SAFETY DATA SHEET

Product Name: **THERMAL HERO QUANTUM Thermal Paste for HIGH-PERFORMANCE Applications TH-501701-US**

Revision number: 001 Date: 30/10/2024

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Trade name: THERMAL HERO QUANTUM Thermal Paste for HIGH-PERFORMANCE Applications TH-501701-US

Brand: THERMAL HERO

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

Relevant identified uses: Thermal compound application.

Uses advised against: All other uses.

1.3 Details of the supplier of the Safety Data Sheet

IPROJEX GmbH.
Hohe Bleichen 12 / 20354 Hamburg,
Germany

Phone: +49 40 4230 76 77
E-mail: support@thermalhero.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

This product is classified as non-hazardous according to OSHA Hazardous Communication Standard 29 CFR 1910.1200.

2.2 Label elements

This product does not require specific labelling according to OSHA Hazardous Communication Standard 29 CFR 1910.1200.

2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

This product does not contain hazardous chemicals according to the OSHA Hazardous Communication Standard 29 CFR 1910.1200.

Ingredients:

Name	CAS No.	GHS classification	% (w/v)
Zinc oxide	1314-13-2	Not classified.	Proprietary
Aluminium	1344-28-1	Not classified.	Proprietary
Polydimethylsiloxane	63148-62-9	Not classified.	Proprietary

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Following inhalation: Remove to fresh air, keep warm and quiet, give oxygen if breathing is difficult. Seek immediate medical attention.

Following skin contact: Remove contaminated clothing, brush material off skin, wash affected area with soap and water. Seek medical attention if irritation develops or persists.

Following eye contact: Flush eyes with lukewarm water, including under upper and lower eyelids, for at least 15 minutes. Seek medical attention if irritation develops or persists.

Following ingestion: Rinse mouth immediately and drink plenty of water. Call a physician immediately. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

Protection of first aider: Not applicable.

4.2 Most important symptoms and effects

Symptoms: The known symptoms and effects are described in section 2.2 of this SDS.

Risks: Untreated symptoms may result in additional health risks.

4.3 Indication of any immediate medical and special treatment

The physician may contact the national poison centre for advice.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable extinguishing media: No data available.

5.2 Specific hazards arising from mixture

If gases/oxides form, use protective equipment/breathing apparatus.

5.3 Advice for fire fighters

Special protective equipment for firefighters:
As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

5.4 Other information
No other information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 NOTES FOR NON-EMERGENCY PERSONNEL: Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

6.2 ENVIRONMENTAL PRECAUTIONS: Keep away from drains, surface and ground water. Danger of explosion.

Notes for those trained to participate in an emergency:

6.3 ACCIDENTAL RELEASE MEASURES: Covering of drains. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Accord with the putting and clicking of standard management of the storage. Avoid spillage. Prevent any unnecessary contact with other chemicals. Handling unpacked THERMAL HERO QUANTUM may alter its quality and degree of purity.

7.2 Conditions for safe storage, including any incompatibilities

Storage Conditions:	Avoid High Temperature at place of storage. Not in glass containers, as with solidifying the liquid has an enlargement of the volume of around approx. 0,3%, which may cause an inner pressure within the glass. Plastics (PE, PP) are well suitable as container material.
Incompatible materials:	See section 10.

7.3 Specific end uses
See section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
No data available.

8.2 Exposure controls

Engineering controls:

None under normal use conditions. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective equipment:

Hand:	Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.
Body protection:	Appropriate protective clothing should be worn to prevent skin contact.
Eye:	Use safety goggle with side protection.
Respiratory:	P3 respiratory protection in an emergency producing oxide fumes.
Other measures:	No statement available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Paste
Color:	Grey
Odor:	Odorless
Operating Temperature:	-50 ~ 300 °C
Application Temp.:	20 ~ 50 °C
Electrical Conductive:	No
Evaporation rate:	No data available
Flammability:	None
Density:	3,5g/cm^3
Viscosity:	230 pas

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
The product amalgamates with metals on the surface like copper, tin, lead,
zinc, gold and silver jewellery, particularly also with light metals on the surface, especially if these are free of oxides. If necessary, the product has to be tested for reactions to materials and chemical substances for a specific application.

10.2 Chemical stability
Stable under ambient conditions.

10.3 Possibility of hazardous reactions
None.

10.4 Conditions to avoid
With aluminum and with following addition of water exothermically.

10.5 Incompatible materials

Halogeneous one, hydrogen peroxide/hydrogen chloride, chlorine, bromine, aluminum.

10.6 Hazardous decomposition products
None if substance is used properly.

SECTION 11: TOXICOLOGICAL INFORMATION

General information:
This product does not contain known human carcinogens.

11.1 Information on toxicological effects

Acute Toxicity:
The metal alloy has not been tested, the single components of the alloy are below the limits of acute toxicity even if a full resorption is assumed.

Skin corrosion/irritation:
With frequent skin contact skin defatting is possible.

Serious eye damage/irritation:
Splashes in the eyes may cause irritations.

Respiratory or skin sensitization:
No statements available for any of the ingredients.

Germ cell mutagenicity:
No statements available for any of the ingredients.

Carcinogenicity:
This product does not contain known human carcinogens.

Reproductive toxicity:
No statements available for any of the ingredients.

STOT – single exposure:
No statements available for any of the ingredients.

STOT – repeated exposure:
No statements available for any of the ingredients.

Aspiration hazard:
No statements available for any of the ingredients.

Likely route(s) of exposure:
Skin exposure and eye exposure are the most likely to occur. Accidental ingestion is also possible.

SECTION 12: ECOLOGICAL INFORMATION

General information:

No statements available for any of the ingredients

12.1 Toxicity
No statements available for any of the ingredients.

12.2 Persistence and degradability

Physical- and photochemical elimination:
No statements available for any of the ingredients.

Biodegradation:
No statements available for any of the ingredients.

12.3 Bioaccumulative potential
No statements available for any of the ingredients.

12.4 Mobility in soil

Known/Predicted environmental distribution:
No statements available for any of the ingredients.

Surface tension:
No statements available for any of the ingredients.

Adsorption/Desorption:
No statements available for any of the ingredients.

12.5 Results of PBT and vPvB assessment
This product does not contain components which are considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects
No statements available for any of the ingredients.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product:
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Waste material:
Dispose according to Federal, State, Provincial and Local regulations.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number
ADR/RID/IDMG/IATA: Non-regulated

14.2 UN proper shipping name
ADR/RID/IDMG/IATA: Non-regulated

14.3 Transport hazard class(es)
ADR/RID/IDMG/IATA: Non-regulated

14.4 Packing group
ADR/RID/IDMG/IATA: Non-regulated

14.5 Environmental hazards
ADR/RID/IDMG/IATA: Non-regulated

14.6 Special precautions for user
No statements available.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable, as product is not shipped in bulk.

SECTION 15: REGULATORY INFORMATION

International Inventories
TSCA: Complies
DSL: All components are listed either on the DSL or NDSL.

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List.

US Federal Regulations
SARA 313: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Acute health hazard: No
Chronic Health Hazard: No
Fire hazard: No
Sudden release of pressure hazard: No
Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this

material.

U.S. State Regulations
California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canada
WHMIS Hazard Class
Not determined.

SECTION 16: OTHER INFORMATION

Further information
The information presented in this Safety Data Sheet (SDS) is accurate to the best of our knowledge at the date of publication. The information given within the SDS is meant solely as a guide for safe handling, use, transportation, processing, storage, release and disposal. In no means can the information within the SDS be considered as a warranty or specification for quality.