

## SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

### Pasta termoprzewodząca HP

Creation date	22nd September 2022	Version	7.0
Revision date	14th February 2024		

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**  
Substance / mixture Pasta termoprzewodząca HP mixture
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**  
**Mixture's intended use**  
Heat transferring agent.  
**Mixture uses advised against**  
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**  
**Manufacturer**  
Name or trade name AG TermoPasty Grzegorz Gąsowski  
Address Kolejowa 33 E, Sokoły, 18-218  
Poland  
Identification number (CRN) 200133730  
VAT Reg No PL9661767714  
Phone 862741342  
E-mail biuro@termopasty.pl  
Web address www.termopasty.pl  
**Competent person responsible for the safety data sheet**  
Name AG TermoPasty Grzegorz Gąsowski  
E-mail biuro@termopasty.pl
- 1.4. Emergency telephone number**  
European emergency number: 112

#### SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**  
**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**  
The mixture is classified as dangerous.

Aquatic Chronic 2, H411

**Most serious adverse effects on human health and the environment**

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

- 2.2. Label elements**  
**Hazard pictogram**



**Hazard statements**

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P273 Avoid release to the environment.  
P391 Collect spillage.  
P501 Dispose of contents/container to according to applicable regulations.

- 2.3. Other hazards**

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended. Dust may form explosive mixture with air.

## SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

### Pasta termoprzewodząca HP

Creation date 22nd September 2022  
Revision date 14th February 2024 Version 7.0

#### SECTION 3: Composition/information on ingredients

##### 3.2. Mixtures

###### Chemical characterization

Mixture of substances and additives specified below.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 030-013-00-7 CAS: 1314-13-2 EC: 215-222-5 Registration number: 01-2119463881-32-0064	zinc oxide	≤30	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	
CAS: 1344-28-1 EC: 215-691-6 Registration number: 01-2119529248-35-0114	aluminium oxide		not classified as dangerous	1

###### Notes

1 A substance for which exposure limits are set.

Full text of all classifications and hazard statements is given in the section 16.

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

###### If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

###### If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

###### If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes.

###### If swallowed

Rinse out the mouth with clean water. In the event of issues, find medical help.

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

###### If inhaled

Not expected.

###### If on skin

Not expected.

###### If in eyes

Not expected.

###### If swallowed

Not expected.

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

Symptomatic treatment.

## SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

### Pasta termoprzewodząca HP

Creation date 22nd September 2022  
Revision date 14th February 2024 Version 7.0

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

###### Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

###### Unsuitable extinguishing media

Water - full jet.

##### 5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

##### 5.3. Advice for firefighters

Use a self-contained breathing apparatus and full-body protective clothing. Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

#### SECTION 6: Accidental release measures

##### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8.

##### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water. Do not allow to enter drains.

##### 6.3. Methods and material for containment and cleaning up

Place the product mechanically in an appropriate manner. Dispose of the collected material according to the instructions in the section 13.

##### 6.4. Reference to other sections

See the Section 7, 8 and 13.

#### SECTION 7: Handling and storage

##### 7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

##### 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

##### 7.3. Specific end use(s)

not available

#### SECTION 8: Exposure controls/personal protection

##### 8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

###### United Kingdom

###### EH40/2005 Workplace exposure limits (Fourth Edition 2020)

Substance name (component)	Type	Value	Note
Aluminium oxides (CAS: 1344-28-1)	WEL 8h	10 mg/m <sup>3</sup>	inhalable dust
	WEL 8h	4 mg/m <sup>3</sup>	respirable dust

###### DNEL

zinc oxide					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Oral	50 mg/kg/24h			
Workers	Dermal	5000 mg/kg/24h			

## SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

### Pasta termoprzewodząca HP

Creation date 22nd September 2022  
Revision date 14th February 2024 Version 7.0

#### PNEC

zinc oxide			
Route of exposure	Value	Value determination	Source
Drinking water	20.6 µg/l		
Marine water	6.1 µg/l		
Microorganisms in sewage treatment	100 µg/l		
Freshwater sediment	117.8 mg/kg		
Sea sediments	56.5 mg/kg		
Soil (agricultural)	35.6 mg/kg		

#### 8.2. Exposure controls

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

##### Eye/face protection

It is not needed.

##### Skin protection

Hand protection: Protective gloves resistant to the product. Contaminated skin should be washed thoroughly.

##### Respiratory protection

It is not needed.

##### Thermal hazard

Data not available.

##### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	solid
Colour	white
Odour	data not available
Melting point/freezing point	-50 °C
Boiling point or initial boiling point and boiling range	data not available
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	320 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	data not available
Kinematic viscosity	data not available
Solubility in water	insoluble
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	2.1 g/cm <sup>3</sup> at 20 °C
Relative vapour density	data not available
Particle characteristics	data not available
Form	paste

#### 9.2. Other information

not available

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

not available

## SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

### Pasta termoprzewodząca HP

Creation date 22nd September 2022  
Revision date 14th February 2024 Version 7.0

#### 10.2. Chemical stability

The product is stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Unknown.

#### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

#### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

#### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological data is available for the mixture.

##### Acute toxicity

Based on available data the classification criteria are not met.

##### aluminium oxide

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD <sub>50</sub>	>2000 mg/kg bw		Rat	
Dermal	LC <sub>50</sub>	>2.3 mg/l of air	4 hours		

##### zinc oxide

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD <sub>50</sub>	>2000 mg/kg		Rat	
Inhalation	LC <sub>50</sub>	>5.7 mg/l		Rat (Rattus norvegicus)	
	LOAEL	>5.7 mg/m <sup>3</sup>		Human	

##### Skin corrosion/irritation

Based on available data the classification criteria are not met.

##### Serious eye damage/irritation

Based on available data the classification criteria are not met.

##### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

##### Germ cell mutagenicity

Based on available data the classification criteria are not met.

##### Carcinogenicity

Based on available data the classification criteria are not met.

##### Reproductive toxicity

Based on available data the classification criteria are not met.

##### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

## SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

### Pasta termoprzewodząca HP

Creation date 22nd September 2022  
Revision date 14th February 2024 Version 7.0

#### Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

#### Aspiration hazard

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. Based on available data the classification criteria are not met.

#### 11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

##### Acute toxicity

aluminium oxide				
Parameter	Value	Exposure time	Species	Environment
LC <sub>50</sub> /EC <sub>50</sub>	>100 mg/l		Fish (Salmo trutta)	
LC <sub>50</sub> / EC <sub>50</sub>	>100 mg/l		Invertebrates (Daphnia magna)	
LC <sub>50</sub> / EC <sub>50</sub>	>100 mg/l		Algae and other aquatic plants (Selenastrum capricornutum)	

zinc oxide				
Parameter	Value	Exposure time	Species	Environment
LC <sub>50</sub>	1.1 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
EC <sub>50</sub>	>1.0 mg/l	48 hours	Invertebrates (Daphnia magna)	
IC <sub>50</sub>	0.17 mg/l	72 hours	Algae (Pseudokirchneriella subcapitata)	

#### 12.2. Persistence and degradability

Data not available.

#### 12.3. Bioaccumulative potential

Data not available.

#### 12.4. Mobility in soil

Data not available.

#### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

#### 12.6. Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

#### 12.7. Other adverse effects

Data not available.

### SECTION 13: Disposal considerations

## SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

### Pasta termoprzewodząca HP

Creation date	22nd September 2022		
Revision date	14th February 2024	Version	7.0

#### 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

#### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### Waste type code

13 03 10\* other insulating and heat transmission oils

#### Packaging waste type code

15 01 10\* packaging containing residues of or contaminated by hazardous substances

(\*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

### SECTION 14: Transport information

#### 14.1. UN number or ID number

not subject to transport regulations

#### 14.2. UN proper shipping name

not relevant

#### 14.3. Transport hazard class(es)

not relevant

#### 14.4. Packing group

not relevant

#### 14.5. Environmental hazards

not relevant

#### 14.6. Special precautions for user

Reference in the Sections 4 to 8.

#### 14.7. Maritime transport in bulk according to IMO instruments

not relevant

### SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out (mixture).

### SECTION 16: Other information

#### A list of standard risk phrases used in the safety data sheet

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.

#### Guidelines for safe handling used in the safety data sheet

P273	Avoid release to the environment.
P391	Collect spillage.
P501	Dispose of contents/container to according to applicable regulations.



# SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

## Pasta termoprzewodząca HP

Creation date	22nd September 2022	Version	7.0
Revision date	14th February 2024		

### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

### Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC <sub>50</sub>	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC <sub>50</sub>	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC <sub>50</sub>	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD <sub>50</sub>	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEL	Lowest observed adverse effect level
log K <sub>ow</sub>	Octanol-water partition coefficient
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)

### Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

### Recommended restrictions of use

not available

### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

### The changes (which information has been added, deleted or modified)

The version 7.0 replaces the SDS version from 21 April 2023. Changes were made in sections 2, 11 and 16.



## SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended

### Pasta termoprzewodząca HP

Creation date	22nd September 2022		
Revision date	14th February 2024	Version	7.0

#### Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.

