

1. Product and Company Identification

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|--------------------------------------|---|
| Product identifier | Phosfloc |
| Other means of identification | Not available |
| Recommended use | Phosphate remover |
| Recommended restrictions | None known. |
| Manufacturer information | NC Brands 40 Richards Ave. Norwalk, CT 06854 US |
| Supplier | See above. |

2. Hazards Identification

| | | |
|-----------------------------------|-----------------------------------|------------|
| Physical hazards | Corrosive to metals | Category 1 |
| Health hazards | Acute toxicity, oral | Category 4 |
| | Acute toxicity, dermal | Category 4 |
| | Acute toxicity, inhalation | Category 4 |
| | Serious eye damage/eye irritation | Category 1 |
| Environmental hazards | Not classified. | |
| WHMIS 2015 defined hazards | Not classified | |
| Label elements | | |



| | |
|--|--|
| Signal word | Danger |
| Hazard statement | May be corrosive to metals. Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled. Causes serious eye damage. |
| Precautionary statement | |
| Prevention | Keep only in original packaging. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing. Use only outdoors or in a well-ventilated area. Avoid breathing dust. Wear eye protection/face protection. |
| Response | Absorb spillage to prevent material-damage. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. Specific treatment (see information on this label). Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. |
| Storage | Store in a corrosion resistant container with a resistant inner liner. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC) | None known |
| WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC) | None known |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | Not applicable. |

3. Composition/Information on Ingredients

Mixture

| Chemical name | Common name and synonyms | CAS number | % |
|-------------------|--------------------------|------------|-----|
| Aluminum sulphate | | 10043-01-3 | 100 |

4. First Aid Measures

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| Inhalation | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. |
| Skin contact | IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell. Specific treatment (see information on this label). Take off contaminated clothing and wash it before reuse. |
| Eye contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. |
| Ingestion | IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. |
| Most important symptoms/effects, acute and delayed | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Symptoms may be delayed. |
| General information | If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children. |

5. Fire Fighting Measures

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| Suitable extinguishing media | Treat for surrounding material. |
| Unsuitable extinguishing media | Do not use water jet. Do not use halogenated extinguishing agents or foam. |
| 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 | Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | No unusual fire or explosion hazards noted. |
| Hazardous combustion products | May include and are not limited to: Oxides of sulfur. |

6. Accidental Release Measures

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| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Cover with plastic sheet to prevent spreading. Absorb spillage to prevent material damage. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| Environmental precautions | Avoid discharge into drains, water courses or onto the ground. Do not discharge into lakes, streams, ponds or public waters. |

7. Handling and Storage

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|--------------------------------------|--|
| Precautions for safe handling | Minimize dust generation and accumulation. Do not taste or swallow. Avoid breathing dust. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Use only outdoors or in a well-ventilated area. Avoid prolonged exposure. Wear appropriate personal protective equipment. Wash thoroughly after handling. Use care in handling/storage. Wash contaminated clothing before reuse. Use good industrial hygiene practices in handling this material. |
|--------------------------------------|--|

Conditions for safe storage, including any incompatibilities

Store locked up. Store in a cool, dry place out of direct sunlight. Store in corrosive resistant container with a resistant inner liner. Keep container tightly closed. Keep only in the original container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

| Components | Type | Value |
|------------------------------------|------|---------|
| Aluminum sulphate (CAS 10043-01-3) | TWA | 2 mg/m3 |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components | Type | Value | Form |
|------------------------------------|------|---------|-------------|
| Aluminum sulphate (CAS 10043-01-3) | TWA | 1 mg/m3 | Respirable. |

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

| Components | Type | Value | Form |
|------------------------------------|------|---------|----------------------|
| Aluminum sulphate (CAS 10043-01-3) | TWA | 1 mg/m3 | Respirable fraction. |

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

| Components | Type | Value | Form |
|------------------------------------|------|---------|----------------------|
| Aluminum sulphate (CAS 10043-01-3) | TWA | 1 mg/m3 | Respirable fraction. |

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

| Components | Type | Value |
|------------------------------------|------|---------|
| Aluminum sulphate (CAS 10043-01-3) | TWA | 2 mg/m3 |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|------------------------------------|------|---------|----------------------|
| Aluminum sulphate (CAS 10043-01-3) | TWA | 1 mg/m3 | Respirable fraction. |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|------------------------------------|------|---------|
| Aluminum sulphate (CAS 10043-01-3) | TWA | 2 mg/m3 |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Impervious gloves. Confirm with reputable supplier first.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. As required by employer code.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).

