SAFETY DATA SHEET

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

Rozpuszczalnik do lakieru PVB

Creation date	20th February 2023		
Revision date		Version	4.0

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

1.1. Product identifier — Rozpuszczalnik do lakieru PVB

Substance / mixture — mixture

UFI — JF30-60K4-600V-99JV

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

Mixture's intended use

Solvent.

Main intended use

PC-TEC-21 Solvents and extraction agents

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.

Flam. Liq. 2, H225
Skin Irrit. 2, H315
Eye Dam. 1, H318
STOT SE 3, H336

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

Most serious adverse physico-chemical effects

Highly flammable liquid and vapour.

Most serious adverse effects on human health and the environment

May cause drowsiness or dizziness. Causes skin irritation. Causes serious eye damage.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

acetone
isopropanol
butan-1-ol

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear eye protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.

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: 606-001-00-8 CAS: 67-64-1 EC: 200-662-2 Registration number: 01-2119471330-49-XXXX	acetone	≤60	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	1
Index: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 Registration number: 01-2119457558-25-XXXX	isopropanol	≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	
Index: 603-004-00-6 CAS: 71-36-3 EC: 200-751-6 Registration number: 01-2119484630-38-XXXX	butan-1-ol	≤15	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335, H336	

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 unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

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. Rinse skin with water/shower.

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. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

If swallowed

DO NOT INDUCE VOMITING! Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.

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

If inhaled

Inhaling vapours can cause corrosion of the breathing system. May cause drowsiness or dizziness.

If on skin

Causes skin irritation.

If in eyes

Causes serious eye damage.

If swallowed

Corrosion of the digestion system can occur.

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. Highly flammable liquid and vapour. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale aerosols. Prevent contact with skin and eyes.

6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. 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. Do not use solvents.

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. Do not inhale aerosols. Prevent contact with skin and eyes. No smoking. Use only non-sparking tools. Wash hands and exposed parts of the body thoroughly after handling. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge.

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. Do not expose to sunlight. Store locked up. Keep container tightly closed. Keep cool.

Content	Packaging type	Material of package
500 ml	bottle	HDPE

The specific requirements or rules relating to the substance/mixture

Solvent vapours are heavier than air and accumulate especially near the floor where they may form an explosive mixture with the air.

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.

European Union **Commission Directive 2000/39/EC**

Substance name (component)	Type	Value
acetone (CAS: 67-64-1)	OEL 8 hours	1210 mg/m³
	OEL 8 hours	500 ppm

DNEL

acetone

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	2420 mg/m³	Acute effects local		
Workers	Dermal	186 mg/kg bw/day	Chronic effects systemic		
Workers	Inhalation	1210 mg/m³	Chronic effects systemic		
Consumers	Dermal	62 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	200 mg/m³	Chronic effects systemic		
Consumers	Oral	62 mg/kg bw/day	Chronic effects systemic		

butan-1-ol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	10 mg/m³	Chronic effects systemic		
Consumers	Inhalation	55 mg/m³	Chronic effects systemic		
Consumers	Oral	3.125 mg/kg	Chronic effects systemic		

isopropanol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	500 mg/m³	Chronic effects systemic		
Workers	Dermal	888 mg/kg bw/day	Chronic effects systemic		
Consumers	Inhalation	89 mg/m³	Chronic effects systemic		
Consumers	Dermal	319 mg/kg bw/day	Chronic effects systemic		
Consumers	Oral	26 mg/kg bw/day	Chronic effects systemic		

PNEC

acetone

Route of exposure	Value	Value determination	Source
Drinking water	10.6 mg/l		
Marine water	1.06 mg/l		
Sea sediments	30.4 mg/kg of food		
Freshwater sediment	30.4 mg/kg of food		
Soil (agricultural)	29.5 mg/kg of dry substance of soil		
Microorganisms in sewage treatment	100 mg/l		

butan-1-ol

Route of exposure	Value	Value determination	Source
Drinking water	0.082 mg/l		
Marine water	0.0082 mg/l		
Water (intermittent release)	2.25 mg/l		
Freshwater sediment	0.178 mg/kg		
Sea sediments	0.0178 mg/kg		
Soil (agricultural)	0.015 mg/kg of dry substance of soil		

isopropanol

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

Follow the usual measures intended for health protection at work and especially for good ventilation.

Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Hand protection: Protective gloves resistant to the product. When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. 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.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	colourless
Odour	data not available
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	Highly flammable liquid and vapour.
Lower and upper explosion limit	data not available
Flash point	<23 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	non-polar/aprotic
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	data not available

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.

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.

acetone

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	5800 mg/kg		Rat (Rattus norvegicus)	
Inhalation (vapor)	LC_{50}	76000 mg/m³	4 hours	Rat (Rattus norvegicus)	
Dermal	LD_{50}	7400 mg/kg		Rabbit	
Dermal	LD_{50}	7400 mg/kg		Guinea-pig (Cavia aperea f. porcellus)	

butan-1-ol

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD_{50}	2292 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD_{50}	3430 mg/kg		Rabbit	
Inhalation	LC_{50}	17.76 mg/l	4 hours	Rat (Rattus norvegicus)	

isopropanol

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Inhalation	LC_{50}	>5 mg/l	4 hours	Rat	
Oral	LD_{50}	>2000 mg/kg		Rat	
Skin	LD_{50}	>2000 mg/kg		Rabbit	

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

acetone

Route of exposure	Result	Method	Exposure time	Species
Eye		OECD 405		

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

May cause drowsiness or dizziness.

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

acetone

Parameter	Value	Exposure time	Species	Environment
LC_{50}	8800 mg/l	48 hours	Invertebrates	Fresh water
LC_{50}	2100 mg/l	24 hours	Invertebrates	Salt water
LOEC	530 mg/l	8 days	Algae and other aquatic plants	Fresh water
NOEC	430 mg/l	96 hours	Algae and other aquatic plants	Salt water
LC_{50}	5540 mg/l	96 hours	Fish (Oncorhynchus mykiss)	Fresh water
LC_{50}	11000 mg/l	96 hours	Fish	Salt water

butan-1-ol

Parameter	Value	Exposure time	Species	Environment
LC_{50}	1376 mg/l	96 hours	Fish (Pimephales promelas)	
EC_{50}	1328 mg/l	48 hours	Daphnia (Daphnia magna)	
EC_{50}	4390 mg/l	17 hours	Microorganisms (Pseudomonas putida)	
EC_{50}	225 mg/l	96 hours	Algae and other aquatic plants (Pseudokirchneriella subcapitata)	
NOEC	4.1 mg/l	21 days	Daphnia (Daphnia magna)	
EC_{50}	18 mg/l	21 days	Daphnia (Daphnia magna)	

isopropanol

Parameter	Value	Exposure time	Species	Environment
LC_{50}	>100 mg/l	48 hours	Fish (Leuciscus idus)	
EC_{50}	>100 mg/l	48 hours	Daphnia (Daphnia magna)	
EC_{50}	>100 mg/l	72 hours	Algae (Scenedesmus subspicatus)	

Chronic toxicity

acetone

Parameter	Value	Exposure time	Species	Environment
NOEC	2212 mg/l	24 hours	Invertebrates (Daphnia magna)	

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.

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.

SECTION 14: Transport information

14.1. UN number or ID number

UN 1993

14.2. UN proper shipping name

FLAMMABLE LIQUID, N.O.S. (Acetone)

14.3. Transport hazard class(es)

3 Flammable liquids

14.4. Packing group

III - substances presenting low danger

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.	**30**
UN number	**1993**
Classification code	F1
Safety signs	3

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. Product contains reportable explosives precursors: Reporting of suspicious transactions, disappearances and thefts according to Regulation (EU) 2019/1148, Article 9.

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

Guidelines for safe handling used in the safety data sheet

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear eye protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a doctor.

A list of additional standard phrases used in the safety data sheet

EUH066	Repeated exposure may cause skin dryness or cracking.

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_{50}	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
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_{50}	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD_{50}	Lethal dose of a substance in which it can be expected death of 50% of the population
log Kow	Octanol-water partition coefficient
NOEC	No observed effect concentration
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

Acute Tox.	Acute toxicity
Eye Dam.	Serious eye damage
Flam. Liq.	Flammable liquid
Skin Irrit.	Skin irritation
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 21 December 2022. 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.