according to 29 CFR 1910.1200(g)

Thermal paste TG2500

Revision date: 01/21/2025 Product code: LIS-004_US Page 1 of 9

1. Identification

Product identifier

Thermal paste TG2500

Further trade names

use in:

BK032 be quiet! Shadow Rock Slim 2
BK003 be quiet! Shadow Rock TF 2
BK002 be quiet! Shadow Rock LP
BK033 be quiet! Pure Rock 2 FX
BK007 be quiet! Pure Rock 2 Black
BK006 be quiet! Pure Rock 2
BK030 be quiet! Pure Rock Slim 2
BK034 be quiet! Pure Rock LP

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Thermal paste

The product is intended for consumer use.

Commercial users

Uses advised against

The product is only to be used for the intended application.

Details of the supplier of the safety data sheet

Manufacturer

Company name: Listan GmbH

Street: Wilhelm-Bergner-Straße 11c

Place: D-21509 Glinde
Telephone: +49 (0)40/7367686-0
E-mail (Contact person): service@bequiet.com
Internet: https://www.bequiet.com/

Supplier

Company name: Listan USA Inc.

Street: 663 Brea Canyon Rd. #1
Place: USA-CA 91789 Walnut
Telephone: +1 833 423 7843
E-mail: service.na@bequiet.com

Emergency phone number: +1 833 423 7843 Office hours only.

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

This mixture is not classified as hazardous in accordance with Regulation 29 CFR 1910.1200(d).

Label elements

Hazards not otherwise classified

Special danger of slipping by leaking/spilling product.

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

according to 29 CFR 1910.1200(g)

Thermal paste TG2500

Revision date: 01/21/2025 Product code: LIS-004_US Page 2 of 9

Chemical characterization

The product does not contain dangerous substances to be mentioned in section 3.

Relevant ingredients

none (according to 29 CFR 1910.1200(g))

4. First-aid measures

Description of first aid measures

General information

First aider: Pay attention to self-protection!

After inhalation

Provide fresh air. Remove affected persons from the danger zone. In case of respiratory tract irritation, consult a physician.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing. In case of skin irritation, consult a physician.

After contact with eyes

Remove contact lenses. In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth, spit liquid again. Do NOT induce vomiting. Let water be drunken in little sips (dilution effect). Seek medical attention if problems persist.

Most important symptoms and effects, both acute and delayed

No known symptoms to date.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Carbon dioxide (CO2). Foam. Extinguishing powder. Water fog.

Unsuitable extinguishing media

High power water jet.

Specific hazards arising from the chemical

In case of fire may be liberated: Irritating/poisonous gasses and vapours.

Special protective equipment and precautions for fire-fighters

If necessary use self-contained breathing apparatus and protective clothing.

Additional information

Do not allow to enter into surface water or drains. Use water spray/stream to protect personnel and to cool endangered containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General advice

Consider the usual precautions for handling chemicals. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

according to 29 CFR 1910.1200(g)

Thermal paste TG2500

Revision date: 01/21/2025 Product code: LIS-004_US Page 3 of 9

Methods and material for containment and cleaning up

For containment

Take up mechanically, placing in appropriate containers for disposal.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Cleaning agent: Isopropanol

Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink.

Further information on handling

When using do not eat, drink, smoke, sniff.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep only in the original container.

Hints on joint storage

Keep away from: acid. Base. Protect from direct sunlight.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No	Substance	ppm	mg/m³		Category	Origin
7429-90-5	Aluminum (total)	-	10		TWA (8 h)	REL
1314-13-2	Zinc oxide (Dust)	-	5	1	TWA (8 h)	REL
		-	C 15	1	Ceiling	REL
1314-13-2	Zinc oxide (Fume)	-	5	1	TWA (8 h)	REL
		-	10	l	STEL (15 min)	REL
1314-13-2	Zinc oxide fume	-	5	1	TWA (8 h)	PEL
1314-13-2	Zinc oxide Respirable fraction	-	5	l	TWA (8 h)	PEL
1314-13-2	Zinc oxide Total dust	-	15		TWA (8 h)	PEL

Additional advice on limit values

Currently there are no further exposure limits available.

