SECTION 1 – IDENTIFICATION

Name, Address, and Telephone of the Responsible Party
Dyno Nobel Inc.
2795 East Cottonwood Parkway, Suite 500
Salt Lake City, Utah 84121
Phone: 801-364-4800  Fax 801-321-6703
E-Mail: dnya.hse@am.dynonobel.com  www.dynonobel.com

Product Identifier
Product Name: Superprill
Formula: NH4NO3

Other Means of Identification
Synonyms: Superprill™, Prilled Ammonium Nitrate, Industrial Grade LoDAN, Ammonium Nitrate, Industrial Grade HiDAN, Ammonium Nitrate, Agricultural Grade

Intended Use of the Product
Industrial applications

Emergency Telephone Number
FOR 24 HOUR EMERGENCY, CALL
CHEMTREC (USA) 800-424-9300
CANUTEC (CANADA) 613-996-6666

SECTION 2 – HAZARD(S) IDENTIFICATION

Classification of the Substance or Mixture
Classification (GHS-US)
Ox. Sol. 3 H272
Eye Irrit. 2A H319

Label Elements
GHS-US Labeling

Hazard Pictograms (GHS-US):

Signal Word (GHS-US): Warning
Hazard Statements (GHS-US):
H272 - May intensify fire; oxidizer
H319 - Causes serious eye irritation
P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking
P220 - Keep/Store away from combustible materials, clothing, incompatible materials
P221 - Take any precaution to avoid mixing with combustibles, organic material, clothing, incompatible materials
P260 - Do not breathe fume, dust.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 - If eye irritation persists: Get medical advice/attention
P370+P378 - In case of fire: Use water only on AN fires.
P405 - Store locked up.
P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations*
Other Hazards: Aquatic Acute 3 H402
H402 – Harmful to aquatic life

*Do not perform hot work on contaminated equipment.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Product identifier</th>
<th>% (w/w)</th>
<th>Ingredient Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammonium nitrate</td>
<td>(CAS No) 6484-52-2</td>
<td>98 - 100</td>
<td>Ox. Sol. 3, H272 Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4 - FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: If symptoms occur, go into fresh air and ventilate suspected area. Seek medical attention.

Skin Contact: Remove contaminated clothing. Wash with soap and water followed by rinsing with water. Seek medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Seek medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Irritation to eyes, skin and respiratory tract.

Inhalation: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty breathing.

Skin Contact: May cause skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: None known.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If ingested, may cause methemoglobinemia – emergency response should treat appropriately, such as by intravenous administration of methylene blue.

SECTION 5 - FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Evacuate the area for 1 mile if ammonium nitrate is involved in a fire. Only water shall be used on ammonium nitrate fires. Dry chemical, foams, steam and smothering devices are not effective and can lead to possible explosion of the ammonium nitrate. General extinguishers may be used on fires not involving the ammonium nitrate such as conveyors, electrical equipment, tires, bearings, general plant equipment or the like when only minimal amounts of ammonium nitrate are present. For large fires use unmanned monitor nozzles if available.

Unsuitable Extinguishing Media: Dry chemical, carbon dioxide, or regular foam.

Special Hazards Arising From the Substance or Mixture: In intense fires, the ammonium nitrate can melt and detonate from confinement or strong shocks. Evacuation of at least 1 mile is recommended if the ammonium nitrate is involved in a fire.

Fire Hazard: May intensify fire; oxidizer. Will accelerate the burning of other combustibles, resulting in more rapid spread of fire.

Explosion Hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Smothering, contact with organic material, or combustible material may cause an explosive situation.

Reactivity: May cause or intensify fire; oxidizer. May accelerate the burning of other combustible materials. Smothering,
contact with organic material, or combustible material may cause an explosive situation.

**Advice for Firefighters**

**Precautions for Firefighting:** Evacuate the area for 1 mile if ammonium nitrate is involved in a fire. Only fires which are in the initial or beginning stage or those involving minimal amounts of ammonium nitrate in a manufacturing setting or in an area where ammonium nitrate is stored or in vehicles transporting ammonium nitrate should be attacked using manual fire extinguishing methods (fire extinguishers, hose streams, etc.) that require a human operator. If a fire in an area where ammonium nitrate is stored or in vehicles transporting ammonium nitrate progresses beyond the incipient stage or involves the ammonium nitrate, evacuation is required. Fire fighters downwind from a fire should wear self-contained breathing apparatus. Fire fighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves and rubber boots.

**Hazardous Combustion Products:** Nitrogen oxides. Toxic fumes are released. Carbon oxides (CO, CO₂). Ammonia.

**Additional Information:** If a fire has not reached the ammonium nitrate, cool the ammonium nitrate or container thereof to prevent the fire from reaching it. Ammonium nitrate does not burn by itself and thus needs to be kept separate from combustible materials. Ammonium nitrate is an oxidizer and will significantly increase the burning rate of combustible materials.

When in confinement and in the presence of a strong detonation sources the material can explode when subject to sudden shock, pressure, or high temperatures. Avoid temperatures above 210 C (410 F) which may cause thermal decomposition or explosion, especially in confined or poorly ventilated spaces.

Do not allow run-off from fire fighting to enter drains or water courses.

**Reference to Other Sections:** Refer to section 9 for flammability properties. Not flammable.

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**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures:** Handle in accordance with good industrial hygiene and safety practice. Avoid breathing (dust, vapor, mist, gas). Avoid getting in eyes or on skin. Keep away from combustible material.

**For Non-Emergency Personnel**

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

**For Emergency Personnel**

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Ventilate area.

**Environmental Precautions**

Prevent entry to sewers and public waters.

**Methods and Material for Containment and Cleaning Up**

**For Containment:** Avoid generation of dust during clean-up of spills. Use a broom for small spills do not mix with other materials.

