



SAFETY DATA SHEET

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 Dust suppressant for 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 North America: 1-800-255-3924
International: +1-813-248-0585 Collect calls are accepted

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

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.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical description Alkali Metal/Halide

Chemical name	CAS number	%
Water	7732-18-5	63-70
Magnesium chloride	7786-30-3	29-33
Magnesium sulfate	7487-88-9	1.0-3.8

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

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, hazardous combustion products are released that may include: Magnesium oxide.
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. Suitable gloves can be recommended by the glove supplier.

Skin protection	
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 (H ₂ O=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	MgCl ₂
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.

Components	Species	Test Results
Magnesium chloride (CAS 7786-30-3)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	300 - 2000 mg/kg

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.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

NTP Report on Carcinogens

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

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.

Components	Species	Test Results
Magnesium sulfate (CAS 7487-88-9)		
Aquatic		
Crustacea	EC50	Tubificid worm (Tubifex tubifex) 149.6 - 191.36 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 2610 - 3080 mg/l, 96 hours

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	This substance/mixture is not intended to be transported in bulk.

15. Regulatory information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)	Not listed.
SARA 304 Emergency release notification	Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)	Not regulated.
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
SARA 302 Extremely hazardous substance	Not listed.
SARA 311/312 Hazardous chemical	Yes
Classified hazard categories	Hazard not otherwise classified (HNOC)
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.

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Magnesium chloride (CAS 7786-30-3)

Magnesium sulfate (CAS 7487-88-9)

International Inventories

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

*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 20-June-2018

Version # 02

HMIS® ratings
Health: 1
Flammability: 0
Physical hazard: 0

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