

Safety Data Sheet

1. Identification of the substance / preparation and the Company

1.1 Identification of the substance or preparation

Product name **NOVALIS THERMO**

1.2 Use of the substance / preparation

Intended use **Water based, acrylic enamel for iron radiators.**

1.3 Company identification

Name **OIKOS SRL**
Full address **Via Cherubini, 2**
District and Country **47043 GATTEO A MARE FC**
ITALIA
Tel. **0039-0547-681412**
Fax **0039-0547-681430**

e-mail address of the competent person
responsible for the Safety Data Sheet **labtech@oikos-paint.com**

1.4 Emergency telephone

For urgent inquiries refer to **0039-0547-681412 Laboratorio R&S. OIKOS srl**
0039-0557-947819 Centro Antiveneni (Anti-poison Centre)
OSPEDALE Careggi, Firenze, Italia

2. Hazards Identification

NOTHING TO NOTIFY

3. Composition / Information on ingredients

NOTHING TO NOTIFY

4. First aid measures

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes.

Seek medical advice.

SKIN: Immediately wash with plenty of water. Remove all contaminated clothing. Obtain immediate medical attention. Wash contaminated clothing separately before using them again.

INHALATION: Remove to open air. If breathing is irregular or stopped, administer artificial respiration. Obtain immediate medical attention.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Give nothing by mouth to an unconscious person.

5. Fire-fighting measures

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SUITABLE EXTINGUISHING MEDIA

The extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulised water.

EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS

None in particular.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a depressurised mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in the event of large quantities of foam.

6. Accidental release measures

PERSONAL PRECAUTIONS

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, see the other sections of this sheet.

ENVIRONMENTAL PRECAUTIONS

The product must not penetrate the sewers, surface water, ground water and neighbouring areas.

METHODS FOR CLEANING UP

Use inert absorbent material (sand, vermiculite, diatomeous earth, Kieselguhr, etc.) to soak up leaked product. Collect the majority of the remaining material and deposit it in containers for disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

7. Handling and storage

Store in a well ventilated place, keeping the containers closed when not used. Do not smoke while handling. Keep far away from sources of heat, bright flames and sparks and other sources of ignition.

8. Exposure control / personal protection.

8.1 Exposure limit values

Product name	Type	Country		TWA/8h	STEL/15min
				mg/m ³ ppm	mg/m ³ ppm
CALCIUM CARBONATE	OEL	IRL		4	
	WEL	UK		4	

KAOLIN	TLV-ACGIH		2	
	OEL	IRL	2	
	WEL	UK	2	
TALC	TLV-ACGIH		2	
	OEL	IRL	0,8	
	WEL	UK	1	
TITANIUM DIOXIDE	TLV-ACGIH		10	3,1
	OEL	IRL	4	
	WEL	UK	4	
1,2-PROPANEDIOL	OEL	IRL	10	
	WEL	UK		150

8.2 Exposure controls

Observance of safety measures used in handling chemical substances.

RESPIRATORY PROTECTION

If the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear a mask with an B or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (ref. standard EN 141).

EYE PROTECTION

None required.

HAND PROTECTION

None required.

SKIN PROTECTION

None required.

9. Physical and chemical properties

Colour	White
Odour	Characteristic
Appearance	Paste
Solubility	Mixable in water
Viscosity	12000 cps
Vapour density	Not available
Evaporation Rate	Not available
Reactive Properties	Not available
Partition coefficient: n-octanol/water	Not available
pH	8,5-9,5
Boiling point	Not available
Flash point	100 °C
Explosive properties	Not available
Vapour pressure	Not available
Specific gravity	1,250 Kg/l
VOC (Directive 2004/42/EC) :	40,00 g/litre

10. Stability and reactivity

The product can decompose and/or violently react.

N-methyl-2-pyrrolidone is stable up to 315 °C in inert atmosphere. In the presence of air, it slowly oxidizes to form hydroperoxides. Due to thermal decomposition, it yields toxic gases of nitrogen and carbon oxides. It is completely miscible with water giving a neutral or slightly basic reaction. It doesn't attack common materials, but melts different types of plastic materials.

Diethylene glycol butyl ether may react with oxidizing agents. When heated to decomposition, it emits acrid and irritant fumes. It is hygroscopic.

Propylene glycol: it is hygroscopic, stable at normal conditions; at high temperatures, it tends to oxidize yielding propionaldehyde as well as lactic and acetic acid.

11. Toxicological information

N-methyl-2-pyrrolidone: no acute or chronic cases of intoxication or sensitization have been reported. On healthy volunteers, repeated skin applications caused modest and transient erythema. The substance enhances the absorption of several substances through the skin.

A limit of exposure of 400 mg/cu.m is recommended (Fiche toxicologique, 1987). Experiments conducted on mice and rats by the oral and inhalation way revealed no teratogenic effects, at non embryotoxic doses. It is not mutagenic with Ames test.

12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

13. Disposal consideration

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information

This substance is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

15. Regulatory information

Warning symbols: None

Hazard sentences (R): None

Caution recommendations (S): None

This product is not subject to hazard labeling under the 67/548/EEC and 1999/45/EC directives and following amendments and adjustments.

VOC (Directive 2004/42/EC) :

One-pack performance coatings.

VOC given in g/litre of product in a ready-to-use condition :

Limit value: 140 (2007) - 140 (2010) VOC of product : 40,00

16. Other information

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments;
2. Directive 67/548/EEC and following amendments and adjustments (technical adjustment XXIX);
3. Regulation (EC) 1272/2008 (CLP) of the European Parliament;
4. Regulation (EC) 1907/2006 (REACH) of the European Parliament;
5. The Merck Index. - 10th Edition;
6. Handling Chemical Safety;
7. Niosh - Registry of Toxic Effects of Chemical Substances;
8. INRS - Fiche Toxicologique (toxicological sheet);
9. Patty - Industrial Hygiene and Toxicology;
10. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition;

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Changes to previous review

The following sections were modified:

08/11/13