**Methods for Cleaning Up:** Collect spillage for possible reuse. Clean up spills immediately and dispose of waste safely. Contact competent authorities after a spill. Do not take up in combustible material such as: saw dust or cellulosic material.

**Reference to Other Sections**

See heading 8, Exposure Controls and Personal Protection.

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**SECTION 7 - HANDLING AND STORAGE**

**Precautions for Safe Handling**

**Additional Hazards When Processed:** When heated to decomposition, emits toxic fumes. Smothering, contact with organic material, or combustible material in a fire situation may be an explosive situation. Do not puncture or incinerate container.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

**Conditions for Safe Storage, Including Any Incompatibilities**

**Technical Measures:** Comply with applicable regulations 29 CFR 1910.109(i).

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store...
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless to off-white prills</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>170 °C (337°F)</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>177 - 210 °C Decomposition (350 - 410°F)</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Lower Flammable Limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper Flammable Limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Vapor Density at 20 °C</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.72 - 1.00 (Poured bulk density)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not applicable. (inorganic)</td>
</tr>
</tbody>
</table>


SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Exposure Controls

Appropriate Engineering Controls: Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment: Approved safety glasses. Gloves. If insufficient ventilation: wear respiratory protection. Protective clothing when appropriate as indicated by air monitoring or if engineering controls are insufficient.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Approved safety glasses

Skin and Body Protection: Not available

Respiratory Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

Other Information: When using, do not eat, drink or smoke.
Viscosity: Not available
Explosion Data – Sensitivity to Mechanical Impact: Not sensitive to mechanical impact. May be sensitive to supersonic explosively driven projectile impacts.
Explosion Data – Sensitivity to Static Discharge: Not sensitive to static discharge.

SECTION 10 - STABILITY AND REACTIVITY
Reactivity: May cause or intensify fire; oxidizer. May accelerate the burning of other combustible materials. Smothering, contact with organic material, or combustible material may cause an explosive situation.
Chemical Stability: May intensify fire; oxidizer.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION
Information on Toxicological Effects – Product
Acute Toxicity: Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Causes serious eye irritation.
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not available
Carcinogenicity: Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: May cause respiratory irritation.
Symptoms/Injuries After Skin Contact: May cause skin irritation.
Symptoms/Injuries After Eye Contact: Causes serious eye irritation.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: None known.

Information on Toxicological Effects - Ingredient(s)
LD50 and LC50 Data:
Ammonium nitrate (6484-52-2)
LD50 Oral Rat 2217 mg/kg
LC50 Inhalation Rat > 88.8 mg/l/4h
ATE CLP (oral) 2217.000 mg/kg body weight

SECTION 12: ECOLOGICAL INFORMATION
Toxicity: Not classified
Persistence and Degradability
Superprill
Persistence and Degradability: Not established.
### Bioaccumulative Potential

#### Superprill
- Bioaccumulative Potential: Not established.

#### Ammonium nitrate (6484-52-2)
- BCF fish 1: (no bioaccumulation expected)
- Log Pow: -3.1 (at 25 °C)

**Mobility in Soil**: Not available

**Other Adverse Effects**

**Other Information**: Avoid release to the environment.

---

### SECTION 13 – DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations**: Collect spillage for possible reuse. Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Additional Information**: Clean up even minor leaks or spills if possible without unnecessary risk.

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### SECTION 14 - TRANSPORT INFORMATION

14.1 In Accordance with DOT
- **Proper Shipping Name**: AMMONIUM NITRATE with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance
- **Hazard Class**: 5.1
- **Identification Number**: UN1942
- **Label Codes**: 5.1
- **Packing Group**: III
- **ERG Number**: 140

14.2 In Accordance with IMDG
- **Proper Shipping Name**: AMMONIUM NITRATE
- **Hazard Class**: 5.1
- **Identification Number**: UN1942
- **Packing Group**: III
- **Label Codes**: 5.1
- **EmS-No. (Fire)**: F-H
- **EmS-No. (Spillage)**: S-Q

14.3 In Accordance with IATA
- **Proper Shipping Name**: AMMONIUM NITRATE
- **Packing Group**: III
- **Identification Number**: UN1942
- **Hazard Class**: 5
- **Label Codes**: 5.1
- **ERG Code (IATA)**: 5L

14.4 In Accordance with TDG
- **Proper Shipping Name**: AMMONIUM NITRATE with not more than 0.2 per cent combustible substances, including any organic substance calculated as carbon, to the exclusion of any other added substance
- **Packing Group**: III
Hazard Class : 5.1
Identification Number : UN1942
Label Codes : 5.1

SECTION 15 - REGULATORY INFORMATION

US Federal Regulations
Superprill
SARA Section 311/312 Hazard Classes | Immediate (acute) health hazard
Ammonium nitrate (6484-52-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations
Ammonium nitrate (6484-52-2)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Canadian Regulations
Superprill
WHMIS Classification | Class C - Oxidizing Material
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

Ammonium nitrate (6484-52-2)
Listed on the Canadian DSL (Domestic Substances List) inventory.
WHMIS Classification | Class C - Oxidizing Material
Class D Division 2 Subdivision B - Toxic material causing other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 09/10/2018
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A
Ox. Sol. 3 | Oxidizing solids Category 3
H272 | May intensify fire; oxidizer
H319 | Causes serious eye irritation

NFPA Health Hazard : 1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
NFPA Fire Hazard : 0 - Materials that will not burn.
NFPA Reactivity: 3 - Capable of detonation or explosive reaction, but requires a strong initiating source or must be heated under confinement before initiation, or reacts explosively with water.

NFPA Specific Hazard: OX - This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.

Party Responsible for the Preparation of This Document
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Dyno Nobel SDS