

Version number: GHS 1.0

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

THERMON T-75 Heat transfer Compound

Date of compilation: 2016-03-15

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

1.1 Product identifier Trade name Registration number (REACH)

THERMON T-75 Heat transfer Compound

not relevant (mixture)

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses for use in heat tracing and various other applications to aid in the transfer of heat.

1.3 Details of the supplier of the safety data sheet

Thermon Europe B.V. Boezemweg 25 2641 KG Pijnacker PO Box: 205 2640 AE Netherlands

Telephone: +31 15 3615 316 Telefax: e-mail: info@thermon.com Website: www.thermon.com e-mail (competent person)

SDS@thermon.com

1.4 Emergency telephone number

Poison centre		
Country	Name	Telephone
United Kingdom	National Poisons Information Service (NPIS). For medical professionals only.	0844-8920111 (UK only)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Cat- egory	Hazard class and category	Hazard state- ment
3.2	skin corrosion/irritation	Cat. 2	(Skin Irrit. 2)	H315
3.3	serious eye damage/eye irritation	Cat. 2	(Eye Irrit. 2)	H319

Remarks

For full text of H-phrases: see SECTION 16.

Supplemental hazard information

Hazards arising from this product are primarily present when product is in the uncured state. Once hardened, the compound is non-hazardous; however dust that may result from mechanical disturbance can be hazardous.



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THERMON T-75 Heat transfer Compound

Version number: GHS 1.0 Date of compilation: 2016-03-15 2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 (CLP) Signal word Warning Pictograms GHS07 **Hazard statements** H315 Causes skin irritation. H319 Causes serious eye irritation. **Precautionary statements Precautionary statements - prevention** P264 Wash thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. **Precautionary statements - response**

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific treatment (see on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
Silicic acid, sodium salt (MR >2,6 <3,2)	CAS No 1344-09-8 EC No 215-687-4	25 - < 50	Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 STOT SE 3 / H335	
Respirable Crystalline Silica	CAS No 14808-60-7 EC No 238-878-4	1 - < 5	STOT RE 1 / H372	

For full text of abbreviations: see SECTION 16.



THERMON T-75 Heat transfer Compound

Version number: GHS 1.0

Date of compilation: 2016-03-15

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Brush off loose particles from skin. - Rinse skin with water/shower.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

- **4.2 Most important symptoms and effects, both acute and delayed** Symptoms and effects are not known to date.
- **4.3** Indication of any immediate medical attention and special treatment needed none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

the product is not combustible, co-ordinate firefighting measures to the fire surroundings

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
 For non-emergency personnel
 Remove persons to safety.
 For emergency responders
 Wear breathing apparatus if exposed to vapours/dust/spray/gases.
- 6.2 Environmental precautions Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.
- 6.3 Methods and material for containment and cleaning up Advices on how to contain a spill Covering of drains.



according to Regulation (EC) No. 1907/2006 (REACH)

THERMON T-75 Heat transfer Compound

Version number: GHS 1.0

Date of compilation: 2016-03-15

Advices on how to clean up a spill

Take up mechanically. Wipe up with absorbent material (e.g. cloth, fleece). **Other information relating to spills and releases**

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Take precautionary measures against static discharge. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

Incompatible substances or mixtures

Keep in a cool, well-ventilated place away from acids, alkalis, heavy metal salts and reducing substances. Ammonium compounds.

Consideration of other advice

Ventilation requirements

Use local and general ventilation.

7.3 Specific end use(s)

Not relevant.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Coun- try	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Source
GB	dust		WEL		10			EH40/2005
GB	dust		WEL		4			EH40/2005
GB	kaolin	1332-58-7	WEL		2			EH40/2005
GB	calcium silicate	1344-95-2	WEL		10			EH40/2005
GB	calcium silicate	1344-95-2	WEL		4			EH40/2005
GB	titanium dioxide	13463-67-7	WEL		10			EH40/2005
GB	titanium dioxide	13463-67-7	WEL		4			EH40/2005
GB	silica, crystalline	14808-60-7	WEL		0.1			EH40/2005



according to Regulation (EC) No. 1907/2006 (REACH)

THERMON T-75 Heat transfer Compound

Version number: GHS 1.0

Date of compilation: 2016-03-15

Notation STEL	Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time- weighted average

Relevant DNELs/DMELs/PNECs and other threshold levels • relevant DNELs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09- 8	DNEL	1.59 mg/kg	human, dermal	worker (in- dustry)	chronic - systemic ef- fects
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09- 8	DNEL	5.61 mg/m ³	human, inhalatory	worker (in- dustry)	chronic - systemic ef- fects

• relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environ- mental com- partment	Exposure time
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09- 8	PNEC	7.5 mg/l	aquatic organisms	freshwater	short-term (single in- stance)
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09- 8	PNEC	1 mg/l	aquatic organisms	marine water	short-term (single in- stance)
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09- 8	PNEC	348 mg/l	aquatic organisms	sewage treat- ment plant (STP)	short-term (single in- stance)
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09- 8	PNEC	7.5 mg/l	aquatic organisms	water	continuous

8.2 Exposure controls

Appropriate engineering controls General ventilation. Individual protection measures (personal protective equipment) Eye/face protection

Use safety goggle with side protection. (EN 166). Skin protection

hand protection



Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.



Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

THERMON T-75 Heat transfer Compound

Version number: GHS 1.0

- type of material
- NR: natural rubber, latex
- breakthrough times of the glove material
- >480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection



In case of inadequate ventilation wear respiratory protection. Particulate filter device (EN 143). P3 (filters at least 99,95 % of airborne particles, colour code: White).

