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SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: TM 900 S Product code: 600.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Anti-seizing paste Professional use

1.3. Details of the supplier of the safety data sheet

Registered company name: ORAPI.

Address: PARC INDUSTRIEL DE LA PLAINE DE L'AIN - 225 ALLEE DES CEDRES.01150.SAINT-VULBAS.FRANCE.

Telephone: 33-(0)4-74-40-20-20. Fax: 33-(0)4-74-40-20-21.

fds@orapi.com

1.4. Emergency telephone number: 33-(0)1-45-42-59-59.

Association/Organisation: INRS.

Other emergency numbers

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazardous to the aquatic environment - Acute hazard, Category 1 (Aquatic Acute 1, H400).

Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms:



GHS09

Signal Word:

WARNING

Hazard statements:

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P273 Avoid release to the environment.

Precautionary statements - Response:

P391 Collect spillage.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition:

Identification	(EC) 1272/2008	Note	%
INDEX: 1257	GHS07, GHS09	[1]	2.5 <= x % < 10
CAS: 7440-50-8	Wng		
EC: 231-159-6	Acute Tox. 4, H302		
REACH: 01-2119480154-42	Aquatic Chronic 2, H411		
	Aquatic Acute 1, H400		
CUIVRE	M Acute = 10		
INDEX: 1235		[1]	$0 \le x \% < 2.5$
CAS: 8042-47-5			
EC: 232-455-8			
REACH: 01-2119487078-27			
WHITE MINERAL OIL (PETROLEUM)			
INDEX: 128_37_0	GHS09	[1]	$0 \le x \% < 2.5$
CAS: 128-37-0	Wng		
EC: 204-881-4	Aquatic Acute 1, H400		
REACH: 01-2119565113-46	M Acute = 1		
	Aquatic Chronic 1, H410		
2,6-DI-TERT-BUTYL-P-CRESOL	M Chronic = 1		

Information on ingredients:

[1] Substance for which maximum workplace exposure limits are available.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation :

Bring to the fresh air.

Consult a physician in case of disorder.

In the event of splashes or contact with eyes:

Wash abundantly with fresh and clean water during 15 minutes by maintaining the eyelids open.

If there is any pain, redness or visual impairment, consult an ophthalmologist.

In the event of splashes or contact with skin:

Remove clothing impregnated and wash carefully the skin with some water and some soap or use a known cleaner.

Not to use solvents or thinners.

Consult a doctor in the event of irritation.

In the event of swallowing:

Seek medical attention, showing the label.

Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use:

- powder
- dry sand

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Unsuitable methods of extinction

In the event of a fire, do not use:

- water jet

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed:

- carbon monoxide (CO)
- carbon dioxide (CO2)

5.3. Advice for firefighters

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

Extremely slippery in case of spillage.

For non first aid worker

Avoid contact with skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

To contain and collect the leakages with noncombustible materials absorbing: sand, ground in barrels for the waste disposal.

6.4. Reference to other sections

No data available.

SECTION 7: HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Keep a well ventilation if vapour, fog or aerosol could appear.

Avoid contact with skin, eyes and clothings.

Do not breathe vapours, fumes and mist.

Extremely slippery in case of spillage.

Fire prevention:

Prevent access by unauthorised personnel.

Recommended equipment and procedures:

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures:

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

No data available.

Storage

Keep container tightly closed and in a cool, dry and well-ventilated place.

Keep the container away from heat, bad weather, dampness and freezing.

Packaging

Always keep in packaging made of an identical material to the original.

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7.3. Specific end use(s)

No data available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7440-50-8	0.2 mg/m3	-	-	-	-
128-37-0	2 (IFV) mg/m3			A4	

- Germany - AGW (BAuA - TRGS 900, 21/06/2010) :

CAS	VME:	VME:	Excess	Notes
8042-47-5		5 A mg/m3		4(II)
128-37-0		10 E mg/m3		4 (II)

- France (INRS - ED984:2012):

CAS	VME-ppm:	VME-mg/m3:	VLE-ppm:	VLE-mg/m3:	Notes:	TMP No:
128-37-0	-	10	-	-	-	-

Oil mist: VME = 1 mg/m3 (INRS) - VLE = 10 mg/m3 (15min), VME = 5 mg/m3 (8h) (ACGIH)

- UK / WEL (Workplace exposure limits, EH40/2005, 2007):

CAS	TWA:	STEL:	Ceiling:	Definition:	Criteria:
7440-50-8	0.2 mg/m3	-	-	-	-
128-37-0	10 mg/m3				

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

WHITE MINERAL OIL (PETROLEUM) (CAS: 8042-47-5)

Final use: Workers.
Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 220 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 160 mg of substance/m3

Final use: Consumers.