Exposure controls

according to 29 CFR 1910.1200(g)

Thermal paste TG2500

Revision date: 01/21/2025 Product code: LIS-004_US Page 4 of 9

Appropriate engineering controls

Provide for sufficient ventilation and punctiform suction at critical points.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly fitting safety goggles.

Standards: EN ISO 16321-1 or 29 CFR 1910.133

Hand protection

The selection of appropriate hand protection should be based on an evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified, as outlined in 29 CFR 1910.138(a).

Protect skin by using skin protective cream. In case of prolonged or frequently repeated skin contact: Wear chemically resistant gloves.

Suitable material: NBR (Nitrile rubber).

penetration time (maximum wearing period): >480 minutes

Layer thickness: 0,11 mm

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Protective clothing.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

exceeding exposure limit values

Suitable respiratory protective equipment: half-mask with filter EN 149 or 29 CFR 1910.134 .

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state: paste-like (liquid)

Color: gray
Odor: odorless

Melting point/freezing point: no data available

Boiling point or initial boiling point and >250 °C

boiling range:

Flammability: no data available no data available Lower explosion limits: no data available Upper explosion limits: no data available Flash point: Auto-ignition temperature: no data available Decomposition temperature: no data available pH-Value: no data available no data available Viscosity / kinematic: Water solubility: no data available

Solubility in other solvents

no data available

Dissolution rate:

Partition coefficient n-octanol/water:

Dispersion stability:

Vapor pressure:

Density:

no data available
no data available
no data available
2,5 g/cm³

according to 29 CFR 1910.1200(g)

Thermal paste TG2500

Revision date: 01/21/2025 Product code: LIS-004_US Page 5 of 9

Relative density:

Bulk density:

no data available
no data available
Relative vapour density:

no data available
Particle characteristics:

no data available

Other information

Information with regard to physical hazard classes

Explosive properties no data available Self-ignition temperature

Solid: no data available
Gas: no data available

Oxidizing properties no data available

Other safety characteristics

Solvent separation test:

Solvent content:

Sublimation point:

Softening point:

Viscosity / dynamic:

no data available
no data available
no data available
no data available

Further Information no data available

10. Stability and reactivity

Reactivity

No dangerous reactivity under regular conditions.

Chemical stability

The product is stable under regular conditions.

Possibility of hazardous reactions

No dangerous reactions to be expected if used properly.

Conditions to avoid

No data available

Incompatible materials

Strong bases. Strong acid.

Hazardous decomposition products

In case of fire may be liberated: Irritating/poisonous gasses and vapours.

11. Toxicological information

Information on toxicological effects

Toxicocinetics, metabolism and distribution

No data available

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

according to 29 CFR 1910.1200(g)

Thermal paste TG2500

Revision date: 01/21/2025 Product code: LIS-004_US Page 6 of 9

Sensitizing effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): No ingredient of this mixture is listed.

Carcinogenicity (NTP): No ingredient of this mixture is listed.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

12. Ecological information

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

The aforementioned statement applies to substances contained in the product with a minimum content of 0.1%.

Other adverse effects

No data available.

13. Disposal considerations

Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains.

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.