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

information on basic physical and chemical	properties
Appearance	
Physical state	liquid (paste)
Colour	dark grey
Odour	characteristic
Other physical and chemical parameters	
pH (value)	11
Melting point/freezing point	0 °C
Initial boiling point and boiling range	101 - 102 °C
Flash point	not determined
Evaporation rate	not determined
Flammability (solid, gas)	not relevant (fluid)
Explosive limits	not determined
Vapour pressure	156 mmHg at 61.5 °C
Density	not determined
Relative density	1.98 water = 1
Solubility(ies)	not determined
Partition coefficient	
n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	not determined
Viscosity	not determined
Explosive properties	none
Oxidising properties	none
Other information	
Of no significance.	

United Kingdom DEVIBFABRIEK 000473 SDS-01

9.2

Date of compilation: 2016-03-15



according to Regulation (EC) No. 1907/2006 (REACH)

THERMON T-75 Heat transfer Compound

Version number: GHS 1.0

Date of compilation: 2016-03-15

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions No known hazardous reactions.

10.4 Conditions to avoid

High temperature will cause a hardening effect that is intended per the use of product. **Physical stresses which might result in a hazardous situation and have to be avoided** strong shocks

10.5 Incompatible materials

the uncured compound turns to a gel and generates heat when mixed with acid. The compound may react with ammonium salts resulting in evolution of ammonia gas. The compound can react with sugar residues to form carbon monoxide.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Compound may decompose when mixed with acids releasing silicic acid.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture. **Classification procedure** The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09-8	oral	LD50	3,400 ^{mg} / _{kg}	rat

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.



THERMON T-75 Heat transfer Compound

Version number: GHS 1.0

Date of compilation: 2016-03-15

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Other information

Hazards arising from this product are primarily present when product is in the uncured state. Once hardened, the compound is non-hazardous; however dust that may result from mechanical disturbance can be hazardous. Once hardened, the compound is non hazardous. Cutting, grinding, crushing, or drilling hardened compound may generate dust containing silica, graphite, and/or inorganic colorant. The dust may irritate the nose, throat, and respiratory tract. Coughing, sneezing, chest pain, shortness of breath, inflammation of mucous membrane, and flu-like fever may occur following exposures in excess of appropriate exposure limits. Preexisting respiratory conditions may be aggravated when in the presence of dust.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment. Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09-8	LC50	1,108 ^{mg} /l	fish	96 hours
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09-8	EC50	1,700 ^{mg} /l	aquatic inverteb- rates	48 hours
Silicic acid, sodium salt (MR >2,6 <3,2)	1344-09-8	ErC50	>345.4 ^{mg} /l	algae	72 hours

Biodegradation

The relevant substances of the mixture are readily biodegradable.

12.2 Persistence and degradability

This material is not persistent in aquatic systems. It is high in pH,(when undiluted and/or not neutralized) which is acutely harmful to aquatic life. Diluted material rapidly de-polymerizes to yield dissolved silica (not distinguishable from natural dissolved silica). It does not contribute to BOD. This material does not bio-accumulate except in species that use silica as a structural material such as siliceous sponges and diatoms. The addition of excess dissolved silica over the limiting concentrations will not stimulate the growth of diatom populations. Neither silica nor sodium will appreciably bio-concentrate up the food chain.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment Data are not available.

12.6 Other adverse effects

The alkalinity of this material will have a local effect on ecosystems sensitive to changes in pH. **Endocrine disrupting potential** None of the ingredients are listed.



THERMON T-75 Heat transfer Compound

Version number: GHS 1.0

Date of compilation: 2016-03-15

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets. Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	UN number	(not subject to transport regulations)
14.2	UN proper shipping name	not relevant
14.3	Transport hazard class(es) Class	-
14.4	Packing group	not relevant
14.5	Environmental hazards	NONE (non-environmentally hazardous acc. to the dangerous goods regulations)

- **14.6** Special precautions for user There is no additional information.
- **14.7** Transport in bulk according to Annex II of MARPOL and the IBC Code The cargo is not intended to be carried in bulk.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

• Restrictions according to REACH, Annex XVII

None of the ingredients are listed.

• List of substances subject to authorisation (REACH, Annex XIV)

None of the ingredients are listed.

• Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II

None of the ingredients are listed.

• Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

 \bullet Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

None of the ingredients are listed.

• Explosives precursors which are subject to restrictions

None of the ingredients are listed.



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THERMON T-75 Heat transfer Compound

Version number: GHS 1.0

Date of compilation: 2016-03-15

15.2 **Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
Eye Dam.	seriously damaging to the eye
Eye Irrit.	irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant)
РВТ	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
Skin Corr.	corrosive to skin
Skin Irrit.	irritant to skin
STEL	short-term exposure limit
STOT RE	specific target organ toxicity - repeated exposure
STOT SE	specific target organ toxicity - single exposure
TWA	time-weighted average
vPvB	very Persistent and very Bioaccumulative
WEL	workplace exposure limit

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU Regulation (EC) No. 1272/2008 (CLP, EU GHS)
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Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

THERMON T-75 Heat transfer Compound

Version number: GHS 1.0

Date of compilation: 2016-03-15

Classification procedure

Physical and chemical properties: The classification is based on tested mixture. Health hazards/environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H315	causes skin irritation
H319	causes serious eye irritation
H335	may cause respiratory irritation
H372	causes damage to organs through prolonged or repeated exposure

Disclaimer

Data is presented in good faith and is based on the present state of our knowledge. It is intended to describe the compound with regard to the appropriate safety precautions. This information is not intended to be a product specification. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable.

However, users should review these recommendations in the specific context of the intended use and determine whether they are appropriate.