Exposure method: Ingestion.

Potential health effects: Long term systemic effects.

DNEL: 40 mg/kg body weight/day

Exposure method: Dermal contact.

Potential health effects: Long term systemic effects.

DNEL: 92 mg/kg body weight/day

Exposure method: Inhalation.

Potential health effects: Long term systemic effects.

DNEL: 35 mg of substance/m3

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

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- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Type of gloves recommended:

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Respiratory protection during the release of vapours/aerosols: combined filter against gas/vapours of organic compounds and against solid and liquid particles (e.g., EN 14387 type A-P2).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information:

Physical state: Paste.

Important health, safety and environmental information

Not relevant. Boiling point/boiling range: Not relevant. Flash point interval: Not relevant. Vapour pressure (50°C): Not relevant. Density: Not stated. Water solubility: Insoluble. Melting point/melting range: Not specified. Not relevant. Self-ignition temperature: Decomposition point/decomposition range: Not specified.

9.2. Other information

Colour: copper

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid:

- heat

10.5. Incompatible materials

Keep away from:

- strong oxidising agents

10.6. Hazardous decomposition products

The thermal decomposition may release/form:

- carbon monoxide (CO)
- carbon dioxide (CO2)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

No data available.

11.1.1. Substances

Acute toxicity:

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Oral route : LD50 = 6000 mg/kg

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Dermal route : LD50 > 2000 mg/kg

Species: Rabbit

OECD Guideline 402 (Acute Dermal Toxicity)

11.1.2. Mixture

No toxicological data available for the mixture.

SECTION 12: ECOLOGICAL INFORMATION

Very toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

CUIVRE (CAS: 7440-50-8)

Fish toxicity: 0.01 < NOEC <= 0.1 mg/l

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Fish toxicity: LC50 = 0.199 mg/l

Duration of exposure: 96 h

Crustacean toxicity: EC50 = 0.48 mg/l

Factor M = 1

Duration of exposure: 48 h

NOEC = 0.15 mg/l

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Algae toxicity: ECr50 = 0.758 mg/l

Duration of exposure: 72 h

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Biodegradability: Non-rapidly degradable.

12.3. Bioaccumulative potential

12.3.1. Substances

2,6-DI-TERT-BUTYL-P-CRESOL (CAS: 128-37-0)

Bioaccumulation : BCF = 598

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

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Waste:

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging:

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

SECTION 14: TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2017 - IMDG 2016 - ICAO/IATA 2017).

14.1. UN number

3077

14.2. UN proper shipping name

UN3077=ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

(cuivre, 2,6-di-tert-butyl-p-cresol)

14.3. Transport hazard class(es)

- Classification:



g

14.4. Packing group

Ш

14.5. Environmental hazards

- Environmentally hazardous material :



14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	9	M7	III	9	90	5 kg	274 335 375 601	E1	3	_

Not subject to this regulation if $Q \le 51/5 \text{ kg}$ (ADR 3.3.1 - DS 375)

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ
	9	-	III	5 kg	F-A,S-F	274 335 969	E1

Not subject to this regulation if $Q \le 51/5$ kg (IMDG 3.3.1 - 2.10.2.7)

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	9	-	III	956	400 kg	956	400 kg	A97	E1
								A158	
								A179	
								A197	
	9	-	III	Y956	30 kg G	-	-	A97	E1
								A158	
								A179	
								A197	

Not subject to this regulation if $Q \le 51/5 \text{ kg}$ (IATA 4.4.4 - DS A197)

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

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14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2016/1179. (ATP 9)

- Container information:

No data available.

- Particular provisions :

No data available.

15.2. Chemical safety assessment

No data available.

SECTION 16: OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3:

H302 Harmful if swallowed. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.

Abbreviations:

DNEL: Derived No-Effect Level

ADR: European agreement concerning the international carriage of dangerous goods by Road.

IMDG: International Maritime Dangerous Goods. IATA: International Air Transport Association. ICAO: International Civil Aviation Organisation

RID: Regulations concerning the International carriage of Dangerous goods by rail.

 $WGK: Wasserge fahrdungsklasse \ (Water \ Hazard \ Class).$

GHS09: Environment

PBT: Persistent, bioaccumulable and toxic. vPvB: Very persistent, very bioaccumulable. SVHC: Substances of very high concern.