



# THERMAL GREASE 1100

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Detail : 1100-12 Thermal grease  
 Application of the substance / the preparation: Heated paste  
 Manufacturer / supplier: Holland Shielding Systems B.V.  
 Jacobus Lipsweg 124  
 3316 BP Dordrecht  
 the Netherlands  
 Ph: +31(0)78- 204 90 00  
 Fax: +31(0)78- 204 90 08  
 www.hollandshielding.com  
 info@hollandshielding.com

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

No classification.

### 2.2 Label elements

The product does not require a hazard warning label in accordance with GHS/CLP-directives.

Hazard pictograms	None
Signal word	None
Hazard statements	None
Precautionary statements	None

### 2.3 Other hazards

Human health dangers	Frequent persistent contact with the skin can cause skin irritation.
Environmental hazards	Does not contain any PBT or vPvB substances.
Other hazards	Further hazards were not determined with the current level of knowledge.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Product-type:

The product is a mixture.

Range [%]	Substance
25 - 35	Petroleum
25 - 35	Bornitrid
10 - 20	Aluminium oxide CAS: 1344-28-1, EINECS/ELINCS: 215-691-6, Reg-No.: 01-2119529248-35-XXXX
15 - 25	Aluminium CAS: 7429-90-5, EINECS/ELINCS: 231-072-3, EU-INDEX: 013-002-00-1, Reg-No.: 01-2119529243-45-XXXX
Comment on component parts	No dangerous components. Substances of Very High Concern- SVHC: substances are not contained or are below 0.1%.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

General information	Take off contaminated clothing and wash before reuse.
Inhalation	Ensure supply of fresh air. In the event of symptoms seek medical treatment.

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Skin contact	When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Seek medical advice immediately.

## 4.2 Most important symptoms and effects, both acute and delayed

None

## 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Forward this sheet to the doctor.

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable extinguishing media	Foam. Carbon dioxide. Water spray jet. Dry powder.
Extinguishing media that must not be used	Full water jet.

### 5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

### 5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product.

Use personal protective equipment.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically.

Dispose of absorbed material in accordance with the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

The normal safety precautions for handling chemicals must be observed.

Avoid contact with eyes and skin. Use personal protective equipment.

Do not eat, drink or smoke when using this product.

Wash hands before breaks and after work.

Use barrier skin cream.

Take off contaminated clothing and wash before reuse.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.

Prevent penetration into the ground.



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Do not store together with food and animal food/diet.  
Keep container tightly closed.  
Protect from heat/overheating.

## 7.3 Specific end use(s)

See product use, SECTION 1.2

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Ingredients with occupational

#### Exposure limits to be monitored (GB)

Substance
Aluminium
CAS: 7429-90-5, EINECS/ELINCS: 231-072-3, EU-INDEX: 013-002-00-1, Reg-No.: 01-2119529243-45-XXXX
Long-term exposure: 10 mg/m <sup>3</sup> , inhalable dust (respirable dust: 4 mg/m <sup>3</sup> )
Substance
Aluminium oxide
CAS: 1344-28-1, EINECS/ELINCS: 215-691-6, Reg-No.: 01-2119529248-35-XXXX
Long-term exposure: 10 mg/m <sup>3</sup> , inhalable dust (respirable dust: 4 mg/m <sup>3</sup> )

### DNEL

Substance
Aluminium oxide, CAS: 1344-28-1
Industrial, inhalative (dust), Long-term- local effects: 15,63 mg/m <sup>3</sup> (AF=3).
General population, oral, Long-term- systemic effects: 3,29 mg/kg bw/d (AF= 40).
Substance
Aluminium, CAS: 7429-90-5
Industrial, inhalative, Long-term- local effects: 3,72 mg/m <sup>3</sup> .
Industrial, inhalative, Long-term- local effects: 3,72 mg/m <sup>3</sup> .
General population, oral, Long-term- systemic effects: 7,9 mg/kg bw/day.

### PNEC

Substance
Aluminium oxide, CAS: 1344-28-1
Sewage treatment plants (STP), 20 mg/l (AF=10).
Substance
Aluminium, CAS: 7429-90-5
There are no PNEC values established for the substance.,

### 8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	0,4mm Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Protective clothing (EN 340)
Other	Avoid contact with eyes and skin.
Respiratory protection	Not required under normal conditions.
Thermal hazards	None
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Form	Pasty
Color	Silver-grey
Odor	Characteristic
Odour threshold	No information available.
pH-value	Not applicable
pH-value [1%]	Not applicable
Boiling point [°C]	Not applicable
Flash point [°C]	Not applicable
Flammability (solid, gas) [°C]	Not applicable
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Oxidising properties	No
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/ml]	No information available.
Bulk density [kg/m <sup>3</sup> ]	Not applicable
Solubility in water	Insoluble
Partition coefficient [n-octanol/water]	No information available.
Viscosity	Not applicable
Relative vapour density in air determined	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Autoignition temperature [°C]	Not self-igniting
Decomposition temperature [°C]	No information available.