Thermal hazards

Not applicable.

General hygiene considerations

Keep away from food and drink. 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. When using do not eat or drink.

9. Physical and Chemical Properties

Appearance Granules / Powder

Physical state Solid.

| | |
|---|-------------------------|
| Form | Solid. |
| Color | White to off-white |
| Odor | Odorless |
| Odor threshold | Not available. |
| pH | 2.8 - 3.8 (1% solution) |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | 240 °F (115.56 °C) |
| Pour point | Not available. |
| Specific gravity | 1.6 |
| Partition coefficient (n-octanol/water) | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| 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 | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |

10. Stability and Reactivity

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| Reactivity | May be corrosive to metals. This product may react with strong oxidizing agents. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Chemical stability | Material is stable under normal conditions. |
| Conditions to avoid | Do not mix with other chemicals. |
| Incompatible materials | Strong oxidizing agents. Metals. |
| Hazardous decomposition products | May include and are not limited to: Oxides of sulfur. |

11. Toxicological Information

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|---|---|
| Routes of exposure | Eye, Skin contact, Inhalation, Ingestion. |
| Information on likely routes of exposure | |
| Ingestion | Harmful if swallowed. May cause stomach distress, nausea or vomiting. |
| Inhalation | Harmful if inhaled. |
| Skin contact | Harmful in contact with skin. Causes skin irritation. |
| Eye contact | Causes serious eye damage. |
| Symptoms related to the physical, chemical and toxicological characteristics | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. |
| Information on toxicological effects | |
| Acute toxicity | Harmful if inhaled. Harmful in contact with skin. Harmful if swallowed. |

| Components | Species | Test Results |
|--|--|---|
| Aluminum sulphate (CAS 10043-01-3) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Mouse | > 1167.5 mg/kg, 5 Days, ECHA |
| | Pig | > 1167.5 mg/kg, 5 Days, ECHA |
| | Rabbit | > 5000 mg/kg, 24 Hours, ECHA |
| | | > 1167.5 mg/kg |
| <i>Inhalation</i> | | |
| LC50 | Rat | 200 mg/m3, 5 Days, ECHA |
| | | 50 mg/m3, 5 Days, ECHA |
| | | 5 mg/L, 4 Hours, ECHA |
| <i>Oral</i> | | |
| LD50 | - | 253 mg/kg |
| | Guinea pig | 490 mg/kg, HSDB |
| | Mouse | > 730 mg/kg, HSDB |
| | Rat | > 2000 mg/kg |
| Skin corrosion/irritation | Causes skin irritation. | |
| Exposure minutes | Not available. | |
| Erythema value | Not available. | |
| Oedema value | Not available. | |
| Serious eye damage/eye irritation | Causes serious eye damage. | |
| Corneal opacity value | Not available. | |
| Iris lesion value | Not available. | |
| Conjunctival reddening value | Not available. | |
| Conjunctival oedema value | Not available. | |
| Recover days | Not available. | |
| Respiratory or skin sensitization | | |
| Canada - Alberta OELs: Irritant | | |
| Aluminum sulphate (CAS 10043-01-3) | | Irritant |
| Respiratory sensitization | Not a respiratory sensitizer. | |
| Skin sensitization | This product is not expected to cause skin sensitization. | |
| 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. See below. | |
| Canada - Manitoba OELs: carcinogenicity | | |
| ALUMINUM METAL AND INSOLUBLE COMPOUNDS, RESPIRABLE FRACTION (CAS 10043-01-3) | | Not classifiable as a human carcinogen. |
| US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | | |
| Not listed. | | |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. | |
| Teratogenicity | Not classified. | |
| Specific target organ toxicity - single exposure | Not available. | |
| Specific target organ toxicity - repeated exposure | Not classified. | |
| Aspiration hazard | Not classified. | |
| Chronic effects | Prolonged inhalation may be harmful. | |

