1. Identification

Product identifier DUSTOFF® Dust Suppressant

Other means of identification

- SDS number ND11
- Synonyms Aqueous Magnesium Chloride and Magnesium Sulfate. Magnesium Chloride, Magnesium Sulfate.

Recommended use Industrial and agricultural applications

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

- Manufacturer
  - Company name Cargill Incorporated
  - Address Minneapolis, MN 55440
  - Telephone 1-888-385-7258
  - Website www.cargillsalt.com
- Emergency telephone number CHEMTREC (800) 424-9300

2. Hazard(s) identification

- Physical hazards Not classified.
- Health hazards Not classified.
- Environmental hazards Hazardous to the aquatic environment, acute hazard Category 3
  Hazardous to the aquatic environment, long-term hazard Category 3

OSHA defined hazards Not classified.

Label elements

- Hazard symbol None.
- Signal word None.
- Hazard statement The mixture does not meet the criteria for classification.
- Precautionary statement
  - Prevention Observe good industrial hygiene practices.
  - Response Wash hands after handling.
  - Storage Store away from incompatible materials.
  - Disposal Dispose of waste and residues in accordance with local authority requirements.
- Hazard(s) not otherwise classified (HNOC) Application of excessive amounts of Dust-Off directly adjacent to or directly upon paved surfaces may result in slippery conditions which present a safety hazard for foot and vehicular traffic.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>63-70</td>
</tr>
<tr>
<td>Magnesium chloride</td>
<td>7786-30-3</td>
<td>29-33</td>
</tr>
<tr>
<td>Magnesium sulfate</td>
<td>7487-88-9</td>
<td>1.0-3.8</td>
</tr>
</tbody>
</table>

4. First-aid measures

Inhalation In case of inhalation of spray mist: Move person into fresh air and keep at rest. Call a physician if symptoms develop or persist.
Skin contact: Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact: Rinse with water. Get medical attention if irritation develops and persists.

Ingestion: Give one or two glasses of water if patient is alert and able to swallow. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed: Accidental exposure or contact might produce: Irritant effects.

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

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures


Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions: Use water spray to cool unopened containers.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: This product is not flammable or combustible.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Avoid inhalation of vapors. Keep unnecessary personnel away. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up: Avoid release to the environment. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS. Dike the spilled material, where this is possible. Soak up with absorbent material such as clay, sand or other suitable non-reactive material. Place in leak-proof containers. Seal tightly for proper disposal.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes. Keep away from sulfuric and nitric acids, caustics, ammonia and cyanides. Practice good housekeeping. May evolve chlorine gas when in contact with strong acids or upon heating above 300 degrees F (149 degrees C). A hazardous reaction involving magnesium chloride and 2-furan percarboxylic acid has been reported. Do not apply directly to plant foliage or root zones, as concentrated magnesium chloride solutions may cause partial or complete defoliation. This product is designed to control dust on unpaved surfaces. Application of excessive amounts of Dust-Off directly adjacent to or directly upon paved surfaces may result in slippery conditions which present a safety hazard for foot and vehicular traffic.

Conditions for safe storage, including any incompatibilities: Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Prolonged storage or subjecting the materials to temperatures below 30 degrees F (-1 degree C) can result in the formation of magnesium sulfate crystals.

8. Exposure controls/personal protection

Occupational exposure limits: No exposure limits noted for ingredient(s).

