1 Identification

**Product identifier**

Trade name: **MORSET**

SDS ID Number: 60124

**Relevant identified uses of the substance or mixture and uses advised against**

Specialty construction product. Not intended for other uses

**Details of the supplier of the safety data sheet**

**Manufacturer/Supplier:**

W.R. Grace & Co. -Conn.
62 Whittemore Avenue
Cambridge, MA 02140 USA

Grace Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

**Information department:**

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
CAN: 1-905-683-8561 (24 hours)

**Transport Emergency:** Chemtrec +1-800-424-9300 (24 hours)

2 Hazard(s) identification

**Classification of the substance or mixture**

Causes severe skin burns and eye damage.
Causes serious eye damage.
Harmful if swallowed.

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

**Hazard pictograms**

![GHS05 GHS07]

**Danger**

**Hazard-determining components of labeling:**

Calcium nitrite
Calcium nitrate

**Precautionary statements**

Wash thoroughly after handling.
Wear protective gloves / protective clothing.
If swallowed: Rinse mouth. Do NOT induce vomiting.

(Cont. on page 2)
Trade name: MORSET

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If swallowed: Call a poison center/doctor if you feel unwell.

NFPA ratings (scale 0 - 4)

- Health = 2
- Fire = 1
- Reactivity = 0

HMIS-ratings (scale 0 - 4)

- HEALTH 2: Health = 2
- FIRE 1: Flammability = 1
- REACTIVITY 0: Reactivity = 0

Other hazards Contains Triisobutyl phosphate. May produce an allergic reaction.

Results of PBT and vPvB assessment

- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with additional nonhazardous ingredients.

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>13780-06-8 Calcium nitrite</td>
<td>30-50%</td>
</tr>
<tr>
<td>10124-37-5 Calcium nitrate</td>
<td>2.0-5.0%</td>
</tr>
</tbody>
</table>

Additional information: For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

Description of first aid measures

General information:
Get medical advice/attention if you feel unwell.

After inhalation: Take affected persons into fresh air and keep quiet.

After skin contact: If skin irritation continues, consult a doctor.

After eye contact:
Rinse opened eye for several minutes under running water.
Rinse cautiously with water for several minutes.
Seek immediate medical advice.

After swallowing:
Wash out mouth with water
Rinse mouth.
Do not induce vomiting; immediately call for medical help.
Trade name: MORSET

Never give anything by mouth to an unconscious person.

**Information for doctor:**
Most important symptoms and effects, both acute and delayed Irritating to eyes.
Indication of any immediate medical attention and special treatment needed No further relevant information available.

**5 Fire-fighting measures**

**Extinguishing media**

**Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
This material, if dried to a solid powder-like form, will become an oxidizer, which may provide oxygen to combustible materials.

**Special hazards arising from the substance or mixture** No further relevant information available.

**Advice for firefighters**

**Protective equipment:** Wear self-contained respiratory protective device.

**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.

**6 Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Use respiratory protective device against the effects of fumes/dust/aerosol.
Avoid contact with eyes.

**Environmental precautions:**
Do not let product enter drains.
Inform respective authorities in case of seepage into water course or sewage system.

**Methods and material for containment and cleaning up:**
Contain and/or absorb spill with inert material (i.e. sand, vermiculite) then place in a suitable container.
Sweep up spilled product into receptacles.
Dispose contaminated material as waste according to section 13 of the SDS.

**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
Open and handle receptacle with care.
Prevent formation of aerosols.
Ensure good interior ventilation.
Do not mix directly with acidic materials. Do not mix directly with other admixtures. Hazardous gas may form.
Store in original containers.
Avoid contact with eyes.

Information about protection against explosions and fires: Protect from heat.

Conditions for safe storage, including any incompatibilities

Storage:

Information about storage in one common storage facility: Protect from heat.

Further information about storage conditions:
Protect from heat and direct sunlight.
Keep receptacle tightly sealed.
Protect from frost.
Store in cool, dry conditions in well sealed receptacles.

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

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters
Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:
Avoid contact with the eyes and skin.
The usual precautionary measures for handling chemicals should be followed.
Do not add amines to this product. Cancer-causing nitrosamines may be formed. Direct contact with other admixtures, washwater and any other material causing the pH to fall below specification can result in the formation of NOx gas creating a hazardous situation. Nitric oxide (NO) is a colorless, odorless gas. Nitrogen dioxide (NO2) is a reddish-brown gas with a highly pungent, bleach-like odor. Exposure can cause irritation to eyes and respiratory system and effect the central nervous and cardiovascular systems. Severe overexposure can be fatal. This hazard does not exist when mixed with other admixtures in concrete.

Breathing equipment: Not required.
Trade name: MORSET

Protection of hands:
Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves
Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Eye protection:

Safety glasses with side shield protection.

Safety glasses with side shields should be worn to prevent contact due to splashing. Under high vapor mist concentrations, tightly sealed goggles should be worn.

A face shield should also be worn if there is potential exposure to splash or spray.

Body protection:
Protective work clothing
Use personal protective equipment as required.
Take off contaminated clothing and wash before reuse.

