	according to Commission Regulation (EU) 2020/878 as amended Termospray HP							
Creati	on date 26th February 2023	iniospidy in						
	on date	Version	5.0					
SECT	ON 1: Identification of the substance/mixt	ure and of the company/ur	ndertaking					
1.1.	Product identifier	Termospray HP	2					
	Substance / mixture	mixture						
1.2.	Relevant identified uses of the substance	or mixture and uses advise	ed against					
	Mixture's intended use							
	Heat transferring agent.							
	Mixture uses advised against							
	The product should not be used in ways other		n 1.					
1.3.	Details of the supplier of the safety data sheet							
	Distributor							
	Name or trade name	Transfer Multisor	t Elektronik Ltd.					
	Address	Birmingham Cole Coleshill	Birmingham Coleshill House Suite 1C, 1 Station Road, Coleshill					
		United Kingdom						
	Phone	+44 1675790026	5					
	E-mail	office@tme-uk.e	u					
	Manufacturer							
	Name or trade name	AG TermoPasty C	Grzegorz Gąsowski					
	Address	Kolejowa 33 E, S	Sokoły, 18-218					
		Poland						
	Identification number (CRN)	200133730						
	VAT Reg No	PL9661767714						
	Phone	862741342						
	E-mail	biuro@termopast						
	Web address	www.termopasty	v.pl					
	Competent person responsible for the saf	-						
	Name		Grzegorz Gąsowski					
	E-mail	biuro@termopast	ty.pl					
1.4.	Emergency telephone number							
	European emergency number: 112							

SECTION 2: Hazards identification 2.1. Classification of the substance or r

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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Termospray HP

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Hazard stater	nents
H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H411	Toxic to aquatic life with long lasting effects.
Precautionary	v 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 no 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	35	Flam. Gas 1, H220 Press. Gas (compressed gas), H280	
Index: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7	butane	33,25	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	1,5-<4,5	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	1-2	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

4.2.

4.3.

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. 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. 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

P P					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	500 mg/m ³	Chronic effects systemic		
Workers	Dermal	888 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	89 mg/m ³	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	white
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
рН	gas
Kinematic viscosity	data not available
Solubility in water	brak danych nierozpuszczalny
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
Form	paste
9.2. Other information	
Evaporation rate	non-applicable

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	LC50	>5 mg/l	4 hours	Rat	
Oral	LD 50	>2000 mg/kg		Rat	
Skin	LD 50	>2000 mg/kg		Rabbit	
zinc oxide					

Route of expo	sure Parameter	Value	Exposure time	Species	Sex
Oral	LD50	>2000 mg/kg		Rat (Rattus norvegicus)	
Inhalation	LC50	>5.7 mg/l		Rat (Rattus norvegicus)	
	LOAEL	>5 mg/m ³		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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	Ierm	iospray nP	
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	Respiratory or skin sensitisation		
	Based on available data the classification criteria a	are not met.	
	Germ cell mutagenicity		
	Based on available data the classification criteria a	are not met.	
	Carcinogenicity		
	Based on available data the classification criteria a	are not met.	
	Reproductive toxicity		
	Based on available data the classification criteria a	are not met.	
	Toxicity for specific target organ - single exp	osure	
	Based on available data the classification criteria a	are not met.	
	Toxicity for specific target organ - repeated e	exposure	
	Based on available data the classification criteria a	are not met.	
	Aspiration hazard		
	Inhalation of solvent vapors above values exceeding inhalation poisoning, depending on the level of con- classification criteria are not met.	5 1	5
11.2.	Information on other hazards		
	nat available		

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
LC50	>100 mg/l	48 hours	Fish (Leuciscus idus)	
EC₅o	>100 mg/l	48 hours	Daphnia (Daphnia magna)	
EC50	>100 mg/l	72 hours	Algae (Scenedesmus subspicatus)	

Parameter	Value	Exposure time	Species	Environment
LC50	1.1 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
EC₅o	>1.0 mg/l	48 hours	Invertebrates (Daphnia magna)	
IC50	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.

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

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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.

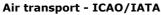
UN number Classification code Safety signs

1950 5F 2.1+hazardous for the environment

203 203

F-D, S-U 620





• •
Packaging instructions passenger
Cargo packaging instructions
Marine transport - IMDG
EmS (emergency plan)
MFAG



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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).

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SECTION 16: Other information

A list of standard risk phrase	es 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 no 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 abbreviation	ons 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	
EC50	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	
IC50	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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Termospray HP Creation date 26th February 2023 Revision date Version 5.0 **IUPAC** International Union of Pure and Applied Chemistry LC 50 Lethal concentration of a substance in which it can be expected death of 50% of the population Lethal dose of a substance in which it can be expected death of 50% of the LD₅₀ population LOAEL Lowest observed adverse effect level Octanol-water partition coefficient log Kow OEL Occupational Exposure Limits PBT Persistent, Bioaccumulative and Toxic ppm Parts per million Gas under pressure: compressed gas Press. Gas (Comp.) 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. Lig. 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 5.0 replaces the SDS version from 09 December 2021. Changes were made in sections 1, 2, 12, 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.