

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

EUGENOL

Version : SDS/2010/1 Date: 19/08/2013

Revision : Date:

Page No.: Page 1 of 6

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

1.1 Product Identifiers Product Code 1051
Product Name EUGENOL

CAS No. 97-53-0 N/A

CLP Reference No. 02-2119658303-41-0000

REACH Pre-Registration No.

 EC No.
 202-589-1

 EINECS
 N/A

 FEMA No.
 2467

1.2 Use Use in Flavour / Food Application.

1051

1.3 Company / Undertaking Identification Ultra International B.V.

Malledijk 3H, 3208 LA Spijkenisse, (Loods 12-15), Netherlands

Tel: +3161 8431850 Fax: +91-120 - 437 4000

E-mail: <u>ultraintl.nl@gmail.com*</u> www.ultrainternational.com

1.4 Emergency Telephone +91-9810008844

2. HAZARD IDENTIFICATION

2.1 Classification of the substance / preparation

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS classification]

<u>HAZARD CATEGORY</u> <u>HAZARD STATEMENTS</u>

Acute Toxicity Oral 5 H303 MAY BE HARMFUL IF SWALLOWED Skin corrosion/irritation 3 H316 CAUSE MILD SKIN IRRITATION

Skin Sensitization 1 H317 MAY CAUSE AN ALLERGIC SKIN REACTION

Eye Damage/Irritation 2A H319 CAUSE SERIOUS EYE IRRITATION

Aquatic Acute Toxicity 2 H401 TOXIC TO AQUATIC LIFE

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R36 IRRITATING TO EYES

R43 MAY CAUSE SENSITIZATION BY SKIN CONTACT

2.2 Label Elements

Label elements according to Regulation (EC) No. 1272/2008 (Substance)/Directive 67/548/EEC

Hazard Pictogram / Symbol:



GHS 07

Signal word / Indication(s) of danger:

Warning

Hazard Pictogram / Symbol:



Xi IRRITANT

Hazard Statements

H303 MAY BE HARMFUL IF SWALLOWED
H316 CAUSE MILD SKIN IRRITATION

H317 MAY CAUSE AN ALLERGIC SKIN REACTION

H319 CAUSE SERIOUS EYE IRRITATION

H401 TOXIC TO AQUATIC LIFE



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

EUGENOL

Version : SDS/2010/1 Date: 19/08/2013

Revision : Date:

Page No.: Page 2 of 6

Precautionary Statements

P261 AVOID BREATHING DUST/FUME/GAS/MIST/VAPOURS/SPRAY
P264 WASH .. (HANDS/FACE) THOROUGHLY AFTER HANDLING

P273 AVOID RELEASE TO THE ENVIRONMENT

1051

P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION FACE PROTECTION

P302+352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER

P305+351+338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES; REMOVE CONTACT LENSES IF PRESENT AND EASY TO DO SO.

CONTINUE RINSING.

P312 CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL
P333+313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION
P337+313 IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION

P501 DISPOSE OFF CONTAINERS TO..... (IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATION)

3. COMPOSITION / INFORMATION OF INGREDIENTS

 Substance Name
 :
 EUGENOL

 Substance Description
 :
 Aromatic chemical

 Hazard components
 :
 EUGENOL

 CAS No.
 :
 97-53-0

 EC No.
 :
 202-589-1

Chemical Name : 4-allyl-2-methoxyphenol

Stabilizers : N/A Hazard Impurities : N/A

Synonyms : Eugenic Acid
Caryophyllic Acid

Index No. : N/A

CLP Reference No. : 02-2119658303-41-0000

REACH Pre-Registration No. : ----

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

 Eye Contact
 :
 Remove contact lenses if worn. Flush immediately with plenty of water.

 Skin Contact
 :
 Remove contaminated clothing. Wash affected area with mild soap and water.

 Inhalation
 :
 Remove affected person to fresh air. If discomfort persists, consult physician.

 Swallowing
 :
 Seek immediate medical care.

Indication of any immediate medical attention and special treatment method

IF SWALLOWED: Immediately call a POISON CENTER or Doctor/Physician.

IF ON SKIN (or hair): Remove /take off immediately all contaminated clothing. Rinse skin with water /shower.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media

- **Suitable** : Carbon Dioxide; Dry Chemical; Universal Type Foam.

- Unsuitable : Water spray; others not established.

