

## ***ENDO N2 (Liquid)***

### **1. NAME OF SUBSTANCE / PREPARATION AND COMPANY**

Commercial names/synonyms:

ENDO N2 (*liquid*)

Manufacturer:

GHIMAS S.p.A.  
Via Cimarosa 85  
40033 Casalecchio di Reno (BO)  
Tel. ++39 051 575353 Fax ++39 051 575568

Technical informations:

laboratorio@ghimas.it

Emergency telephone number:

+39 02-6610-1029 (Centro Antiveneni Niguarda Ca' Granda - Milano)

### **2. HAZARDS IDENTIFICATION**

Harmful if swallowed. Don't breathe the vapours. Avoid the contact with the eyes and the skin.

### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Description:

Mixture of ether oils in the proportions set out below

	%	CAS N°	Hazard statement(s)	Precautionary statement
Eugenol	77,0	97-53-0	H317 -H319	P280, P305+P351+P338
Rose oil	1,8	8007-01-0	H226	/
Lavander oil	1,2	8000-28-0	/	/
Peanut oil	20,0	8002-03-7	/	/

Information for the single components. About the hazard statements and precautionary statement see paragraph 16.

### **4. FIRST AID MEASURES**

If it comes into contact with the eyes:

Wash immediately in plenty of water and water or physiological solution for at least 10-15 minutes.

If it comes into contact with the skin:

Remove the contaminated clothes and wash immediately in plenty of soap and water or physiological solution for at least 10-15 minutes.

If it is swallowed:

In case of persistent symptoms, consult a doctor.

If it is inhaled:

Remove the victim from the contaminated area and leave him or her to rest in a well ventilated area. If the victim has difficulty in breathing, call for a doctor immediately.

General information:

Remove contaminated clothes

## 5. FIRE FIGHTING MEASURES

This liquid is combustible. Extinguish with a water jet, foam, powder or carbon dioxide.

## 6. ACCIDENTAL RELEASE OR SPILLAGE

Stop the product reaching drains and other water channels.

Issue staff with protective clothing. Use inert material such as sand, sawdust, silcagel, etc, to soak up the liquid. Place everything in suitable containers to await disposal. Wash the area affected by the spill with plenty of water.

## 7. HANDLING AND STORAGE

Keep in hermetically sealed containers in a dry, well aired place.

Keep the product away from naked lights, sources of heat and oxidising agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection:

Respiratory system:

Mask to protect against the organic fumes

eyes:

Safety goggles

Skin:

Rubber gloves and apron

Personal Hygiene:

Do not eat, drink or smoke during handling. Work in premises equipped with efficient fume extraction systems

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Liquid oil

Colour: Yellow

Odour: Eugenol Aroma

Solubility in water: Insoluble

Solubility in main organic solvent: Mixes with alcohol, chloroform and oils

pH: -

Density (water = 1): 1,02 g/cm<sup>3</sup> (20°C)

Vapour pressure 1,5 hPa (20°C)

Melting point: -

Boiling point: >200 °C

Flash point: >110 °C

Bottom and top flash points in air (% by vol.): -

Ignition temperature: The product isn't self-inflammable

Decomposition temperature: it doesn't dissociate if used according to specifications

## 10. STABILITY AND REACTIVITY

Dangerous decomposition products: None if used according to specifications  
Dangerous reactions: None if used according to specifications

## 11. TOXICOLOGICAL INFORMATION

Exposition limits:

TLV / TWA ppm = mg/m<sup>3</sup>  
TLV / STEL ppm = mg/m<sup>3</sup>

ENTERS THE HUMAN BODY: Through swallowing, inhalation, touching

ACUTE TOXICITY: NO INFORMATION ABOUT THE MIXTURE IS AVAILABLE. THE INFORMATION GIVEN REFERS TO THE CONCENTRATED EUGENOL

Eugenol:	DL50 oral	rat	1930 mg/Kg
	DL50 oral	mouse	3000 mg/Kg
	DL50 intrap.	mouse	500 mg/Kg.

The substance has a low level of acute toxicity. Moderate irritant effect because of its scouring action. If inhaled, it causes irritation to the nose, mouth and throat and coughing. Only if inhaled in large quantities will it cause dyspnea, depression of the central nervous system with consequent drowsiness, disturbance of sleeping and waking patterns and have a narcotic effect. Swallowing will cause burning sensations in the digestive system, nausea, headaches and giddiness. Touching may cause local irritation and rashes, chapping, eczema and drying of the skin. The substance acts as a local anaesthetic, delaying or eliminating the perception of pain.

CHRONIC TOXICITY:

Systematic chronic toxicity of the substance is practically nonexistent. Prolonged and/or repeated exposure can cause tiredness, drowsiness, a feeling of dullness, possible respiratory difficulties and may damage the liver if taken in large quantities..