Non-contaminated packages may be recycled.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

Recommended cleaning agent: Water (with cleaning agent)

14. Transport information

U.S. DOT 49 CFR 172.101

according to 29 CFR 1910.1200(g)

Thermal paste TG2500

Revision date: 01/21/2025 Product code: LIS-004_US Page 7 of 9

UN number or ID number: UN 3082

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc

oxide)

Transport hazard class(es):9Packing group:IIIHazard label:9



Marine transport (IMDG)

UN number or ID number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc

oxide)

Transport hazard class(es):

Packing group:

Hazard label:

9



Special Provisions: 274 335 969

Limited quantity: 5 L
Excepted quantity: E1
EmS: F-A. S-F

Air transport (ICAO-TI/IATA-DGR)

UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (zinc

oxide)

Transport hazard class(es):

Packing group:
Hazard label:

9



Special Provisions: A97 A158 A197 A215

Limited quantity Passenger: 30 kg G
Passenger LQ: Y964
Excepted quantity: E1

IATA-packing instructions - Passenger: 964
IATA-max. quantity - Passenger: 450 L
IATA-packing instructions - Cargo: 964
IATA-max. quantity - Cargo: 450 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



Danger releasing substance: zinc oxide

Special precautions for user

No special precautions known.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

not applicable

according to 29 CFR 1910.1200(g)

Thermal paste TG2500

Revision date: 01/21/2025 Product code: LIS-004_US Page 8 of 9

15. Regulatory information

U.S. Regulations

National Inventory TSCA

All components are listed in the TSCA inventory or exempted.

National regulatory information

SARA Section 311/312 Hazards:

aluminium powder (pyrophoric) (7429-90-5): Fire hazard, Reactive

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

This product can not expose you to chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Observe in addition any national regulations!

This mixture is classified as not hazardous according to Regulation 29 CFR Part 1910.1200.

16. Other information

Hazardous Materials Identification System (HMIS)

Health:	0
Flammability:	0
Physical Hazard:	0
Personal Protection:	В

NFPA Hazard Ratings

Health:	0
Flammability:	0
Reactivity:	0
Unique Hazard:	_



 Revision date:
 01/21/2025

 Revision No:
 1,00

 Version 1,00 - 08.11.2024 - first creation



according to 29 CFR 1910.1200(g)

Thermal paste TG2500

Revision date: 01/21/2025 Product code: LIS-004 US Page 9 of 9

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

BImSchV (Fed.Imm.Prot.Act): Directive on the Implementation of the Federal Immission Protection Act

CAS: Chemical Abstracts Service

DIN: Norm of the Deutsche Institut für Normung (German Institute for Standardization)

EC: Effective Concentration

EG: European Community (Europäische Gemeinschaft)

EN: European Norm

IATA: International Air Transport Association

IBC Code: International Code for the Construction and Equipment of ships carrying Dangerous Chemicals in

ICAO: International Civil Aviation Organization

IMDG: International Maritime Code for Dangerous Goods ISO: Norm of the International Standards Organization

CLP: Classification, Labeling, Packaging

IUCLID: International Uniform Chemical Information Database

LC: Lethal concentration

I D: Lethal dose

log Kow: Octanol/water partition coefficient

MARPOL: Maritime Pollution Convention = Convention for the Prevention of Maritime Pollution from Ships

OECD: Organisation for Economic Co-operation and Development

PBT: Persistent, bio-cumulative, toxic

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail

TRGS: Technische Regeln für Gefahrstoffe

UN: United Nations

VOC: Volatile Organic Compounds

vPvB: very persistent and very bio-cumulative

VwVwS: Administrative Regulation for Water Pollutants

WGK: German Water Hazard Class

GHS: Globally Harmonized System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

TLV: Threshold Limiting Value STOT: Specific Target Organ Toxicity

AwSV: Ordinance on Installations for Handling Substances Hazardous to Water

The information given in this safety data sheet is to describe the product's safety regulations. It is not for quaranteeing certain characteristics and is based on today's knowledge. The safety data sheet was generated upon information of pre-suppliers by:

asseso AG, Ottostraße 1, 63741, Aschaffenburg, Germany

Phone: +49 (0)6021 - 1 50 86-0, Fax: +49 (0)6021 - 1 50 86-77, E-Mail: eu-sds@asseso.eu, www.asseso.eu

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)