

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

1 Identification

- **Product identifier**
- **Trade name:** Speed Heat
- **Other means of identification:** No other identifiers
- **Recommended use and restriction on use**
- **Recommended use:** Heat source
- **Restrictions on use:** No relevant information available.
- **Details of the supplier of the Safety Data Sheet**
- **Manufacturer/Supplier:**
Sterno, LLC
6900 N Dallas Pkwy #870
Plano, TX 75024
Phone: (951) 682-9600
- **Emergency telephone number:**
ChemTel Inc.
(800) 255-3924 (North America)
(801) 1 (813)248-0585 (International)

2 Hazard(s) identification

- **Classification of the substance or mixture**
Water-react. 3 H261 In contact with water releases flammable gas.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Dam. 1 H318 Causes serious eye damage.
Carc. 1A H350 May cause cancer. Route of exposure: Inhalation.
STOT SE 3 H335 May cause respiratory irritation.
- **Additional information:**
Product generates heat when mixed with water. Thermal burns are possible under these conditions.

- **Label elements**

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms:**



GHS02 GHS05 GHS07 GHS08

- **Signal word:** Danger
- **Hazard statements:**
H261 In contact with water releases flammable gas.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H350 May cause cancer. Route of exposure: Inhalation.
H335 May cause respiratory irritation.

- **Precautionary statements:**

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.

(Cont'd. on page 2)



Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 1)

P231+P232	Handle under inert gas. Protect from moisture.
P261	Avoid breathing dust.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection.
P302+P352	If on skin: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a poison center/doctor.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P370+P378	In case of fire: Use for extinction: Dry sand, graphite powder, or special powder for metal fires.
P402+P404	Store in a dry place. Store in a closed container.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards

Product generates heat when mixed with water. Thermal burns are possible under these conditions. There are no other hazards not otherwise classified that have been identified.

3 Composition/information on ingredients

Chemical characterization: Mixtures**Components:**

7429-90-5	Aluminium	Pyr. Sol. 1, H250; Water-react. 2, H261	40-60%
1305-62-0	Calcium dihydroxide	Eye Dam. 1, H318 Skin Irrit. 2, H315; STOT SE 3, H335	10-25%
1305-78-8	Calcium oxide	Eye Dam. 1, H318 Skin Irrit. 2, H315; STOT SE 3, H335	10-20%
497-19-8	Sodium carbonate	Eye Irrit. 2A, H319	<10%
1309-48-4	Magnesium oxide		<10%
471-34-1	Calcium carbonate		<10%
14808-60-7	Quartz (SiO ₂)	Carc. 1A, H350; STOT RE 1, H372	<1%

Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

Description of first aid measures**General information:**

Information is only applicable to product contents, and not to product as normally supplied. This

(Cont'd. on page 3)



Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 2)

information is applicable to damaged, leaking, or spilled product as contact with contents is possible under these conditions.

· After inhalation:

Supply fresh air; consult doctor in case of complaints.
Provide oxygen treatment if affected person has difficulty breathing.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.
In case of minor burns, flush with cool water.
Seek medical treatment in case of complaints.

· After eye contact:

Protect unharmed eye.
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. Then consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.

· Most important symptoms and effects, both acute and delayed:

Coughing
Irritant to skin and mucous membranes.
Irritating to eyes.
May cause respiratory irritation.
Gastric or intestinal disorders when ingested.

· Danger:

Danger of gastric perforation.
Causes serious eye damage.

· Indication of any immediate medical attention and special treatment needed: Treat symptomatically.

5 Fire-fighting measures

· Extinguishing media**· Suitable extinguishing agents:**

Carbon dioxide
Fire-extinguishing powder
Foam
Gaseous extinguishing agents
Sand

· For safety reasons unsuitable extinguishing agents: Water**· Special hazards arising from the substance or mixture**

Reacts violently with water.
In contact with water releases flammable gas.

· Advice for firefighters**· Protective equipment:**

Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required.

(Cont'd. on page 4)



Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 3)

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation.

· Environmental precautions

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· Methods and material for containment and cleaning up

Pick up mechanically.

Rinse remainder away with copious quantities of water.

Send for recovery or disposal in suitable receptacles.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· Handling**· Precautions for safe handling:**

Keep out of reach of children.

Handle with care.

Avoid contact with the eyes and skin.

Prevent formation of dust.

Avoid breathing dust.

Use only in well ventilated areas.