CORROSIVE IRRITANT PROPERTIES:

- For the skin: A moderate irritant effect, largely due to its scouring action. Causes rashes, chapping and eczema; the substance acts as a local anaesthetic, delaying or eliminating the perception of pain.

- For the eyes: An average irritant effect, largely due to its scouring action. Causes a 'stinging' sensation and tears: the substance may act as a local anaesthetic, delaying or eliminating the perception of pain.

IRRITANT PROPERTIES:

No experimental or epidemiological evidence of the irritant properties of the substance is available. Cases of irritation caused by the use of eugenol during treatment have been reported.

CARCINOGENESIS

Cancerogenicità – topo - Orale

Oncogenia: dubbio agente oncogeno secondo RTECS Fegato: tumori

- No experimental evidence of carcinogenic properties is available. The active principle, eugenol, is classified as IARC Group 3: the carcinogenic effect of eugenol on humans cannot be classified (animals: slight evidence - no data available for humans)

MUTAGENESIS:

No experimental evidence is available for the preparation. The active ingredient, eugenol tested positive in some tests.

**TERATOGENY:**

No experimental evidence of this has been recorded.

**ADDITIONAL TOXICOLOGICAL INFORMATION:**

If used and handled according to specifications, the product doesn't have any harmful effect, for our experience and for the gathered information

**12. ECOLOGICAL INFORMATION**

Dangerous for class 1 waters (German Regulation) (self classification). Follow prescribed procedures and do not discharge into the environment.

**13. DISPOSAL CONSIDERATION**

Dispose in accordance with regulations in force for the disposal of dangerous products.

**14. TRANSPORT REGULATION**

UN Number:

ADR/RID:           IMDG:           IATA:

UN proper shipping name

ADR/RID:           IMDG:           IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID:-           IMDG:-           IATA:-

Environmental hazards

ADR/RID:-           IMDG:-           IATA:-

**15. REGULATION INFORMATION**

-

**16. OTHER INFORMATIONS**

Hazard statements(s):	H226	Flammable liquid and vapour
	H317	May cause an allergic skin reaction
	H319	It causes serious eye irritation
Precautionary statement(s):	P280	wear gloves
	P305+P351+P338	N CASE OF EYE CONTACT: Rinse thoroughly for several minutes. Remove contact lenses if easy to do. Continue rinsing.

*The data and information contained in this safety report are based on the most reliable information available at the moment that the report was drawn up. The company assumes no liability for harm to persons or damage to things that may arise from improper use of the information contained in this document.*

## **ENDO N2 (powder)**

### **1. NAME OF SUBSTANCE / PREPARATION AND COMPANY**

Commercial names / synonyms  
ENDO N2 (powder)

Manufacturer:  
GHIMAS S.p.A.  
Via Cimarosa 85  
40033 Casalecchio di Reno (BO)  
Tel. ++39 051 575353  
Fax ++39 051 575568

Technical information:  
laboratorio@ghimas.it

Emergency telephone number:  
+39 02-6610-1029 (Centro Antiveleni Niguarda Ca' Granda - Milano)

### **2. POSSIBLE HAZARDS**

Harmful if inhaled or in contact with the skin. Irritates eyes, skin and respiratory tract. Possible irreversible damage - limited evidence.  
Use the product according to the prescription

### **3. COMPOSITION / INFORMATION ON CONSTITUENTS**

Description: mixture of solids in the proportions set out

Components	%	CAS N°	Hazard statement(s)	Precautionary statement(s)
Zinc oxide	65-66	1314-13-2	H410	P273, P501
Zinc stearate	0,074	557-05-1	-	-
Dehydrated zinc acetate	0,074	5970-45-6	H302,H319, H410	P273, P305+P351+P338,P501
Paraformaldehyde	4,0	30525-89-4	H228,H302+H332,H315, H317,H318,H335,H351	P210,P261,P280, P305+P351+P338
Titanium dioxide	4 - 5	13463-67-7	-	-
Basic bismut subcarbonate	10,1	5892-10-4	-	-
Basic bismuth subnitrate	15,1	1304-85-4	H272, H315, H319, H335	P220, P261, P305 + P351 + P338
Ferrous oxide	0,1 – 0,2	1309-37-1	H315, H319, H335	P261, P305 + P351 + P338

About the hazard statements and precautionary statements see paragraph 16

#### 4. FIRST AID MEASURES

- If it comes into contact with the eyes:

Wash immediately in plenty of water or physiological solution for at least 10-15 minutes. In case consult a doctor

- If it comes into contact with the skin:

Wash immediately in plenty of soap and water or physiological solution for at least 10-15 minutes.

- If it is swallowed:

In case of persistent symptoms, consult a doctor.

- If it is inhaled:

Remove the victim from the contaminated area and leave him or her to rest in a well ventilated area. If the victim has difficulty in breathing, call for a doctor immediately.