12. Ecological Information

Ecotoxicity See below

Ecotoxicological data

| Components | Species | | Test Results |
|--------------------------------------|---|---|--------------------------|
| Aluminum sulphate (CAS 10043-01-3) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Amphipod (<i>Crangonyx pseudogracilis</i>) | 11.8 - 14 mg/L, 48 hours |
| Fish | LC50 | Fathead minnow (<i>Pimephales promelas</i>) | 3.4 - 5.6 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. | | |
| Mobility in general | Not available. | | |
| Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. | | |

13. Disposal Considerations

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| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Local disposal regulations | Dispose in accordance with all applicable regulations. |
| Hazardous waste code | D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] 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 | Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. |

14. Transport Information

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|---|---|
| Transport of Dangerous Goods (TDG) Proof of Classification | In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue. |
| General | IMDG Regulated Marine Pollutant. |
| U.S. Department of Transportation (DOT) | |
| Basic shipping requirements: | |
| UN number | UN3260 |
| Proper shipping name | Corrosive solid, acidic, inorganic, n.o.s. |
| Technical name | Aluminum sulphate |
| Hazard class | 8 |
| Packing group | III |
| Special provisions | IB8, IP3, T1, TP33 |
| Packaging exceptions | 154 |
| Packaging non bulk | 213 |
| Packaging bulk | 240 |
| Transportation of Dangerous Goods (TDG - Canada) | |
| Basic shipping requirements: | |
| UN number | UN3260 |
| Proper shipping name | CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. |
| Technical name | Aluminum sulphate |
| Hazard class | 8 |
| Packing group | III |
| Special provisions | 16 |

DOT



TDG



15. Regulatory Information

Canadian federal regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canada Priority Substances List (Second List): Listed substance

Aluminum sulphate (CAS 10043-01-3) Listed.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS 2015 Exemptions Not applicable

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Aluminum sulphate (CAS 10043-01-3) Listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance No

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.

US state regulations

US - California Hazardous Substances (Director's): Listed substance

Aluminum sulphate (CAS 10043-01-3) Listed.

US - Illinois Chemical Safety Act: Listed substance

Aluminum sulphate (CAS 10043-01-3)

US - Louisiana Spill Reporting: Listed substance

Aluminum sulphate (CAS 10043-01-3) Listed.

US - Minnesota Haz Subs: Listed substance

Aluminum sulphate (CAS 10043-01-3) Listed.

US - New Jersey RTK - Substances: Listed substance

Aluminum sulphate (CAS 10043-01-3)

US - Texas Effects Screening Levels: Listed substance

Aluminum sulphate (CAS 10043-01-3) Listed.

US. Massachusetts RTK - Substance List

Aluminum sulphate (CAS 10043-01-3)

US. New Jersey Worker and Community Right-to-Know Act

Not regulated.

US. Pennsylvania Worker and Community Right-to-Know Law

Aluminum sulphate (CAS 10043-01-3)

US. Rhode Island RTK

Aluminum sulphate (CAS 10043-01-3)

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.

Inventory status

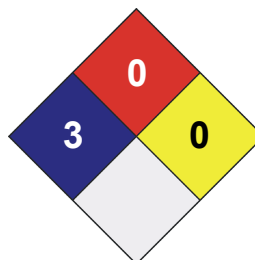
| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

| LEGEND | |
|----------|---|
| Severe | 4 |
| Serious | 3 |
| Moderate | 2 |
| Slight | 1 |
| Minimal | 0 |

| | |
|----------------------------|-----|
| HEALTH | / 3 |
| FLAMMABILITY | 0 |
| PHYSICAL HAZARD | 0 |
| PERSONAL PROTECTION | X |

**Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available. Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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01

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Prepared by

Dell Tech Laboratories, Ltd. Phone: (519) 858-5021

Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.