SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Topnik AC-81N

Creation date	13th September 2022		
Revision date		Version	5.0

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

1.1. Product identifier — Topnik AC-81N

Substance / mixture — mixture

UFI — NW10-304Y-P00Y-D52Q

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

Mixture's intended use

Flux agent.

Main intended use

PC-TEC-24 — Welding, soldering, and flux products

Mixture uses advised against

The product should not be used in ways other then 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

National Health Service (NHS) 111
National poisoning information centre Scotland, NHS 24: 111

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
Skin Sens. 1, H317
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

Causes serious eye irritation. May cause drowsiness or dizziness.

2.2. Label elements

Hazard pictogram

Signal word

Danger

Hazardous substances

propan-2-ol
Diethylammonium chloride

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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.
P233	Keep container tightly closed.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

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: 603-117-00-0 CAS: 67-63-0 EC: 200-661-7 Registration number: 01-2119457558-25-XXXX	propan-2-ol	80-95	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	1
CAS: 56-81-5 EC: 200-289-5	glycerol	<5		1
CAS: 5949-29-1 EC: 201-069-1 Registration number: 01-2119457026-42-XXXX	Acidum citricum	<5	Eye Irrit. 2, H319	
CAS: 660-68-4 EC: 211-541-9 Registration number: 01-2120765004-62-XXXX	Diethylammonium chloride	<5	Acute Tox. 4, H302+H332 Acute Tox. 3, H311 Skin Corr. 1A, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 STOT SE 3, H335	

Notes

1 Substance with a Union workplace exposure limit.

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. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

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

May cause drowsiness or dizziness.

If on skin

Not expected.

If in eyes

Causes serious eye irritation.

If swallowed

Irritation, nausea.

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
100 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.

United Kingdom **EH40/2005 Workplace exposure limits (Fourth Edition 2020)**

Substance name (component)	Type	Value
propan-2-ol (CAS: 67-63-0)	WEL 8h	999 mg/m³
	WEL 8h	400 ppm
	WEL 15min	1250 mg/m³
	WEL 15min	500 ppm

United Kingdom **EH40/2005 Workplace exposure limits (Second edition, published 2011)**

Substance name (component)	Type	Value
glycerol (CAS: 56-81-5)	WEL 8h	10 mg/m³

DNEL

propan-2-ol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Dermal	888 mg/kg	Systemic chronic effects		
Workers	Inhalation	500 mg/m³	Systemic chronic effects		
Consumers	Dermal	319 mg/kg	Systemic chronic effects		
Consumers	Inhalation	89 mg/m³	Systemic chronic effects		

propan-2-ol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Consumers	Oral	26 mg/kg	Systemic chronic effects		

PNEC

Acidum citricum

Route of exposure	Value	Value determination	Source
Drinking water	0.44 mg/l		
Seawater	0.044 mg/l		
Freshwater sediment	34.6 mg/kg of dry substance		
Freshwater sediment	3.46 mg/kg of dry substance		
Microorganisms in wastewater treatment plants	>1000 mg/l		
Soil (agricultural)	33.1 mg/kg of dry substance		

propan-2-ol

Route of exposure	Value	Value determination	Source
Drinking water	140.9 mg/l		
Seawater	140.9 mg/l		
Freshwater sediment	552 mg/kg		
Sea sediments	552 mg/kg		
Soil (agricultural)	28 mg/kg		

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. 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

Protective goggles.

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

Data 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	containing alcohol
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	80-105 °C
Flammability	Highly flammable liquid and vapour.
Lower and upper explosion limit	data not available
Flash point	data not available
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	
Density	1,03+/-0,05 g/cm³
Form	liquid

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. 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.

Acidum citricum

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		5400 mg/kg bw		Rat	
Dermal	LD_{50}		>2000 mg/kg bw		Rat	

Diethylammonium chloride

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}	OECD 401	540 mg/kg		Rat	
Inhalation	LC_{50}	OECD 403	17.3 mg/l	4 hour	Rat	
Dermal	LD_{50}		582 mg/kg		Rabbit	

glycerol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		12600-36000 mg/kg		Rat	

propan-2-ol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Sex
Oral	LD_{50}		5840 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD_{50}		13400 mg/kg		Rabbit	
Inhalation	LC_{50}		25000 mg/m³	4 hour	Rat (Rattus norvegicus)	

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Diethylammonium chloride

Route of exposure	Result	Exposure time	Species
	Corrosive		Rabbit

Serious eye damage/irritation

Causes serious eye irritation.