- General information:

Remove contaminated clothes

#### 5. FIRE FIGHTING MEASURES

Extinguish with a water jet, foam, powder. Provide workers with appropriate protective equipment for respiratory system.

#### 6. ACCIDENTAL RELEASE OR SPILLAGE

Issue staff with protective clothing. Stop the powder from spreading and then gather it up into containers for disposal. Wash the affected area with plenty of water and ensure that the area is adequately ventilated.

#### 7. HANDLING AND STORAGE

Keep in hermetically sealed containers in a dry, well aired place.

The product is not a fuel but should nevertheless be kept away from sources of heat or flammable substances.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

*Personal protection:*

Respiratory system: Mask

Eyes: Safety goggles

Skin: Rubber gloves and apron

Personal hygiene: Do not eat, drink or smoke during handling. Immediately remove all the contaminated clothes. Wash the hands during the breaks and at the end of work

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Powdery solid
Colour:	Pink
Odour:	Pungent smell of formaldehyde
Solubility in water:	Partially, when heated
Solubility in main organic solvents:	
Solubilità in organic acids	soluble
Density (water = 1):	
Specific weight of vapours (air=1)	
Melting point:	>1000 °C
Boiling point:	
Flash point:	Not applicable
Bottom and top flash points in air (% by volume):	

Ignition temperature:	the product are not self igniting
Vapor pressure:	
Decomposition temperature:	None if used according to specification
Solvent content	0.0%
Solid content	100%

## 10. STABILITY AND REACTIVITY

Dangerous decomposition products:	None if used according to specifications
Dangerous reactions:	None if used according to specifications

## 11. TOXICOLOGICAL INFORMATION

### Exposure limits

TLV / TWA (zinc oxide)	ppm = 5	mg/m <sup>3</sup>
TLV / STEL (zinc oxide)	ppm = 10	mg/m <sup>3</sup>
TLV / TWA 1 (Paraformaldehyde)	ppm = 1,5	mg/m <sup>3</sup>
TLV / STEL 2 (Paraformaldehyde)	ppm = 3	mg/m <sup>3</sup>

ENTERS THE HUMAN BODY Through swallowing, inhalation, touching

ACUTE TOXICITY: NO INFORMATION ABOUT THE MIXTURE IS AVAILABLE. THE INFORMATION GIVEN REFERS TO THE ACTIVE COMPONENT

Paraformaldehyde DL50 oral rat 592mg/Kg

The presence of Paraformaldehyde in the product may cause a burning sensation, coughing, laryngitis, breathlessness, headaches, nausea and vomiting. It may provoke allergic reactions in the respiratory system and on the skin

### CORROSIVE IRRITANT PROPERTIES:

For the skin:

The preparation irritates the skin and causes local rashes and irritation

-For the respiratory system:

The preparation irritates the respiratory system

- For the eyes:

The preparation irritates the mucous of the eye

### IRRITANT PROPERTIES:

The preparation has irritant properties and causes reactions in the skin and the respiratory apparatus

### CARCINOGENESIS

No experimental or epidemiological evidence is available for the preparation.

The decomposition product of paraformaldehyde, has been listed as a carcinogen by NTP and IARC.

### MUTAGENESIS

No experimental evidence is available for the preparation.

### TERATOGENY

No experimental evidence of this has been recorded.

## 12. ECOLOGICAL INFORMATION

Dangerous for class 0 waters (German Regulation) (self classification). Follow prescribed procedures and do not discharge into the environment.

**13. DISPOSAL CONSIDERATION**

Dispose in accordance with regulations in force for the disposal of dangerous products.

**14. TRANSPORT REGULATION**

*Transport by road and rail:*

ADR/RID:	Class	Page
CT/RAIL	Category	Page

*Transport by sea*

IMDG CODE: UN n° 3077	Class	Page
-----------------------	-------	------

*Transport by air*

ICAO/IATA: UN n° 3077	Class	Page
-----------------------	-------	------

**15. REGULATORY INFORMATION**

-

**16. OTHER INFORMATIONS**

Hazard statement(s):	H410 H302 H319 H228 H272 H302+H332 H315 H317 H318 H319 H335 H351	Very toxic to aquatic life with long lasting effects Harmful if swallowed. Causes serious eye irritation. Flammable solid. May intensify fire; oxidiser Harmful if swallowed or if inhaled Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes serious eye irritation. May cause respiratory irritation. Suspected of causing cancer.
Precautionary statement(s):	P210  P220 P261 P273 P280 P501  P305+P351+P338	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep/Store away from clothing/ combustible materials. Avoid breathing dust. Avoid release to the environment Wear protective gloves/ eye protection/ face protection. Dispose of contents/ container to an approved waste disposal plant. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

*The data and information contained in this safety report are based on the most reliable information available at the moment that the report was drawn up. The company assumes no liability for harm to persons or damage to things that may arise from improper use of the information contained in this document.*