Biological limit values: No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls: Provide adequate ventilation and minimize the risk of inhalation of mists.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).
Skin protection
Hand protection
Wear appropriate chemical resistant gloves.
Other
Wear suitable protective clothing.
Respiratory protection
Provide sufficient ventilation for operations causing mist formation. In case of inadequate ventilation or risk of inhalation of mist, use suitable respiratory equipment with particle filter.
Thermal hazards
Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties
Appearance
Clear liquid.
Physical state
Liquid.
Form
Slightly viscous, brown/amber liquid with a slight saline odor.
Color
Brown or amber.
Odor
Slight saline odor.
Odor threshold
Not available.
pH
Not available.
Melting point/freezing point
Not available.
Initial boiling point and boiling range
226.4 - 253.4 °F (108 - 123 °C) (760 mm Hg)
Flash point
Not available.
Evaporation rate
Not available.
Flammability (solid, gas)
Not applicable.
Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.
Flammability limit - upper (%)
Not available.
Explosive limit - lower (%)
Not available.
Explosive limit - upper (%)
Not available.
Vapor pressure
7.5 mm Hg (86 °F (30 °C))
Vapor density
Not available.
Relative density
1.306 (H2O=1)
Solubility(ies)
Solubility (water)
100 %
Partition coefficient (n-octanol/water)
Not available.
Auto-ignition temperature
Not available.
Decomposition temperature
Not available.
Viscosity
Not available.
Other information
Molecular formula
MgCl2
Molecular weight
95.22
pH in aqueous solution
5.5 - 6.5

10. Stability and reactivity
Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability
Material is stable under normal conditions.
Possibility of hazardous reactions
A hazardous reaction involving magnesium chloride and 2-furan percarboxylic acid has been reported.
Conditions to avoid
Contact with incompatible materials.
Incompatible materials
Avoid contact with strong acids. Incompatible with sulfuric and nitric acids, caustics, ammonia and cyanides.
Hazardous decomposition products
May evolve chlorine gas when in contact with strong acids or upon heating above 300 degrees F (149 degrees C).

11. Toxicological information
Information on likely routes of exposure
- **Inhalation**: Spray mist may irritate the respiratory system.
- **Skin contact**: Prolonged or repeated skin contact may cause irritation.
- **Eye contact**: Mild eye irritation.
- **Ingestion**: Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics
- Eye and skin contact: Exposure may cause temporary irritation, redness, or discomfort.

Information on toxicological effects
- **Acute toxicity**: Ingestion of large amounts can cause gastrointestinal upset and irritation of the stomach.
- **Skin corrosion/irritation**: Prolonged skin contact may cause temporary irritation.
- **Serious eye damage/eye irritation**: May cause slight eye irritation.

- **Respiratory or skin sensitization**
  - Respiratory sensitization: Not available.
  - Skin sensitization: This product is not expected to cause skin sensitization.
- **Germ cell mutagenicity**: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
- **Carcinogenicity**: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

- **Reproductive toxicity**: This product is not expected to cause reproductive or developmental effects.
- **Specific target organ toxicity - single exposure**
  - Not classified.
- **Specific target organ toxicity - repeated exposure**
  - Not classified.
- **Aspiration hazard**
  - Not available.

12. Ecological information
- **Ecotoxicity**: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
- **Persistence and degradability**: No data is available on the degradability of this product.
- **Bioaccumulative potential**: No data available.
- **Mobility in soil**: No data available.
- **Other adverse effects**: Do not apply directly to plant foliage or root zones, as concentrated magnesium chloride solutions may cause partial or complete defoliation.

13. Disposal considerations
- **Disposal instructions**: Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
- **Local disposal regulations**: Dispose in accordance with all applicable regulations.
- **Hazardous waste code**: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
- **Waste from residues / unused products**: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
- **Contaminated packaging**: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not available.

15. Regulatory information

US federal regulations
All components are on the U.S. EPA TSCA Inventory List.
This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. Personal protection:

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US. Massachusetts RTK - Substance List
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Country(s) or region</td>
<td>Inventory name</td>
<td>On inventory (yes/no)</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
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<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
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<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
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<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### 16. Other information, including date of preparation or last revision

- **Issue date**: 29-August-2014
- **Revision date**: -
- **Version #**: 01
- **HMIS® ratings**:
  - Health: 1
  - Flammability: 0
  - Physical hazard: 0
- **Disclaimer**

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