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

### 1.1. Product identifier

Product name: **Qoltec thermal grease 4.63W/mK (models: 51650, 51651, 51652, 51653, 51654)**

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

Identified uses: Heatsink compound

Uses advised against: undefined

### 1.3. Details of the supplier of the safety data sheet

NTEC sp. z o.o.
ul. Chorzowska 44b,
44-100 Gliwice, Poland
fax.: +48 32 231 16 82
tel.: +48 32 231 16 82
e-mail: sales@ntec.pl
www.ntec.pl

Supplier: Transfer Multisort Elektronik Ltd.
Coleshill, Birmingham Coleshill House Suite 1C, 1 Station Road
+44 1675790026 e-mail: office@tme-uk.eu

### 1.4. Emergency telephone number

European emergency number: 112

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 (CLP)**
The product is not classified as hazardous according to Regulation (EC) 1272/2008

### 2.2. Label elements

Labeling according to Regulation (EC) No 1272/2008

**Signal word**

**Pictograms**

**Hazard statements**

None

**Precautionary statements**

**General**
None
**Prevention**
None
**Response**
None
**Storage**
None
**Removal**
None

### 2.3. Other hazards

Criteria for PBT or vPvB in accordance with Annex XIII – no data.

Inhalation of fumes may result in metal fume fever, a flu -like illness with symptoms of metallic taste, fever and chills, aches, chest tightness, and cough.

## SECTION 3: Composition/information on ingredients

**3.1. Substances -** not applicable

**3.2. Mixtures**

| Name of substance | Identifier | Classification 1272/2008 | | % weight |
|---|---|---|---|---|
| Magnesium acetylide | Index: --<br>CAS: 12122-46-2<br>EC: -- | -- | -- | 45 |
| Poly(dimethylsilocane) | Index: --<br>CAS: 63148-62-9<br>EC: -- | -- | -- | 10 |
| Aluminum oxide | Index: --<br>CAS: 1344-28-1<br>EC: 215-691-6 | -- | -- | 33 |
| Magnesium oxide | Index: --<br>CAS: 1309-48-4<br>EC: 215-171-9 | -- | -- | 12 |

**Notes**

The full meaning of the risk phrases H included in the section 16

[1] Specific concentration limits, ATE

[2] Substance for which there are national occupational exposure limit values

[3] Substance with a Union workplace exposure limit

[4] SVHC: substances included in the list established in accordance with Article 59 (1)

## SECTION 4: First aid measures

**4.1. Description of first aid measures**

**Inhalation**

Remove person to fresh air and keep comfortable for breathing.
Ensure warmth and calm.
Provide medical assistance if necessary.

**Ingestion**

Do not induce vomiting. Rinse mouth.
If unconscious – do not give the person anything to swallow.
Immediately provide medical assistance. Transport the injured person to a hospital if necessary.

**Eye contact**

Remove contact lenses.
Immediately rinse contaminated eyes with lukewarm water for at least 15 minutes with the eyelids rolled back.
Avoid strong water stream - risk of cornea damage.
Provide medical assistance if necessary.

**Skin contact**

Remove contaminated clothing immediately.
Clean contaminated skin, wash with plenty of water, then wash with water and mild soap.

If skin irritation persists, consult a doctor.

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

**Eye contact**: Direct contact may cause mild irritation.

**Ingestion**: Low ingestion hazard in normal use. Repeated ingestion or swallowing large amounts may injure internally.

**4.3. Indication of any immediate medical attention and special treatment needed**

Symptomatic treatment.

First aid supplies should be available on the workplace premises.

## SECTION 5: Firefighting measures

**5.1. Extinguishing media**

**Suitable extinguishing media**

On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide ($CO_2$), dry chemical or water spray. Water can be used to cool fire exposed containers .

**Unsuitable extinguishing media**

Do not direct dense jets of water onto the surface of a burning product.

**5.2. Special hazards arising from the substance or mixture**

**Combustion products**

Toxic thermal decomposition products silicon dioxide, metal oxides, formaldehyde, as well as carbon monoxide and carbon dioxide ($CO_x$), may be generated during combustion.

**Explosive mixtures**

Not applicable

**5.3. Advice for firefighters**

Use standard firefighting methods for extinguishing chemical fires.

Use water to cool containers exposed to high temperatures, and if possible, remove them from the area affected.

Use water spray jets to disperse vapours.

**Fire-fighter protective equipment**

Full personal protective equipment.

Self-contained breathing equipment.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Avoid contact with eyes and skin. Wear appropriate protective equipment. Remove all sources of ignition. Keep all persons not equipped with personal protection equipment away.

