE ORALE :	<b>Allyl isothiocyanate - CAS N° 57-06-7 : Acute toxicity estimate: 500 mg/kg - Method: Calculation method</b>
TOXICITE DERMAL :	<b>Allyl isothiocyanate - CAS N° 57-06-7 : Acute toxicity estimate: 300 mg/kg - Method: Calculation method</b>
PRESENCE of CMR :	<b>Dont' contain CMR substances, category 1A, 1B et 2 of 1272/2008 EC regulation</b>

## 12. ECOLOGICAL INFORMATION

### 12.1. Toxicity

Do not leave the product, even diluted or in great quantity, penetrate the ground water, water or the drains.

Serious eye damage/eye irritation :	<b>Allyl isothiocyanate - CAS N° 57-06-7 : causes serious eye irritation</b>
SKIN CORROSION /SKIN IRRITATION :	<b>Allyl isothiocyanate - CAS N° 57-06-7 : causes skin irritation</b>

### 12.2. Persistence and degradability

NO CONCERNED

### 12.3. Bioaccumulative potential

NO CONCERNED

### 12.4. Mobility in soil

No data available.

### 12.5. Results of PBT and vPvB assessment

No data available.

### 12.6. Other adverse effects

NO CONCERNED

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## 13. DISPOSAL RECOMMENDATIONS

### 13.1. Waste treatment methods

**Product** : Recommendation : Does not have to be evacuated with the refuse . Not to let penetrate in the sewers.

**Not cleaned packing** : Recommendation : Evacuation in accordance with the regulations.

## 14. TRANSPORT INFORMATION

:



:



IATA:



### 14.1. UN number

: 1545 ( D/E )

:1545

IATA :1545

UN N° :

**1545 (allyl isothiocyanate stabilized ) code tunnel (D/E)**

### 14.2. Transport hazard class(es) and Packing group

RID/ADR (Road) :

**6.1+3 II - subsidiary risk HAZARDOUS TO ENVIRONMENT**

IATA (Air) :

**6.1+ 3 II**

IMDG (Sea) :

**6.1+3 II - subsidiary risk HAZARDOUS TO ENVIRONMENT - Marine pollutant**

## 15. REGULATORY INFORMATION

The product is not classified.

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

Class of water contamination (Germany) : WGK



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## 15.2. Chemical safety assessment

NO CONCERNED

## 16. OTHER INFORMATION

### Full H sentences text in point 3 :

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H410	Very toxic to aquatic life with long lasting effects.

### Acronyms used:

C.A.S: Chemical Abstract Service

TSCA: Toxic Substances Control Act

EINECS: European inventory of existing Commercial Chemical Substances

GHS Global Harmonized System

CLP: Classification and Labelling and Packaging of substances and mixtures

ADR: Agreement Dangerous goods by Road

IMDG: International Maritime Dangerous Goods

IATA: International Air Transport Association

The information contained in this sheet is based on our knowledge of the product concerned at the time of issue.

The information given in this safety data sheet is in accordance with **Regulation 1907/2006/EC of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) establishing a European Chemicals Agency, (amended by Regulation 2015/830, 2020/878 (Annex II of REACH)**, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94, as well as Council Directive 76/769/EEC, and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC, 200/21/EC and according to Regulation 453/2010/EC of 20 May 2010.

The attention of users is also drawn to the possible risks involved when a product is used for a purpose other than that for which it was designed.

REVISION DATE :

**19/07/2022**