

1. - Identification of the substance/preparation and of the company/undertaking**1.1- Substance Identification:**

Trade name: Lutein 20

Chemical name: mixed carotenoid

1.2. - Uses of the substance:

“Lutein 20” is a natural antioxidant widely used in nutrition to avoid the negative effects of oxidation.

1.3. - Company identification:

VITAE NATURALS

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1.4. - Emergency telephone:

National Institute of Toxicology: +34 91 562 04 20.

2. - Hazards Identification.

Low hazard for usual industrial or commercial handling by trained personnel.

Caution: Avoid contact and inhalation.

3. - Composition/Information on ingredients

Components: mixed carotenoid (min 20%)

CAS Reg N°127-40-2

Lutein 20**4. - First-Aid Measures.**

Inhalation: If symptomatic, move to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms persist.

Ingestion: Wash out mouth with water. Call a physician if it is necessary.

Eyes: The eyes should be washed out immediately with water. Assure adequate flushing of the eyes by separating the eyelids with fingers.

Skin: Flush skin with water for at least 15 minutes. Discard contaminated clothing and shoes.

5. - Fire-Fighting Measures.**Suitable extinguishing media:**

Water spray, Carbon dioxide, Dry chemical powder or appropriate foam.

Extinguishing media which must not be used for safety reasons:

Unknown

Special exposure hazards arising from the product itself, from combustion products or from resulting gases:

It emits toxic fumes under fire conditions.

Special protective equipment for fire-fighters:

Wear self-contained breathing device as well as protective clothing, because water or foam may cause frothing and it is necessary to prevent contact with skin and eyes.

6. - Accidental release measures.**Personal precautions:**

Avoid contact with skin and eyes.

Environmental precautions:

Do not allow to flow into drainage systems.

Methods of cleaning up:

Sweep up, place in a bag and hold for its disposal. Ventilate area and wash spill site after material pick up is complete. Avoid raising dust.

Lutein 20**7. - Handling and Storage.****Handling:**

Wear appropriate respirator, gloves and safety goggles. Do not breathe dust. Avoid contact with eyes, skin and clothing.

Storage:

Keep in a tightly closed container. Store at ambient temperature and under dry conditions. Protect from contamination. Keep away from odorous and toxic substances. This product may be used in food.

8. - Exposure controls/Personal protection.**Exposure limits:**

Not established.

Components with specific control parameters:

None.

Personal protection:

Respiratory protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn.

Skin protection: Wear protective gloves and clean body-covering clothing.

Eye protection: Use chemical safety goggles. Have an eye wash fountain in the work area.

9. - Physical and Chemical Properties.

Appearance/Colour:	Orange thick liquid
Odour:	Slightly floral
pH:	not applicable
Flash point:	120°C
Vapor Pressure:	not applicable
Vapor Density (Air=1):	not applicable
Evaporation rate:	not applicable
Solubility in water:	almost insoluble
Viscosity (60°C):	not applicable
Lower explosive limit:	not applicable
Upper explosive limit:	not applicable
Auto ignition temperature:	not available

10. - Stability and Reactivity.**Conditions to avoid:**

It is a stable product but it is better not to keep it in a heat or damp area.

Materials to avoid:

Strong oxidizing agents.

Hazardous combustion or decomposition products:

Carbon monoxide, carbon dioxide. Hazardous polymerization will not occur.

11. - Toxicological information.**Effects of exposure**

Inhalation: *May be harmful by inhalation and irritating to mucous membranes and upper respiratory tract.*

Ingestion: *May be harmful by ingestion.*

Skin: *May be harmful by skin absorption and may cause skin irritation.*

Eyes: *May cause eye irritation.*

12. - Ecological information.

This material has not been tested for environmental effects.

13. - Disposal considerations.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, state and local environmental regulations.

14. - Transport information.

This product does not constitute a hazardous substance in National/International road, rail, sea or air transport, and is not a dangerous good in the meaning of ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR.

ADR=Agreement on Dangerous Goods by Road / RID = Regulations concerning the Intl Transport of Dangerous Goods by Rail

GGVS/GGVE - German Regulations concerning the transport of dangerous goods.

ICAO-TI/IATA-DGR= Air transport regulations of dangerous goods.

IMDG= International maritime Code of dangerous goods.

ADNR=European regulations concerning the carriage of dangerous goods on the Rhine

In case of additional transport information, contact VITAE NATURALS.

Lutein 20**15. - Regulatory information.**

Not available data.

16. - Other information.

The above information is believed to be right but does not purport to be all exclusive and shall be used only as a guide. VITAE NATURALS shall not be held liable for any damage resulting from handling contact with the above product.

This MSDS is in compliance with Regulation 1907/2006/EC.