In case of a discharge of a significant volume of the mixture, warn its users and order all bystanders to leave the contaminated area.

In case of fire and/or explosion do not breathe fumes.

**6.2. Environmental precautions**

Prevent environmental contamination.

Protect drains.

In case of serious contamination of soil, watercourse or sewage system, notify the appropriate authorities.

**6.3. Methods and material for containment and cleaning up**

Secure any damaged packaging.

Ventilate the area affected and avoid inhaling vapours.

If diked material can be pumped, store recovered material in appropriate container.

Wipe up or scrape up and contain for salvage or disposal. Collect mechanically and with non-combustible absorbent material (e.g. sand, earth, diatomaceous earth, vermiculite).

Place all contaminated mass collected in a substitute container and send it for disposal in accordance with the local regulations.

Final cleaning may require use of steam, solvents or detergents. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur.

**6.4. Reference to other sections**

See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

**Recommendations for handling the mixture**

Provide adequate ventilation.
Avoid contact with eyes and skin.
Avoid inhaling product vapours/ aerosol.
Avoid generating dust (if dry)
Avoid inhaling dust.

**General industrial health and safety regulations**

Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Replace contaminated clothing.
Wash contaminated clothing before reusing.

**Guidance on fire and explosion prevention**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage rooms must be ventilated.
Keep container tightly closed.
Store in a dry and cool place.
Keep only in the original container.
Keep away from sunlight, as well as heat and ignition sources.
Do not store together with foodstuffs and animal feed.
Protect from frost.
Do not handle until all safety precautions have been read and understood.

**7.3. Specific end use(s)**

No data available

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

**Ingredients with limit values that require monitoring at the workplace**

| Substance | CAS | Limit values | | | | Comments |
|---|---|---|---|---|---|---|
| | | Long-term | | Short-term | | |
| | | ppm | mg/m$^3$ | ppm | mg/m$^3$ | |
| Silicon | 7440-21-3 | | | | | - |
| inhalable dust | | - | 10 | - | - | |
| respirable dust | | - | 4 | - | - | |
| Magnesium oxide (as Mg) | 1309-48-4 | | | | | - |
| inhalable dust | | - | 10 | - | - | |
| fume and respirable dust | | - | 4 | - | - | |
| Aluminium oxides | 1344-28-1 | | | | | - |
| inhalable dust | | - | 10 | - | - | |

| | | | | |
|---|---|---|---|---|
| respirable dust | - | 4 | - | - |

Additional information:
TWA 15 mg/m3
Total dust, 5 mg/m3 respirable fraction. ACGIH TLV: TWA 10 mg/m3 total dust.

### 8.2. Exposure controls

**Appropriate engineering controls**
Workstations and storage rooms must be well ventilated to keep the dust/vapour concentrations in the air below their limit values.
**Individual protection measures**



**Eye or face protection**
Use safety goggles compliant with the EN 166 standard.
Eye wash bottle with clean water or eye washers must be provided near the work area.
**Skin protection**



**Hand protection**
In case of danger, use chemical-resistant protective gloves compliant with the EN 374 standard.
Select glove material based on breakthrough time, rate of penetration and degradation.
It is recommended to change gloves regularly and immediately replace them if they have any signs of wear, damage (tears, holes) or their appearance changes (colour, flexibility, shape).
Apply protective cream on unprotected body parts.
**Body protection**
Suitable protective clothing
The type of protective equipment must be selected based on the quantity and concentration of hazardous substances in the given work environment.
**Respiratory protection**
In case of hazard due to the mixture vapours levels exceeding allowable levels in the air (e.g. due to ventilation failure), wear respiratory protection equipment. Adapt personal protective equipment appropriate to the activities performed and meeting all quality requirements.
**Environmental exposure controls**
Do not discharge into drains and groundwater.
**General health and safety guidelines**
Follow good personal hygiene practices. Wash after handling, especially before eating, drinking or smoking.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | |
|---|---|
| **Physical state** | Grease |
| **Colour** | Grey |
| **Odour** | Odorless |
| **Melting point/freezing point** | No data available |
| **Boiling point or initial boiling point and boiling range** | No data available |
| **Flammability** | No data available |
| **Lower and upper explosion limit** | No data available |

| | | |
|---|---|---|
| | **Flash point** | 305 °C (Seta Closed Cup) |
| | **Auto-ignition temperature** | No data available |
| | **Decomposition temperature** | No data available |
| | **pH** | No data available |
| | **Kinematic viscosity** | No data available |
| | **Solubility** | not soluble |
| | **Partition coefficient n-octanol/water (log value)** | No data available |
| | **Vapour pressure** | No data available |
| | **Density and/or relative density** | No data available |
| | **Relative vapour density** | No data available |
| | **Particle characteristics** | No data available |
| **9.2.** | **Other information** | |
| | **Information with regard to physical hazard classes** | No data available |
| | **Other safety characteristics** | |
| | **Specific Gravity:** | 3.25 |

## SECTION 10: Stability and reactivity

**10.1. Reactivity**

The mixture is not chemically reactive if stored and used under proper conditions.