· Information about protection against explosions and fires:

Reacts violently with water.

In contact with water releases flammable gas.

· Conditions for safe storage, including any incompatibilities**· Requirements to be met by storerooms and receptacles:**

Storage area should be dry and well-ventilated.

· Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from water.

· Further information about storage conditions:

Keep containers tightly sealed.

Protect from humidity and water.

This product is hygroscopic.

· Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters**· Components with limit values that require monitoring at the workplace:****7429-90-5 Aluminium**

PEL (USA)

Long-term value: 15*; 5** mg/m³

*Total dust; ** Respirable fraction

(Cont'd. on page 5)



Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 4)

REL (USA)	Long-term value: 10* 5** mg/m ³ as Al*Total dust**Respirable/pyro powd./welding f.
TLV (USA)	Long-term value: 1* mg/m ³ as Al; *as respirable fraction
EL (Canada)	Long-term value: 1.0 mg/m ³ respirable, as Al
EV (Canada)	Long-term value: 5 mg/m ³ aluminium-containing (as aluminium)
LMPE (Mexico)	Long-term value: 1* mg/m ³ A4, *fracción respirable

1305-62-0 Calcium dihydroxide

REL (USA)	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL (USA)	Long-term value: 5 mg/m ³
TLV (USA)	Long-term value: 5 mg/m ³
EL (Canada)	Long-term value: 5 mg/m ³
EV (Canada)	Long-term value: 5 mg/m ³
LMPE (Mexico)	Long-term value: 5 mg/m ³

1305-78-8 Calcium oxide

REL (USA)	Long-term value: 5 mg/m ³
REL (USA)	Long-term value: 2 mg/m ³
TLV (USA)	Long-term value: 2 mg/m ³
EL (Canada)	Long-term value: 2 mg/m ³
EV (Canada)	Long-term value: 2 mg/m ³
LMPE (Mexico)	Long-term value: 2 mg/m ³

1309-48-4 Magnesium oxide

REL (USA)	Long-term value: 15* mg/m ³ fume; *total particulate
TLV (USA)	Long-term value: 10* mg/m ³ *as inhalable fraction
EL (Canada)	Short-term value: 10** mg/m ³ Long-term value: 10* 3** mg/m ³ *inhalable fume;**respirable dust and fume
EV (Canada)	Long-term value: 10 mg/m ³ inhalable
LMPE (Mexico)	Long-term value: 10* mg/m ³ A4, *fracción respirable

471-34-1 Calcium carbonate

REL (USA)	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL (USA)	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV (USA)	TLV withdrawn

14808-60-7 Quartz (SiO2)

(Cont'd. on page 6)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 5)

PEL (USA)	Long-term value: 0.05* mg/m ³ *resp. dust; 30mg/m ³ /%SiO ₂ +2
REL (USA)	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A
TLV (USA)	Long-term value: 0.025* mg/m ³ *as respirable fraction
EL (Canada)	Long-term value: 0.025 mg/m ³ ACGIH A2; IARC 1
EV (Canada)	Long-term value: 0.10* mg/m ³ *respirable fraction
LMPE (Mexico)	Long-term value: 0.025* mg/m ³ A2, *fracción respirable

· **Exposure controls**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Avoid breathing dust.

· **Engineering controls:** Provide adequate ventilation.

· **Breathing equipment:** For large spills, respiratory protection may be advisable.

· **Protection of hands:**



Thermally-protective gloves.

Protection may be required for spills.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:**



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

· **Body protection:** Protective work clothing

· **Limitation and supervision of exposure into the environment**

No relevant information available.

· **Risk management measures** No relevant information available.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

Form:

Outer shell containing powder, granular, or solid materials.

Color:

According to product specification

· **Odor:**

Characteristic

(Cont'd. on page 7)



Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 6)

· Odor threshold:	Not determined.
· pH-value:	Alkaline
· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	Not determined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	In contact with water releases flammable gas.
· Auto-ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits	
Lower:	Not determined.
Upper:	Not determined.
· Oxidizing properties:	Not determined.
· Vapor pressure:	Not determined.
· Density:	
Relative density:	Not determined.
Vapor density:	Not applicable.
Evaporation rate:	Not applicable.
· Solubility in / Miscibility with Water:	Reacts with water.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity	
Dynamic:	Not applicable.
Kinematic:	Not applicable.
· Other information	No relevant information available.

