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

1.1 Product identifier
   Trade name: RTV-2
   Registration number (REACH): not relevant (mixture)

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Relevant identified uses:
   - Professional use
   - Industrial use

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 Pijnacker
   Netherlands

   Telephone: +31 15 3615 370
   e-mail: info@thermon.com
   Website: www.thermon.com

   e-mail (competent person): SDS@thermon.com

1.4 Emergency telephone number
   Emergency information service: +01 (800) 820-4328 / +01 (512) 396-5801 / +01 (713) 205-2690 (24h)
   This number is only available during the following office hours: Mon-Fri 09:00 - 17:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification according to Regulation (EC) No 1272/2008 (CLP)
   This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

2.2 Label elements
   Labelling according to Regulation (EC) No 1272/2008 (CLP)
   Not required.

2.3 Other hazards
   Use only outdoors or in a well-ventilated area.

   Results of PBT and vPvB assessment
   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
   The product does not contain any (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the substance and hence require reporting in this section.
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
Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

Following skin contact
Wash with plenty of soap and water.

Following eye contact
Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart.

Following ingestion
Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

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
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Water mist; Alcohol resistant foam; Dry extinguishing powder; Carbon dioxide (CO2)

Unsuitable extinguishing media
Water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
During fire hazardous fumes/smoke could be produced. Carbon monoxide (CO). Carbon dioxide (CO2). Silicon oxides. Formaldehyde.

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.

Special protective equipment for firefighters
Self-contained breathing apparatus (EN 133). Standard protective clothing for firefighters.
SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
For non-emergency personnel
Remove persons to safety. Ventilate affected area.

For emergency responders
Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions
Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up
Advises on how to contain a spill
Covering of drains.

Advises on how to clean up a spill
Wipe up with absorbent material (e.g. cloth, fleece).

Appropriate containment techniques
Use of adsorbent materials.

Other information relating to spills and releases
Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

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. Use only in well-ventilated areas.

Advice on general occupational hygiene
Wash hands after use. Do not 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
- flammability hazards
  Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.

- incompatible substances or mixtures
  Observe hints for combined storage. Keep away from alkalis, oxidising substances, acids.

Control of effects
Protect against external exposure, such as
High temperatures. UV-radiation/sunlight.

Consideration of other advice
Store in a well-ventilated place. Keep container tightly closed. These precautions are for room temperature handling. Use at elevated temperature of aerosol/spray applications may require added precautions.
7.3 Specific end use(s)

There is no additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

When heated above 150 °C in the presence of air, product can form formaldehyde vapours. Safe handling conditions may be maintained by keeping vapour concentrations within the occupational exposure limits.

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Notation</th>
<th>Identifier</th>
<th>TWA [ppm]</th>
<th>TWA [mg/m³]</th>
<th>STEL [ppm]</th>
<th>STEL [mg/m³]</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>GB</td>
<td>formaldehyde</td>
<td>50-00-0</td>
<td></td>
<td>WEL</td>
<td>2</td>
<td>2.5</td>
<td>2</td>
<td>2.5</td>
<td>EH40/2005</td>
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<tr>
<td>GB</td>
<td>silica, amorphous</td>
<td>7631-86-9</td>
<td>i</td>
<td>WEL</td>
<td>6</td>
<td>2.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GB</td>
<td>silica, amorphous</td>
<td>7631-86-9</td>
<td>r</td>
<td>WEL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notation

i: inhalable fraction
r: respirable fraction
STE1: short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA: time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

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

Protective clothing (EN 340).

- hand protection

Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. Chemical protection gloves are suitable, which are tested according to EN 374. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- 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. Self-contained breathing apparatus (EN 133).

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

**Appearance**

<table>
<thead>
<tr>
<th>Physical state</th>
<th>liquid (paste)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>red</td>
</tr>
<tr>
<td>Odour</td>
<td>acetic acid</td>
</tr>
</tbody>
</table>

**Other safety parameters**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value/Not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH (value)</td>
<td>not determined</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>not relevant, (fluid)</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not determined</td>
</tr>
<tr>
<td>Density</td>
<td>not determined</td>
</tr>
<tr>
<td>Vapour density</td>
<td>this information is not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.04 (water = 1)</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>not determined</td>
</tr>
</tbody>
</table>

**Partition coefficient**

<table>
<thead>
<tr>
<th>Partition coefficient</th>
<th>Value/Not determined</th>
</tr>
</thead>
<tbody>
<tr>
<td>- n-octanol/water (log KOW)</td>
<td>this information is not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td>not determined</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>none</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>none</td>
</tr>
</tbody>
</table>
9.2 Other information
There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity
This material is not reactive under normal ambient conditions.

10.2 Chemical stability
The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions
Use at elevated temperatures may form highly hazardous compounds. Reacts with: Strong oxidisers. Acetic acid is formed upon contact with water or humid air. When heated above 150°C in the presence of air, product can form formaldehyde vapours.

10.4 Conditions to avoid
Keep away from heat.

10.5 Incompatible materials
Oxidisers.

10.6 Hazardous decomposition products
Formaldehyde.
Hazardous combustion products: see section 5.

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)
This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

Acute toxicity
Shall not be classified as acutely toxic.

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation
Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation
Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity
Shall not be classified as germ cell mutagenic.

Carcinogenicity
Shall not be classified as carcinogenic.

Reproductive toxicity
Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure
Shall not be classified as a specific target organ toxicant (single exposure).
Specific target organ toxicity - repeated exposure
Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard
Shall not be classified as presenting an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity
Shall not be classified as hazardous to the aquatic environment.

12.2 Persistence and degradability
Data are not available.

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

12.6 Other adverse effects
Data are not available.

Endocrine disrupting potential
None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Sewage disposal-relevant information
Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings
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)
none

14.4 Packing group
not relevant

14.5 Environmental hazards
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
No data available.
Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)
Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)
Not subject to ICAO-IATA.

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)
None of the ingredients are listed.

Restrictions according to REACH, Annex XVII
None of the ingredients are listed.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list
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.

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)
None of the ingredients are listed.

Regulation 98/2013/EU on the marketing and use of explosives precursors
None of the ingredients are listed.

15.2 Chemical Safety Assessment
No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)</td>
</tr>
<tr>
<td>ADR</td>
<td>Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>CLP</td>
<td>Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>DMEL</td>
<td>Derived Minimal Effect Level</td>
</tr>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the United Nations</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
</tbody>
</table>
### Descriptions of used abbreviations

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>ICAO</td>
<td>International Civil Aviation Organization</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution from Ships (abbr. of &quot;Marine Pollutant&quot;)</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>PNEC</td>
<td>Predicted No-Effect Concentration</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>REACH</td>
<td>Registration, Evaluation, Authorisation and Restriction of Chemicals</td>
</tr>
<tr>
<td>RID</td>
<td>Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-term exposure limit</td>
</tr>
<tr>
<td>SVHC</td>
<td>Substance of Very High Concern</td>
</tr>
<tr>
<td>TWA</td>
<td>Time-weighted average</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
<tr>
<td>WEL</td>
<td>Workplace exposure limit</td>
</tr>
</tbody>
</table>

### Key literature references and sources for data


### 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 (additivitiy formula).

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.