



SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: 880108-VI Harrell's 17-5-17 All Purpose

Product Type: Solid Granule

Uses:

Recommended use / restrictions of use: Professional applications or Agricultural fertilizer. No restrictions.

Supplier

Supplier's Details: Harrell's LLC
720 Kraft Rd
Lakeland, FL 33815
1-800-282-8007

Emergency telephone number

Name : Chemtrec

Phone Number : 1-800-424-9300

Customer Number : 10202

2. HAZARDS IDENTIFICATION

Hazard classification: This material is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

Oxidizing solids – Category 3
Causes serious eye damage - Category 1
Acute toxicity - Category 4 Oral
Reproductive toxicity – Category 2

Label elements

Hazard pictograms:



Signal word: Danger!

Hazard statements: May intensify fire; oxidizer
Causes serious eye damage



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Precautionary statements: Harmful if swallowed
 Suspected of damaging fertility or the unborn child
 Keep away from heat, open flames, sparks, hot surfaces. - No smoking
 Take any precaution to avoid mixing with combustibles
 In case of fire: Use water in large amounts for extinction
 Wear protective gloves, eye protection/face protection, protective clothing
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Wash thoroughly after handling.

Other hazards
 Other hazards not contributing to the classification Spill area may be slippery.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

| Chemical name/component | CAS# | Concentration % |
|--|------------|-----------------|
| Potassium nitrate | 7757-79-1 | 25-50 |
| Ammonium nitrate | 6484-52-2 | 20-30 |
| Calcium nitrate, anhydrous | 10124-37-5 | 10-25 |
| Potassium pentahydrogen bis(phosphate) | 14887-42-4 | < 10 |
| Boric acid | 10043-35-3 | < 0.2 |

4. FIRST-AID MEASURES

Description of first aid measures

Eye Contact --If in eyes: Flush with water for 15 minutes. Call a doctor for treatment if irritation persists.
 Skin Contact - If on skin: Wash thoroughly with soap and water. Launder clothing before reuse
 Inhalation -- If inhaled: Remove affected person from source of exposure. Call 911 if breathing is difficult.
 Ingestion -- If ingested: Get medical attention. Have the product label with you when calling a doctor or going for treatment.

Most important symptoms and effects, both acute and delayed

Eye contact Causes serious eye damage. Symptoms can include pain, irritation & redness.
 Skin contact May causes mild skin irritation with continuous exposure/contact.
 Inhalation May cause respiratory irritation
 Ingestion Swallowing large quantities can give complaints to stomach/bowel. Cyanosis may occur (lips and fingernails turn blue).

Indication of any immediate medical attention and special treatment needed No additional information available.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Water spray, dry chemical, carbon dioxide, sand
 Unsuitable extinguishing media: Do not use chemical extinguishers of foams. Don't use steam or sand to extinguish fire.
 Special hazards arising from the Promotes combustion. Product is not self-ignitable, but may support



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substance or mixture: combustion.
Specific hazards: In case of fire, there is a potential option of explosion, especially if fertilizers are contaminated by inappropriate (incompatible) chemical substances (e.g. oils, see section 10).

Advice for firefighters

Firefighting instructions: Use extinguishing media appropriate for the surrounding materials.
Protection during firefighting: Wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Other information: If safe to do so prevent the contamination of the fertilizer by oil and other combustible materials. Do not allow run-off from fire-fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Protective equipment: Wear eye protection, gloves and clothing that covers the skin.
Emergency procedures: Activate emergency procedures.

Environmental precautions: Prevent entry to sewers and public surface waters.

Methods and material for containment and cleaning up

Clean up methods : Use mechanical means. Store material in suitable containers for recycle or disposal. Minimize generation of dust.
Reference to other sections: See Section 7 for safe handling information.

7. HANDLING AND STORAGE

Precaution for safe handling: Avoid contact with skin and eyes. After handling, wash hands thoroughly with soap and water. Avoid breathing dust. Wash before eating and drinking.
Fire/explosion precautions : No special measures required.

Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a dry, cool, and well-ventilated area. Protect from weather.
Storage temperature (recommended) <= 30C/86F
Incompatible materials: Storage with combustible substances, agents, acids, alkali, sulphur, chlorates, chlorides, chromates, nitrites, permanganates, metal powders and substances containing such materials as copper, nickel, cobalt, zinc and alloys of any of the aforementioned materials should be avoided.
Prohibitions on mixed storage: Keep substance away from: (strong) acids, (strong) bases, combustible materials, organic materials, oxidizing agents

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Control parameters

Exposure limits are listed below, if they exist.



