SAFETY DATA SHEET (SDS)

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

Product name: Thermal Putty

Model Nr: (TN-GN04-01, TN-GN04-02, TN-GN06-01, TN-GN06-02, TN-GN10-01, TN-GN10-02)

Recommended use: Electrical industry and electronics

Manufacturer: Gelid Solutions Ltd.

Address: Unit 602, 6/F, Tower A, Southmark, 11 Yip Hing Street, Wong Chuk Hang, Aberdeen, Hong Kong

Emergency Telephone: +852 97820922

Email: info@gelidsolutions.com

Revision Date: 27th Oct 2025

SECTION 2: Hazards identification

Classification according to Regulation (EC) No 1272/2008 (CLP):
The mixture is not classified as hazardous.
Label elements (CLP):

- **Signal word:** None
- **Hazard pictograms:** None
- **Hazard statements:** None
- **Precautionary statements:** Observe good industrial hygiene practices.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable – product is a mixture.

3.2 Mixtures

The mixture is classified as Eye Irritation Category 2 (H319) based on available data for the mixture as a whole.
The specific identity and/or exact percentage of composition has been withheld as a trade secret in accordance with Regulation (EC) No 1907/2006 (REACH) Article 31 and Annex II.

SECTION 4: First aid measures

Inhalation: Move to fresh air. Get medical attention if symptoms occur.

Skin contact: Wash skin with soap and water. Get medical attention if irritation persists.

Eye contact: Flush thoroughly with water. If irritation occurs, get medical assistance.

Ingestion: Rinse mouth thoroughly with water. Do not give anything by mouth to an unconscious person. Get medical attention if any discomfort occurs.

SECTION 5: Firefighting measures

General fire hazards	Combustible solid.
5.1. Extinguishing media	
Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None known.
5.2. Special hazards arising from the substance or mixture	None known.
5.3. Advice for firefighters	
Special protective equipment for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.
Special fire fighting Procedures	Move containers from fire area if you can do so without risk. In the event of fire, wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Avoid contact with skin and eyes
For emergency responders	Keep unnecessary personnel away.

6.2. Environmental precautions

Environmental manager must be informed of all major spillages.

6.3. Methods and material for containment and cleaning up

Avoid generation and spreading of dust.

Never return spills to original containers for re-use. Sweep up or gather material and place in appropriate container for disposal. Avoid dust formation.

SECTION 7: Handling and storage

Handle in accordance with good industrial hygiene practices. Store in a dry place away from heat, ignition sources and incompatible materials.

SECTION 8: Exposure controls/personal protection

Use personal protective equipment as required. Wear safety goggles, gloves and protective clothing if necessary. Provide adequate ventilation.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	MAK	5mg/m3	Respirable fraction.
		5mg/m3	Respirable Fume

		10mg/m3	Inhalable Fraction
	STEL	20mg/m3	Inhalable Fraction
		10mg/m3	Respirable Fume
		10mg/m3	Respirable fraction

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	1mg/m3	Respirable fraction.

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	10 mg/m3	Dust
		1,5 mg/m3	Respirable fraction.

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	0,1 mg/m3	Respirable dust.

Denmark. Exposure Limit Values

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TLV	5 mg/m3	Total
		2 mg/m3	Respirable.

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	4mg/m3	Respirable dust.
		10 mg/m3	Total Dust

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value

Aluminium oxide (CAS 1344-28-1)	VME	10mg/m3

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	4mg/m3	Inhalable dust
		1,5mg/m3	Respirable dust.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	AGW	3mg/m3	Respirable fraction
		10mg/m3	Inhalable Fraction

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	5mg/m3	Inhalable
		10mg/m3	Respirable.

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	6mg/m3	Respirable.

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
Aluminium oxide (CAS 1344-28-1)	TWA	10mg/m3

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	4mg/m3	Respirable dust
		10mg/m3	Total inhalable dust

Italy. OELs

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	1mg/m3	Respirable fraction.