Diethylammonium chloride

Route of exposure	Result	Method	Exposure time	Species
Eye	Serious eye damage	OECD 405		Rabbit

Sensitization

Diethylammonium chloride

Route of exposure	Result	Method	Exposure time	Species	Sex
	Sensitizing	OECD 406		Guinea-pig	

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.

Diethylammonium chloride

Result	Method	Exposure time	Specific target organ	Species	Sex
Negative	OECD 474		Female reproductive organs	Mouse	F/M
Negative	OECD 471			Bacteria (Salmonella typhimurium)	

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.

Diethylammonium chloride

Route of exposure	Parameter	Value	Result	Species	Sex
			Slightly irritating		

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

Acidum citricum

Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		440 mg/l	48 hour	Fishes	
LC_{50}		1532 mg/l	24 hour	Daphnia magna	
NOEC		425 mg/l		Algae	

Diethylammonium chloride

Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}	OECD 203	>100 mg/l	96 hour	Fishes (Ozyrias latipes)	
EC_{50}	OECD 202	58.4 mg/l	48 hour	Daphnia (Daphnia magna)	
EC_{50}	OECD 201	48.3 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	
NOEC	OECD 201	15.4 mg/l	72 hour	Algae (Pseudokirchneriella subcapitata)	

glycerol

Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		>10000 mg/l		Fishes (Leuciscus idus)	
LC_{50}		>5000 mg/l	24 hour	Fishes (Carassius auratus)	
EU50		>10000 mg/l	24 hour	Daphnia magna	
IC_{50}		>10000 mg/l	7 day	Algae (Scenedesmus quadricauda)	
EU5		>10000 mg/l	16 hour	Bacteria (Pseudomonas putida)	

propan-2-ol

Parameter	Method	Value	Exposure time	Species	Environment
LC_{50}		9640 mg/l	96 hour	Fishes (Pimephales promelas)	
LC_{50}		>10000 mg/l	24 hour	Aquatic invertebrates (Daphnia magna)	
LOEC		1000 mg/l	8 day	Algae (Selenastrum capricornutum)	

12.2. Persistence and degradability

Biodegradability

Diethylammonium chloride

Parameter	Method	Value	Exposure time	Environment	Result
	OECD 301C	100 %	28 day		Easily biodegradable

glycerol

Parameter	Method	Value	Exposure time	Environment	Result
		>60 %	28 day		Easily biodegradable

Data not available.

12.3. Bioaccumulative potential

glycerol

Parameter	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow	-1.76				

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

not available

12.7. Other adverse effects

Data 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

Producer Responsibility Obligations (Packaging Waste) Regulations 2007 (S.I. No. 871 of 2007). 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

11 05 04 spent flux *

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

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SECTION 14: Transport information

14.1. UN number or ID number

UN 1219

14.2. UN proper shipping name

ISOPROPANOL

14.3. Transport hazard class(es)

3 Flammable liquids

14.4. Packing group

II - substances presenting medium 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.	**33**
UN number	**1219**
Classification code	F1
Safety signs	3

Air transport - ICAO/IATA

Packaging instructions passenger	353
Cargo packaging instructions	364

Marine transport - IMDG

EmS (emergency plan)	F-E, S-D
MFAG	305

SECTION 15: Regulatory information

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

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 as amended. Environmental Protection Act 1990 as amended. Clean Air Act 1993 as amended. Public health act 1961. 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

not available

SECTION 16: Other information

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

H225	Highly flammable liquid and vapour.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H302+H332	Harmful if swallowed or if inhaled.

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.
P233	Keep container tightly closed.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.

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
CE_{50}	Concentration of a substance when it is affected 50% of the population
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
IC_{50}	Concentration causing 50% blockade
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
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
LZO	Volatile organic compounds
MARPOL	International Convention for the Prevention of Pollution from Ships
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UE	European Union
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
vPvB	Very Persistent and very Bioaccumulative
WE	Identification code for each substance listed in EINECS

Acute Tox.	Acute toxicity
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
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.

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.