5.2 Special hazards arising from substance

Combustible liquid Possibility of development of hazardous gases or vapors in event of fire Following may develop: CO and CO2

5.3 Advice for fire fighters

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

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, protective equipment and emergency procedures

Wear personal protective clothing. Keep away unprotected individuals. Eliminate source of ignition. Keep area well ventilated and isolate the spill.

6.2 Environmental precautions

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

.3 Methods and material for containment and cleaning up

Pick up with absorbents material (Sand) or with pump for large spills.

6.4 Reference to other sections

Refer to Section 7, 8 & 13



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

EUGENOL

Version : Date: SDS/2010/1 19/08/2013

Revision : Date:

Page No.: Page 3 of 6

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Measures to prevent fire

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

1051

Use explosion proof electrical/ ventilating/lighting/equipment etc.

Measures to prevent aerosols and dust generation

Ensure good ventilation at workplaces

Measures to protect the environment

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

General Occupational hygiene

Wear protective gloves/protective clothing/eye protection/face protection. Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe use, including any incompatibilities

Information on storage conditions

Should be stored in cool, dark, dry, well ventilated places in full, tightly sealed containers protected from light & source of ignition

Information on packing materials

Should be packed in Aluminium, HDPE Food Grade Cans, MS Coated Drums, and GI Drums, Avoid long contact with Iron

Requirements for storage rooms and vessels

Should be stored in suitable containers (lines inside) e.g. MS Coated Drums, GI Drums etc. No special requirement for storage rooms.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure controls

8.1 Appropriate engineering controls

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

8.2 Personal protective equipments

Skin protection Eye protection

Body protection

Respiratory protection









Dust mask

Safety gloves

tight safety goggles

Protective clothing

3.3 Environmental exposure controls

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

-physical state Liquid

-colour Colourless to pale yellow

 Odour
 Spicy

 Odour Threshold
 Medium

 pH
 N/A

 Melting Point °C
 N/A

 Boiling Point °C
 N/A

Flash Point (Closed Cup) °C

Vapour Pressure

0.009 mm/Hg@20°C

Vapour Density

Not estimated

 Optical Rotation
 Not estimated

 Surface tension
 Not estimated

Solubility

-Water Insoluble

-Alcohol 1:2 in 60% alcohol

Viscosity Not estimated

Partition Coefficient Not estimated



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

EUGENOL

Version : SDS/2010/1 Date: 19/08/2013

Revision : Date:

Page No.: Page 4 of 6

Explosive Limits

 -Lower Explosion Limit
 N/A

 -Upper Explosion Limit
 N/A

 Auto ignition Temperature
 N/A

 Flammability
 N/A

 Granulometry
 N/A

 Oxidising Properties
 N/A

1051

10. STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive, stable at room temperature.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Reactions with strong oxidizers

10.4 Conditions to avoid

No decomposition if stored and handled properly

10.5 Incompatible materials

Avoid strong acids strong bases and all oxidising agents

10.6 Hazardous decomposition products

No dangerous decomposition products expected by intended us

11. TOXICOLOGICAL INFORMATION

 11.1
 Acute toxicity oral (LD50)
 2680 mg/kg bw (Rat)

 11.2
 Acute toxicity inhalation
 Not Determined

 11.3
 Acute toxicity dermal (LD50)
 Not Determined

 11.4
 Skin Irritation/Corrosion
 Not Determined

 11.5
 Respiratory sensitization
 Non-sensitizing

 11.6
 Skin sensitization
 Non-sensitizing

11.7 CMR Effects

Carcinogenicity No Mutagenicity No Toxic to reproduction No

11.8 Eye Irritation / Corrosion Not determined

11.9 Exposure limits

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

established.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

 PNEC Oral
 :
 Not estimated

 NOAEL
 :
 Not estimated

 EC50 (48hrs)
 :
 Not estimated

 LC50 (96hrs)
 :
 Not estimated

 12.2
 Persistence and degradability
 :
 Not determined

 12.3
 Mobility in Soil
 :
 Not determined

12.4 Results of PBT and vPvB assessment

N/A

13. DISPOSAL CONSIDERATION

13.1 Waste treatment methods

Product/packaging disposal

Handle in accordance with official provisions

Waste treatment options

Recycling is preferred to disposal or burning

Waste code /Waste designations according to EWC/AVV

15 02 02* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

13.2 Recommendations

Empty contaminated packing thoroughly as they may be recycled

Moistened solids to be disposed off adhering to necessary technical regulations after consulting concerned authorities