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	6mg/m3	Decomposition aerosol
		4mg/m3	

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements (Hygiene Norm HN 23:2007)

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	5mg/m3	Inhalable fraction
		2mg/m3	Respirable fraction

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
Aluminium oxide (CAS 1344-28-1)	TLV	10mg/m3

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	2,5mg/m3	Fume, total dust
		1,2 mg/m3	Respirable dust and/or fume.

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value

Aluminium oxide (CAS 1344-28-1)	TWA	10mg/m3

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	STEL	5mg/m3	Aerosol
		1,2ppm	Aerosol
	TWA	2mg/m3	Aerosol
		0,5ppm	Aerosol

Slovakia. OELs. Decree of the government of the Slovak Republic concerning protection of health in work with chemical agents

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	4mg/m3	Inhalable fraction
		1,5mg/m3	Respirable fraction.
		0,1mg/m3	

Spain. Occupational Exposure Limits

Components	Type	Value
Aluminium oxide (CAS 1344-28-1)	TWA	10 mg/m3

Sweden. Occupational Exposure Limit Values

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	5mg/m3	Total dust
		2mg/m3	Respirable dust

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1	STEL	24mg/m3	Fume and respirable dust.
	TWA	3mg/m3	Respirable dust.

	3mg/m3	Fume and respirable dust.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Aluminium oxide (CAS 1344-28-1)	TWA	4mg/m3	Respirable dust.
		10mg/m3	Inhalable dust.

Biological limit values

Germany. TRGS 903, BAT List (Biological Limit Values)

Components	Value	Determinant	Specimen	Sampling time
Aluminium oxide (CAS 1344-28-1)	200 µg/l	Aluminium	Urine	*

* - For sampling details, please see the source document.

Recommended monitoring Procedures	Follow standard monitoring procedures.
Derived no-effect level (DNEL)	Not available.
Predicted no effect concentrations (PNECs)	Not available.

8.2. Exposure controls

Appropriate engineering controls.	No exposure to these materials is expected during normal use/handling of this product. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Individual protection measures, such as personal protective equipment

General information	Use personal protective equipment as required. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	Risk of contact: Wear approved safety goggles.

Skin protection

- Hand protection	Use suitable protective gloves if risk of skin contact. Suitable gloves can be recommended by the glove supplier.
- Other	If prolonged or repeated contact is likely, chemical resistant clothing is recommended.
Respiratory protection	In case of inadequate ventilation, use respiratory protection. Use respiratory equipment with combination filter, type A2/P2.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.
Environmental exposure controls	Environmental manager must be informed of all major releases

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Solid.
Form	Solid.
Colour	Grey/Pink/green.
Odour	Slight.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	None
Flammability limit – upper (%)	None

Vapour pressure	Not available
Vapour density	Not available
Relative density	1,5
Solubility(ies)	Insoluble in water
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not applicable
Explosive	Not explosive
Oxidizing	Not available

9.2 Other Information

No relevant additional information available

SECTION 10: Stability and reactivity

The product is stable under normal conditions. Avoid strong oxidising agents.

10.1. Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Stable at normal conditions.
10.3. Possibility of hazardous reactions occur.	Hazardous polymerisation does not
10.4. Conditions to avoid	None known.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	Carbon oxides. Silicon dioxide.

SECTION 11: Toxicological information

Under normal conditions of use, this product does not pose a risk to health. Prolonged skin contact may cause temporary irritation.

SECTION 12: Ecological information

The product is not classified as environmentally hazardous. Avoid uncontrolled releases into the environment.

SECTION 13: Disposal considerations

Dispose of contents/container in accordance with local/regional/national/international regulations.

SECTION 14: Transport information

Not regulated as dangerous goods by ADR, RID, ADN, IATA, or IMDG.

SECTION 15: Regulatory information

This Safety Data Sheet complies with the requirements of:

- Regulation (EC) No 1272/2008 (CLP) on classification, labelling and packaging of substances and mixtures.

- Regulation (EC) No 1907/2006 (REACH).

SVHC: The mixture does not contain substances of very high concern (SVHC) above 0.1% at the SDS issue date.

SECTION 16: Other information

Training information: Follow training instructions when handling this material.

Disclaimer: This Safety Data Sheet was prepared according to CLP and REACH requirements.