9 Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>General Information</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color:</td>
<td>According to product specification</td>
</tr>
<tr>
<td>Odor:</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value (~) at 20 °C (68 °F):</td>
<td>9</td>
</tr>
<tr>
<td>Change in condition</td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Flash point:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gaseous):</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto igniting:</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Danger of explosion:</td>
<td>Product does not present an explosion hazard.</td>
</tr>
</tbody>
</table>

Explosion limits:
| Lower:            | Not determined. |
| Upper:            | Not determined. |
| VOC Content (max):| Not determined. |

Vapor pressure: Not determined.
Density: (~) at 20 °C (68 °F) 1.3 g/cm³ (10.849 lbs/gal)
Relative density Not determined.
Vapour density Not determined.
Evaporation rate Not determined.
Trade name: MORSET

<table>
<thead>
<tr>
<th>Solubility in / Miscibility with</th>
<th>Not miscible or difficult to mix.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Dynamic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

**10 Stability and reactivity**

**Reactivity** Stable under normal conditions.

**Chemical stability**

**Thermal decomposition:** No decomposition if used according to specifications.

**Possibility of hazardous reactions**

While not classified as oxidising, if allowed to dry out and come into contact with combustible material, this product may cause fire.

**Conditions to avoid** No further relevant information available.

**Incompatible materials:**

Avoid direct contact with other admixtures and any other material which could cause the pH of this product to fall below 8.0. Those conditions can result in the formation of Nitrogen oxide (NO, NO2) gas, creating a hazardous situation.

**Hazardous decomposition products:**

Carbon monoxide and carbon dioxide

Nitrogen oxides

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

**11 Toxicological information**

**Information on toxicological effects**

**Acute toxicity:**

<table>
<thead>
<tr>
<th>LD/LC50 values relevant for classification:</th>
</tr>
</thead>
<tbody>
<tr>
<td>13780-06-8 Calcium nitrite</td>
</tr>
<tr>
<td>Oral [LD50] 283 mg/kg (rat)</td>
</tr>
<tr>
<td>10124-37-5 Calcium nitrate</td>
</tr>
<tr>
<td>Oral [LD50] 302 mg/kg (rat)</td>
</tr>
</tbody>
</table>

**Primary irritant effect:**

on the skin: Causes severe skin burns and eye damage.

on the eye: Causes serious eye damage.

inhalation: No irritating effect expected

Ingestion: Harmful if swallowed.
Trade name: MORSET

Additional toxicological information:
Carcinogenic categories
IARC (International Agency for Research on Cancer) Human Carcinogenicity:
Group 1- Positive, Group 2A- Probable, Group 2B- Possible, Group 3- Not Classifiable

<table>
<thead>
<tr>
<th>102-71-6</th>
<th>Triethanolamine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

NTP (National Toxicology Program)
K–Known to be carcinogenic, R–May reasonably be anticipated to be carcinogenic
None of the ingredients is listed.

OSHA-Ca (Occupational Safety & Health Administration)
None of the ingredients is listed.

12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.

Persistence and degradability No further relevant information available.

Behavior in environmental systems:
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.

Additional ecological information:
General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

Other adverse effects No further relevant information available.

13 Disposal considerations

Waste treatment methods Comply with Federal, State and local regulations.
Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

14 Transport information

UN-Number
DOT, ADR, ADN, IMDG, IATA Not applicable.
**Trade name: MORSET**

<table>
<thead>
<tr>
<th>UN proper shipping name</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transport hazard class(es)</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td></td>
</tr>
<tr>
<td>Class</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Packing group</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT, ADR, ADN, IMDG, IATA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental hazards:</th>
<th>Marine pollutant:</th>
<th>No</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Special precautions for user</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td></td>
</tr>
<tr>
<td>Remarks</td>
<td>Not Regulated.</td>
</tr>
</tbody>
</table>

### 15 Regulatory information

**SARA (Superfund Amendments and Reauthorization Act)**

**Section 302/304 (extremely hazardous substances):**

None of the ingredients is listed.

**Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

<table>
<thead>
<tr>
<th>SARA Section 312/Tier I &amp; II Hazard Categories:</th>
<th>10124-37-5 Calcium nitrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Immediate (acute)</td>
<td>Yes</td>
</tr>
<tr>
<td>Health Delayed (chronic)</td>
<td>Yes</td>
</tr>
<tr>
<td>Flammable</td>
<td>No</td>
</tr>
<tr>
<td>Reactive</td>
<td>No</td>
</tr>
<tr>
<td>Pressure</td>
<td>No</td>
</tr>
</tbody>
</table>

**North America Chemical Inventory Status**

**TSCA (Toxic Substances Control Act - United States):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**CEPA (Canadian DSL):**

All ingredients are listed or exempt from listing unless otherwise noted below.

**Right to Know Ingredient Disclosure**

| 7732-18-5 Water |

**California Proposition 65**

**Chemicals known to cause cancer:**

This product contains substances known to the state of California to cause cancer, birth defects or other reproductive harm.

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.
Trade name: MORSET

Carcinogenicity Categories

<table>
<thead>
<tr>
<th>Agency</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA (Environmental Protection Agency)</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td>TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)</td>
<td>Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable</td>
</tr>
<tr>
<td>NIOSH-Cancer (National Institute for Occupational Safety and Health)</td>
<td>None of the ingredients is listed.</td>
</tr>
</tbody>
</table>

Volatile Organic Compounds (VOC) reported per the Emission Standards.
If no g/L value is provided this product is not subject to above standard.

*16 Other information

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

Department issuing SDS:

W.R. Grace & Co. -Conn.
62 Whittemore Avenue
Cambridge, MA 02140 USA
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414

Date of preparation / last revision 05/26/2015 / -
The first date of preparation 03/29/2012
Number of revision times and the latest revision date 1.0 / 05/26/2015