**10.2. Chemical stability**

The mixture is chemically stable if stored and used under proper conditions.

**10.3. Possibility of hazardous reactions**

Hazardous Polymerization: Hazardous polymerization will not occur.

**10.4. Conditions to avoid**

Can react with strong oxidising agents.

**10.5. Incompatible materials**

No data available

**10.6. Hazardous decomposition products**

Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Metal oxides. Formaldehyde.

## SECTION 11: Toxicological information

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

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

**Skin corrosion/irritation**

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

**Serious eye damage/irritation**

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

**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.

**STOT-single exposure**

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

**STOT-repeated exposure**
Based on available data, the classification criteria are not met.
**Aspiration hazard**
Based on available data, the classification criteria are not met.

**11.2. Information on other hazards**

**Endocrine disrupting properties**
No data
**Other information**
**Eyes**: Direct contact may cause mild irritation.
**Skin**: No significant irritation expected from a single short-term exposure.
**Inhalation**: No significant effects expected from a single short-term exposure.
**Ingestion**: Low ingestion hazard in normal use.
**Chronic**
**Skin**: Repeated or prolonged exposure may cause irritation.
**Inhalation**: No known applicable information.
**Ingestion**: Repeated ingestion or swallowing large amounts may injure internally.
Inhalation of fumes may result in metal fume fever, a flu-like illness with symptoms of metallic taste, fever and chills, aches, chest tightness, and cough.

## SECTION 12: Ecological information

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

**12.2. Persistence and degradability**
No data

**12.3. Bioaccumulative potential**
Solid material, insoluble in water.

**12.4. Mobility in soil**
No data

**12.5. Results of PBT and vPvB assessment**
This mixture does not contain substances that meet the criteria for PBT or vPvB in accordance with Annex XIII.

**12.6. Endocrine disrupting properties**
No data

**12.7. Other adverse effects**
No data

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**
Dispose of in accordance with current regulations.
Hand over any used packaging to an authorised company for disposal or reuse.
Do not store along with municipal wastes.
Do not discharge into drains, sewage systems or surface waters.
Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: Transport information

| | | |
|---|---|---|
| **14.1.** | **UN number or ID number** | not applicable |
| **14.2.** | **UN proper shipping name** | not applicable |
| **14.3.** | **Transport hazard class(es)** | not applicable |

| | | |
|---|---|---|
| | Label no. : | not applicable |
| **14.4.** | **Packing group** | not applicable |
| **14.5.** | **Environmental hazards** | No |
| **14.6.** | **Special precautions for user** | not applicable |
| **14.7.** | **Maritime transport in bulk according to IMO instruments** | not applicable |

**Overland transport**
**ADR**

| | |
|---|---|
| Limited quantities (LQ) | not applicable |
| Transport category | not applicable |
| Tunnel restriction code | not applicable |

## SECTION 15: Regulatory information

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

- Regulation (EC) No 1272/2008 (CLP) of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (REACH).
- REGULATION (EC) No 1907/2006 OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a 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.
- COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

### 15.2. Chemical safety assessment

Chemical safety assessment has been carried out

## SECTION 16: Other information

**Full text of H-phrases mentioned in section 3:**
--
**Classification procedures according to Regulation (EC) 1272/2008**
Classification based on producer data

**Abbreviations and Acronyms:**
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
PP: Severe Marine Pollutant
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

**Note to readers**

The product described in the safety data sheet should be stored and used in accordance with good industrial practices and in compliance with all applicable legal regulations.

The information contained in the safety data sheet is based on the current state of knowledge and is intended to describe the product in terms of health, safety and environmental regulations. It should not be considered a guarantee of any specific pro duct properties. No warranty, expressed or implied, is hereby made.

We cannot make any representations or warranties regarding the accuracy or completeness of any information provided or the quality or specifications of any products, substances or mixtures discussed herein.

The user is responsible for creating conditions for the safe use of the product and for the consequences of its misuse.

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