

MATERIAL SAFETY DATA SHEET

(According to EC regulation 1907/2006 and ISO 11014-1)

01 Identification of the preparation

Commercial Name	:	PinnoThin™ TG Powder
Description	:	Micro-encapsulated oil of vegetable origin
Chemical name	:	Powder containing Pine Nut oil
Intended use	:	Food ingredient
Company	:	Lipid Nutrition B.V. Hogeweg 1 1521 AZ Wormerveer The Netherlands
(Emergency) Telephone	:	+31 (0) 75 629 2911
Telefax	:	+31 (0) 75 629 2817

02 Hazards Identification

Human Health hazards	:	No harmful effects have been identified.
Inhalation	:	Not applicable at ambient temperature.
Skin contact	:	Unlikely to be irritating.
Eye contact	:	Can cause irritation.
Ingestion	:	Unlikely to be harmful unless excessive amounts are swallowed.
Physical-chemical hazards	:	None identified
Environment hazards	:	None identified
Unusual Fire and Explosion Hazards	:	This material like most organic material in powder form is capable of creating a dust explosion.

Lipid Nutrition
- Head Office, The Netherlands
- North America
- Asia Pacific

Phone: +31 75 629 29 11
Phone: +1 815 730 5200
Phone: +603 8947 8888

www.lipidnutrition.com
www.Clarinol.com
E-mail: info@lipidnutrition.com

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Last update: 24 April 2008.

03 Composition/Information on ingredients

Substance/Preparation	:	Preparation
Chemical description	:	Pine nut oil
CAS-nr	:	Not applicable to a preparation
EC nr	:	Not applicable to a preparation

04 First Aid measures

Ingestion	:	Rinse mouth with warm water. Drink at least a glass of milk or water.
Skin Contact	:	Remove contaminated clothing. Wash with plenty of water and soap. Seek medical attention if any sensitization might persist.
Eyes Contact	:	Flush eyes with copious amounts of water. If irritation persists, seek medical attention.
Inhalation	:	Remove to fresh air.

05 Fire-fighting measures

Extinguishing media	:	CO ₂ , foam, powder, sand.
<u>Not</u> suitable extinguisher	:	Water
Specific hazards	:	Irritant vapors (acrolein) may be formed in case of thermal combustion.
Protection of fire fighters	:	Self-contained breathing apparatus, full protective clothing.

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06 Accidental release measures

Precautions	:	In heated condition exists risk of splattering in case of contact with waste. Be aware of slipping
Precautions for the environment	:	Prevent draining into open water. Collect spilled material and dispose of in accordance with local regulations, preferably by incineration
Methods for cleaning	:	Spillages and uncontrolled discharges should be kept separately, and processed as waste
Other information	:	Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

07 Handling and storage

Prevention of fire or explosion	:	Risk of explosion in case of welding on empty drums/tanks
Handling	:	Palletized drums and pails should be handled carefully. Stacking of more than two pallets on top of one another should be avoided.
Storage	:	Store in a cool dry place, away from heating source or direct sunlight, avoiding moisture, dust and contaminants.
Special precautions	:	None

08 Exposure controls / Personal protection

Personal precautions	:	Avoid contact with skin and eyes.
Eye protection	:	Safety glasses
Skin protection	:	Gloves
Hygiene measures	:	Handle in accordance with good occupation hygiene
Ventilation	:	Ensure ventilation or local exhaust if formation of vapors occurs
Occupation exposure limits	:	None established

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09 Physical and chemical properties

Appearance	:	Off white powder
Odor	:	Neutral, to characteristic for oil
Flash point	:	> 280°C
Vapor pressure (250°C)	:	< 0.1 mbar
Bulk density	:	± 350-400 kg/m ³
Solubility	:	Dispersible in cold water

10 Stability and reactivity

Stability	:	Stable under normal conditions
Conditions to avoid	:	Strong oxidizing agents
Hazardous reactions	:	Not to be expected
Hazardous decomposition products	:	Thermal decomposition will evolve irritant vapors
Hazardous polymerization	:	Will not occur
Combustion products	:	In case of thermal analysis acrolein will be formed.

11 Toxicological information

Based on information of comparable substances PinnoThin™ TG can be classified non-toxic.

Acute toxicity (Oral-LD ₅₀)	:	> 2g/kg (Rat)
Skin irritation	:	Non irritant (rabbit)
Eye irritation	:	Non irritant (rabbit)
Ames test	:	Non-genotoxic

Data based on structurally equivalent substances.

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12 Ecological information

Bio degradability	:	Readily biodegradable (modified sturm test)
Eco toxicity	:	
LC ₅₀	:	> 100 mg/l (Fish – 48 hours)
EC ₅₀	:	> 100 mg/l (Pseudomonas putida – 16 hours)

13 Disposal procedures

Waste disposal method	:	Depending on local regulations the product can be burned in a suitable combustion installation.
Treatment of empty containers	:	As usual

14 Transport information

General	:	It is recommended that our products should be transported in accordance with the Loders Croklaan Transport Policy (available on request).
Precautions	:	Transport in combination with Foodstuffs only, avoiding contact with chemicals, dust and aromas. Temperature during transport should remain below 25°C.

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15 Regulatory information

EU classification (1907/2006/EC) : This product is not dangerous according to EU regulations.

16 Further information

The above data are not a contractual obligation with respect to product characteristics; they are based on current knowledge.

History

Date of issue : 24-04-2008

Date of previous issue : -

Version : 1.0

Prepared by LDe/RvB

This document replaces all previous versions

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