1 Identification

Product identifier

Trade name: DCI

SDS ID Number: 1475

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

Harmful in contact with skin.
Causes serious eye irritation.

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

Hazard pictograms

Warning

Precautionary statements

Wear protective gloves / protective clothing.
Wash thoroughly after handling.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If on skin: Wash with plenty of water.
If eye irritation persists: Get medical advice/attention.
Call a poison center/doctor if you feel unwell.
Trade name: DCI

NFPA ratings (scale 0 - 4)

Health = 2  
Fire = 1  
Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH 2  
FIRE 1  
REACTIVITY 0

Other hazards

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></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13780-06-8 Calcium nitrite</td>
<td></td>
<td>30-50%</td>
</tr>
<tr>
<td>10124-37-5 Calcium nitrate</td>
<td></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  
Do not induce vomiting; immediately call for medical help.  
Never give anything by mouth to an unconscious person.

Information for doctor:  
Most important symptoms and effects, both acute and delayed Irritating to eyes.
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:
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.
Avoid contact with eyes, skin and clothing.
Do not take internally.
Practice good personal hygiene to avoid ingestion.
Use only with adequate ventilation.
# Safety Data Sheet

**Trade name:** DCI

Wash clothing before reuse. FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

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 original 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:**

Respiratory protection is not normally required. However, a chemical cartridge respirator with organic vapor cartridge and a prefiter for dusts/mists is required at or above the applicable exposure limits (consult exposure guidelines). If no limits exist, use an approved respirator whenever a vapor or mist is generated or if respiratory irritation occurs. Supplied air respirator (SCBA) is required at exposure levels above the capabilities of a chemical cartridge respirator.

**Protection of hands:**

Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.
Rubber or other impervious gloves should be worn to prevent skin contact.

**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.

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### 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><strong>Appearance:</strong></td>
<td></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>
</tbody>
</table>

| **pH-value (~) at 20 °C (68 °F):** | 9 |

<table>
<thead>
<tr>
<th><strong>Change in condition</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<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>
</tbody>
</table>

| **Flammability (solid, gaseous):** | Not applicable. |

| **Decomposition temperature:** | Not determined. |
| **Auto igniting:** | Product is not selfigniting. |
| **Danger of explosion:** | Product does not present an explosion hazard. |

<table>
<thead>
<tr>
<th><strong>Explosion limits:</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>VOC Content (max):</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

| **Vapor pressure:** | Not determined. |
| **Density: (~)*** | Not determined. |
| **Relative density** | Not determined. |
| **Vapour density** | Not determined. |
| **Evaporation rate** | Not determined. |
Trade name: DCI

Solubility in / Miscibility with
Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): Not determined.

Viscosity:
  Dynamic: Not determined.
  Kinematic: Not determined.
  Molecular weight: Not applicable.

Other information: No further relevant information available.

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:

LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>13780-06-8 Calcium nitrite</td>
<td>283 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>10124-37-5 Calcium nitrate</td>
<td>302 mg/kg (rat)</td>
<td></td>
</tr>
</tbody>
</table>

Primary irritant effect:

on the skin: No irritating effect expected
on the eye: Causes serious eye irritation.
inhalation: No irritating effect expected
Ingestion: Harmful if swallowed.
Trade name: DCI

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

None of the ingredients is listed.

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: Danger to drinking water if even small quantities leak into the ground.

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: DCI

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

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

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

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

Transport/Additional information: Not classified as a dangerous good for transport by road, rail or air.

DOT Remarks: Not Regulated.

UN "Model Regulation": -

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):
10124-37-5 Calcium nitrate

SARA Section 312/Tier I & II Hazard Categories:
- Health Delayed (chronic): Yes
- Health Immediate (acute): Yes
- Flammable: No
- Reactive: No
- Pressure: No

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:
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:** DCI

### Carcinogenicity Categories

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
<th>Ingredients Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EPA (Environmental Protection Agency)</strong></td>
<td>None of the ingredients is listed.</td>
<td></td>
</tr>
<tr>
<td><strong>TLV-ACGIH</strong> (THE American Conference of Governmental Industrial Hygienists)</td>
<td>Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable</td>
<td>None of the ingredients is listed.</td>
</tr>
<tr>
<td><strong>NIOSH-Cancer</strong> (National Institute for Occupational Safety and Health)</td>
<td>None of the ingredients is listed.</td>
<td></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** 06/04/2015 / 1.2

**The first date of preparation** 03/15/2012

**Number of revision times and the latest revision date** 1.3 / 06/04/2015