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

EUGENOL

Version : Date: SDS/2010/1 19/08/2013

Revision : Date:

Page No.: Page 5 of 6

14. TRANSPORT INFORMATION

14.1 Land Transport (ADR/RID/GGVSE)

UN Number Not regulated

1051

DG Class N/A

Packing Group N/A

Proper Shipping Name N/A

Classification Code N/A

Hazard Labels N/A

14.2 Sea Transport (IMDG-Code/GGVSee)

UN Number Not Regulated

DG Class N/A
Packing Group N/A
Proper Shipping Name N/A
Marine Pollutant N/A
Hazard Labels N/A

14.3 Air Transport (ICAO-IAT/DGR)

UN Number Not Regulated

 DG Class
 N/A

 Packing Group
 N/A

 Proper Shipping Name
 N/A

14.4 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.

14.5 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

N/A

14.6 Other Information

Custom Tariff Code : 2909 50 20

EmS Code : -

15. REGULATORY INFORMATION

EU regulations:

The product has been classified and labelled according to criteria provided in Directive 67/548/EEC and 1272/2008/EC, and following the recommendations of EFFA (European Flavor and Fragrance Association).

Other Regulations: German Regulation (VwVws)
Water Hazard Class : WGK 1

16. OTHER INFORMATION

16.1 Changes to previous version

Changes applicable according to regulation (EC) No 1907/2006 (REACH)

16.2 Abbreviations and acronyms

GHS : Globally Harmonized System of Classification and labeling of Chemicals

CAS : Chemical abstract Service (division of American Chemical society)

CLP : Classification, Labelling and Packaging
LD50 : Lethal concentration, 50 percent
EC50 : Effective concentration, 50 percent
PNEC : Predicted No Effect Concentration
NOAEL : No Observed Adverse Effect Levels

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

RID : Regulations Concerning the International Transport of Dangerous Goods by Rail



IMDG

SAFETY DATA SHEET

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

Version : SDS/2010/1 Date: 19/08/2013

Revision : Date:

Page No.: Page 6 of 6

1051 EUGENOL

IATA : International Air Transport Association

IATA-DGR : Dangerous Goods Regulations by the International Air Transport Association (IATA)

International Maritime Code for Dangerous Goods

ICAO : International Civil Aviation Organization

16.4 Wording of relevant hazard statement and/or precautionary statements referred to in section 2 to 15

Hazard Codes

Xi IRRITANT

:

Risk Phrases

R36 IRRITATING TO EYES

R43 MAY CAUSE SENSITIZATION BY SKIN CONTACT

Safety Phrases

\$24 AVOID CONTACT WITH SKIN

\$26 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE

\$37 WEAR SUITABLE GLOVES

Hazard Statements

H303 MAY BE HARMFUL IF SWALLOWED
H316 CAUSE MILD SKIN IRRITATION

H317 MAY CAUSE AN ALLERGIC SKIN REACTION

H319 CAUSE SERIOUS EYE IRRITATION

H401 TOXIC TO AQUATIC LIFE

Precautionary Statements

P261 AVOID BREATHING DUST/FUME/GAS/MIST/VAPOURS/SPRAY
P264 WASH .. (HANDS/FACE) THOROUGHLY AFTER HANDLING

P273 AVOID RELEASE TO THE ENVIRONMENT

P280 WEAR PROTECTIVE GLOVES/PROTECTIVE CLOTHING/EYE PROTECTION FACE PROTECTION

P 302+352 IF ON SKIN: WASH WITH PLENTY OF SOAP AND WATER

P305+351+338 IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES; REMOVE CONTACT LENSES IF PRESENT AND EASY TO DO SO.

CONTINUE RINSING.

P312 CALL A POISON CENTER OR DOCTOR/PHYSICIAN IF YOU FEEL UNWELL
P333+313 IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ATTENTION

P337+313 IF EYE IRRITATION PERSISTS: GET MEDICAL ADVICE/ATTENTION

P501 DISPOSE OFF CONTAINERS TO..... (IN ACCORDANCE WITH LOCAL/REGIONAL/NATIONAL/INTERNATIONAL REGULATION)

16.5 Training advice appropriate for workers

N/A

16.6 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. It does not represent a guarantee of the properties of the product.