10 Stability and reactivity

- **Reactivity:** No relevant information available.
- **Chemical stability:** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:** Heating occurs when water is added.
- **Possibility of hazardous reactions**
 - Strong exothermic reaction with acids.
 - Contact with water releases flammable gases.
- **Conditions to avoid** Moisture.
- **Incompatible materials** Strong acids
- **Hazardous decomposition products** Hydrogen

11 Toxicological information

- **Information on toxicological effects**

(Cont'd. on page 8)



Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 7)

- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values that are relevant for classification:** None.
- **Primary irritant effect:**
- **On the skin:**
Thermal burns when mixed with water.
None from normal handling. Symptoms only seen in exposure to leaking articles.
Irritant to skin and mucous membranes.
- **On the eye:**
None from normal handling. Symptoms only seen in exposure to leaking articles.
Strong irritant with the danger of severe eye injury.
- **Sensitization:** Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer):

14808-60-7	Quartz (SiO ₂)	1
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NTP (National Toxicology Program):

14808-60-7	Quartz (SiO ₂)	K
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OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

- **Probable route(s) of exposure:** Skin contact.
- **Acute effects (acute toxicity, irritation and corrosivity):** Thermal burns when mixed with water.
- **Germ cell mutagenicity:** Based on available data, the classification criteria are not met.
- **Carcinogenicity:**
None from normal handling. Symptoms only seen in exposure to leaking articles.
May cause cancer. Route of exposure: Inhalation.
- **Reproductive toxicity:** Based on available data, the classification criteria are not met.
- **STOT-single exposure:**
None from normal handling. Symptoms only seen in exposure to leaking articles.
May cause respiratory irritation.
- **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.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity** No relevant information available.
- **Persistence and degradability** No relevant information available.
- **Bioaccumulative potential:** No relevant information available.
- **Mobility in soil:** No relevant information available.
- **Additional ecological information**
- **General notes:**
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Other adverse effects** No relevant information available.

13 Disposal considerations

- **Waste treatment methods**

(Cont'd. on page 9)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 8)

· **Recommendation:**

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

· **Uncleaned packagings**

· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **UN-Number**

· DOT, ADR/RID/ADN, IMDG, IATA UN1396

· **UN proper shipping name**

· DOT, IATA Aluminium powder, uncoated
 · ADR/RID/ADN, IMDG ALUMINIUM POWDER, UNCOATED

· **Transport hazard class(es)**

· DOT



· Class 4.3
 · Label 4.3

· ADR/RID/ADN



· Class 4.3 (W2)
 · Label 4.3

· IMDG, IATA



· Class 4.3
 · Label 4.3

· **Packing group**

· DOT, ADR/RID/ADN, IMDG, IATA III

· **Environmental hazards**

· Marine pollutant: No

· **Special precautions for user**

Warning: Substances which, in contact with water, emit flammable gases

· **Danger code (Kemler):** 423

(Cont'd. on page 10)

Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 9)

· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**

· **DOT**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 10 kg each.

· **ADR/RID/ADN**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 10 kg each.

· **IMDG**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 10 kg each.

· **IATA**



Limited Quantity for packages less than 30 kg gross and inner packagings less than 1 kg each / 10 kg net.

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **United States (USA)**

· **SARA**

· **Section 302 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

7429-90-5 | Aluminium

· **TSCA (Toxic Substances Control Act)**

All ingredients are listed or exempt.

· **Proposition 65 (California)**

· **Chemicals known to cause cancer:**

14808-60-7 | Quartz (SiO₂)

· **Chemicals known to cause developmental toxicity for females:**

(Cont'd. on page 11)



Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: May 25, 2023

Trade name: Speed Heat

(Cont'd. of page 10)

None of the ingredients are listed.

Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

EPA (Environmental Protection Agency):

None of the ingredients are listed.

IARC (International Agency for Research on Cancer):14808-60-7 | Quartz (SiO₂)

1

Canadian Domestic Substances List (DSL):

All ingredients are listed or exempt.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Pyr. Sol. 1: Pyrophoric solids – Category 1

Water-react. 2: Substances and mixtures which in contact with water emit flammable gases – Category 2

Water-react. 3: Substances and mixtures which in contact with water emit flammable gases – Category 3

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Carc. 1A: Carcinogenicity – Category 1A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

SourcesWebsite, European Chemicals Agency (echa.europa.eu)Website, US EPA Substance Registry Services (ofmpub.epa.gov/sorinternet/registry/substreg/home/overview/home.do)Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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