

# SAFETY DATA SHEET



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

## Termospray Silver

Creation date 26th February 2023  
Revision date Version 4.0

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

- 1.1. Product identifier**  
Substance / mixture Termsospray Silver 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**  
**Distributor**  
Name or trade name Transfer Multisort Elektronik Ltd.  
Address Birmingham Coleshill House Suite 1C, 1 Station Road, Coleshill  
United Kingdom  
Phone +44 1675790026  
E-mail office@tme-uk.eu
- 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.

Aerosol 1, H229, H222  
Aquatic Chronic 2, H411

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

**Most serious adverse physico-chemical effects**

Extremely flammable aerosol. Pressurised container: May burst if heated.

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

Toxic to aquatic life with long lasting effects.

- 2.2. Label elements**

**Hazard pictogram**



**Signal word**

Danger

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### Hazard statements

H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.  
H411 Toxic to aquatic life with long lasting effects.

### Precautionary statements

P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P251 Do not pierce or burn, even after use.  
P273 Avoid release to the environment.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

### 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.

## 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: 601-003-00-5 CAS: 74-98-6 EC: 200-827-9	propane	30	Flam. Gas 1, H220 Press. Gas (compressed gas), H280	
Index: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7	butane	28,5	Flam. Gas 1, H220 Press. Gas (compressed gas), H280	
Index: 030-013-00-7 CAS: 1314-13-2 EC: 215-222-5 Registration number: 01-2119463881-32- 0064	zinc oxide	3,7-<11,1	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	
Index: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 Registration number: 01-2119457558-25- XXXX	propan-2-ol	1-5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	

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

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.

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### 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

Unlikely.

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

##### If inhaled

Not expected.

##### If on skin

Not expected.

##### If in eyes

When intruding eyes, it can evoke irritation.

##### If swallowed

Not expected.

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

Symptomatic treatment.

### 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. Closed containers with the product near the fire should be cooled with water. 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

Provide sufficient ventilation. Extremely flammable aerosol. Pressurised container: May burst if heated. Remove all ignition sources. 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

Ventilate the room. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water.

#### 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 flammable or explosive concentrations and concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use non-sparking tools. Use of antistatic clothes and footwear is recommended. No smoking. Protect against direct sunlight. Do not pierce or burn, even after use. 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. Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

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### 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.

#### DNEL

propan-2-ol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	500 mg/m <sup>3</sup>	Chronic effects systemic		
Workers	Dermal	888 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	89 mg/m <sup>3</sup>	Chronic effects systemic		
Consumers	Dermal	319 mg/kg bw/day	Chronic effects systemic		
Consumers	Oral	26 mg/kg bw/day	Chronic effects systemic		

#### PNEC

propan-2-ol

Route of exposure	Value	Value determination	Source
Drinking water	140.9 mg/l		
Marine water	140.9 mg/l		
Freshwater sediment	552 mg/kg of dry substance		
Freshwater environment	552 mg/kg of dry substance		
Soil (agricultural)	28 mg/kg of dry substance		

### 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

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

#### Thermal hazard

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	gas
Colour	grey
Odour	characteristic
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	Extremely flammable aerosol.
Lower and upper explosion limit	data not available
Flash point	data not available

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Auto-ignition temperature data not available  
Decomposition temperature data not available  
pH data not available  
Kinematic viscosity data not available  
Solubility in water data not available  
Solubility in fats data not available  
Partition coefficient n-octanol/water (log value) data not available  
Vapour pressure data not available  
Density and/or relative density data not available  
Relative vapour density data not available  
Particle characteristics data not available

### 9.2. Other information

Evaporation rate non-applicable  
Appearance paste

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

not available

### 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. Pressurised container: May burst if heated.

### 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.

propan-2-ol

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Inhalation	LC <sub>50</sub>	>5 mg/l	4 hours	Rat	
Oral	LD <sub>50</sub>	>2000 mg/kg		Rat	
Skin	LD <sub>50</sub>	>2000 mg/kg		Rabbit	

zinc oxide

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD <sub>50</sub>	>2000 mg/kg		Rat (Rattus norvegicus)	
Inhalation	LC <sub>50</sub>	>5.7 mg/l		Rat (Rattus norvegicus)	
	LOAEL	>5 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.

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### 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.

### 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

not available

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute toxicity

Toxic to aquatic life with long lasting effects.

propan-2-ol

Parameter	Value	Exposure time	Species	Environment
LC <sub>50</sub>	>100 mg/l	48 hours	Fish (Leuciscus idus)	
EC <sub>50</sub>	>100 mg/l	48 hours	Daphnia (Daphnia magna)	
EC <sub>50</sub>	>100 mg/l	72 hours	Algae (Scenedesmus subspicatus)	

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

Not available.

### 12.3. Bioaccumulative potential

Not available.

### 12.4. Mobility in soil

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

Not available.

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### SECTION 13: Disposal considerations

#### 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.

#### Packaging waste type code

16 05 04 gases in pressure containers (including halons) containing hazardous substances \*  
(\* ) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

### SECTION 14: Transport information

#### 14.1. UN number or ID number

UN 1950

#### 14.2. UN proper shipping name

AEROSOLS

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

2 Gases

#### 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

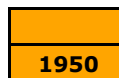
#### Additional information

Hazard identification No.

UN number

Classification code

Safety signs



5F

2.1+hazardous for the environment



#### Air transport - ICAO/IATA

Packaging instructions passenger 203

Cargo packaging instructions 203

#### Marine transport - IMDG

EmS (emergency plan) F-D, S-U

MFAG 620

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### 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.

#### 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

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
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

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P273	Avoid release to the environment.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

#### 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.

#### 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



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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
Press. Gas (Comp.)	Gas under pressure: compressed gas
Press. Gas (Diss.)	Gas under pressure: dissolved gas
Press. Gas (Liq.)	Gas under pressure: liquefied gas
Press. Gas (Ref. Liq.)	Gas under pressure: refrigerated liquefied gas
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
Aerosol	Aerosol
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Eye Irrit.	Eye irritation
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
Press. Gas	Gases under pressure
STOT SE	Specific target organ toxicity - single exposure

### 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 4.0 replaces the SDS version from 09 March 2019. Changes were made in sections 1, 2, 12, 13, 15 and 16.

## 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.