### 9.2 Other information

None

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

No dangerous reactions known if used as directed.

### 10.2 Chemical stability

The product is stable under standard conditions.

### 10.3 Possibility of hazardous reactions

If product is heated above decomposition temperature toxic vapours may be released.

### 10.4 Conditions to avoid

No information available.

### 10.5 Incompatible materials

Oxidizing agent

### 10.6 Hazardous decomposition products

No dangerous reactions known if used as directed.



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## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

#### Acute toxicity

Substance
Aluminium oxide, CAS: 1344-28-1
LD50, oral, Rat: > 5000 mg/kg.
Aluminium, CAS: 7429-90-5
LD50, oral, Rat: > 5000 mg/kg.
LC50, inhalative, Rat: 888 mg/l/4h.
NOAEC, inhalative, Rat: 10 mg/m³.

Serious eye damage/irritation	Based on the available information, the classification criteria are not fulfilled.
Skin corrosion/irritation	Based on the available information, the classification criteria are not fulfilled.
Respiratory or skin sensitisation	Based on the available information, the classification criteria are not fulfilled.
Specific target organ toxicity-single exposure	Based on the available information, the classification criteria are not fulfilled.
Specific target organ toxicity-repeated exposure	Based on the available information, the classification criteria are not fulfilled.
Mutagenicity	Based on the available information, the classification criteria are not fulfilled.
Reproduction toxicity	Based on the available information, the classification criteria are not fulfilled.
Carcinogenicity	Based on the available information, the classification criteria are not fulfilled.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
General remarks	Toxicological data of complete product are not available.

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

### 12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	The methods for determining the biological degradability are not applicable to inorganic substances.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Other adverse effects

Ecological data of complete product are not available.

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Waste material c It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

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Product	In according to RoHS! Disposal in an incineration plant in accordance with the regulations of the local authorities.
Waste no. (recommended)	160509 060399
Contaminated packaging	Uncontaminated packaging may be taken for recycling.
Waste no. (recommended)	150102

## 14. TRANSPORT INFORMATION

### 14.1 UN number

Transport by land according to ADR/RID	Not applicable
Inland navigation (ADN)	Not applicable
Marine transport in accordance with IMDG	Not applicable
Air transport in accordance with IATA	Not applicable

### 14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

### 14.3 Transport hazard class(es)

Transport by land according to ADR/RID	Not applicable
Inland navigation (ADN)	Not applicable
Marine transport in accordance with IMDG	Not applicable
Air transport in accordance with IATA	Not applicable

### 14.4 Packing group

Transport by land according to ADR/RID	Not applicable
Inland navigation (ADN)	Not applicable
Marine transport in accordance with IMDG	Not applicable
Air transport in accordance with IATA	Not applicable

### 14.5 Environmental hazards

Transport by land according to ADR/RID	No
Inland navigation (ADN)	No
Marine transport in accordance with IMDG	No



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Air transport in accordance with IATA No

**14.6 Special precautions for user**  
Relevant information under SECTION 6 to 8.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**  
Not applicable

## 15. REGULATORY INFORMATION

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

EEC-REGULATIONS	1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	none
- VOC (2010/75/CE)	0 %

**15.2 Chemical safety assessment**  
not applicable

## 16. OTHER INFORMATION

### 16.1 Hazard statements (SECTION 03)

### 16.2 Abbreviations and acronyms

ADR	Accord européen relatif au transport international des marchandises Dangereuses par route
RID	Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN	Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE	acute toxicity estimate
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DMEL	Derived Minimum Effect Level
DNEL	Derived No Effect Level
EC50	Median effective concentration
ECB	European Chemicals Bureau
EEC	European Economic Community
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
IBC-Code	International Code for the Construction and Equipment of Ships carrying dangerous Chemicals in Bulk
IC50	Inhibition concentration, 50%
IMDG	International Maritime Code for Dangerous Goods
IUCLID	International Uniform Chemical Information Database
LC50	Lethal concentration, 50%
LD50	Median lethal dose
LC0	lethal concentration, 0%

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LOAEL	lowest-observed-adverse-effect level
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic substance
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
STP	Sewage Treatment Plant
TLV®/TWA	Threshold limit value – time-weighted average
TLV®STEL	Threshold limit value – short-time exposure limit
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative

## 16.3 Other information

### Classification procedure

#### Modified position

SECTION 3 deleted: Boron nitride

SECTION 4 been added: Forward this sheet to the doctor.

SECTION 7 been added: Do not eat, drink or smoke when using this product.

SECTION 12 been added: The methods for determining the biological degradability are not applicable to inorganic substances.