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| Component | Regulation | Type of listing | Value/Notation |
|-----------------------------|------------|-----------------|----------------------|
| Boric Acid | ACGIH | TWA | 2 mg/m ³ |
| Dust – inhalable particles | ACGIH | TWA | 10 mg/m ³ |
| Dust – respirable particles | ACGIH | TWA | 3 mg/m ³ |

Exposure controls

- Appropriate engineering controls: If dust is generated during handling, use adequate ventilation to keep exposure to airborne dust level below the threshold limits.
- Hand protection: Wear suitable protective gloves resistant to this material. The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.
- Eye protection: Safety glasses with side shields or tight fitting goggles if dust is generated.
- Skin and body protection: Wear long sleeved clothing and other suitable clothing to prevent skin exposure.
- Respiratory protection: Respiratory protection should be worn when there is potential to exceed the exposure limit requirements or guidelines. A NIOSH approved dust respirator if dust level is above the threshold limit.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and properties

| | | | |
|-------------------|-------------------|--------------------------|---------------------|
| Physical state: | Solid granule | Flammability: | Not flammable |
| Color: | White | Flash point: | Not applicable |
| Odor: | Odorless | Explosive limit (upper): | No data available |
| Odor threshold: | Not determined | Explosive limit (lower): | No data available |
| Boiling point: | No data available | Auto ignition temp: | No data available |
| Melting point: | No data available | Decomposition temp: | No data available |
| Freezing point: | No data available | Partition coefficient: | No data available |
| Vapor pressure: | Not applicable | Viscosity, kinematic: | Not applicable |
| Vapor density: | Not applicable | Viscosity, dynamic: | Not applicable |
| pH: | No data available | Specific gravity: | No data available |
| Bulk density: | No data available | Solubility: | Soluble in water |
| Evaporation rate: | Not applicable | Oxidizing | May intensify fire. |

Other information: No further information available.

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

- Reactivity: The product stable under normal conditions of use, storage and transport.
- Chemical stability: The product is stable under normal ambient storage conditions.
- Possibility of hazardous reactions: The product reacts with combustible materials and increases combustion even in the absence of air. Reacts with many compounds e.g.: with organic

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| | material, with combustible materials, with (some) metals and their compounds and with (strong) reducers. Reacts with (some) acids: release of toxic and corrosive gases/vapors (nitrous vapors). Heating under strong confinement (eg. in tubes or drains) may lead to a violent reaction or explosion. Can melt and decompose in a fire. |
| Conditions to avoid: | Avoid high temperatures. Prevent moisture contact. |
| Incompatible materials: | Keep substance away from: strong acids, strong bases and oxidation agents, combustible materials, reducing agents, organic materials, metal powders, chromates, chlorates, copper, zinc, aluminum. |
| Hazardous decomposition products: | On heating/burning: release of toxic and corrosive gases/vapors nitrous vapors. Decomposes on exposure to temperature rise: release of oxygen. . Reacts with (some) acids: release of toxic and corrosive gases/vapors : nitrous vapors. |

11. TOXICOLOGICAL INFORMATION

Acute toxicity - Based on available data

Potassium nitrate (7757-79-1)

| | |
|----------------------------|---------------------|
| LD50 oral rat | 3750 mg/kg |
| LD50 dermal rat | > 5000 mg/kg bw/day |
| LC50 inhalation rat (mg/l) | > 0,527 mg/l/4h |

Ammonium nitrate (6484-52-2)

| | |
|----------------------------|---------------------|
| LD50 oral rat | 2950 mg/kg |
| LD50 dermal rat | > 5000 mg/kg |
| LC50 inhalation rat (mg/l) | Inhalation unlikely |

Calcium nitrate, anhydrous (10124-37-5)

| | |
|----------------------------|--|
| LD50 oral rat | 300 - 2000 mg/kg bodyweight (OECD 423) |
| LD50 dermal rat | > 2000 mg/kg bodyweight (OECD 402 with potassium pentacalcium nitrate decahydrate) |
| LC50 inhalation rat (mg/l) | (no data, low vapour pressure) |
| ATE (oral) | 500.000 mg/kg |

Potassium pentahydrogen bis(phosphate) (14887-42-4)

| | |
|-----------------|-------------------------|
| LD50 oral rat | > 2000 mg/kg (OECD 425) |
| LD50 dermal rat | > 2000 mg/kg (OECD 402) |

Boric acid (10043-35-3)

| | |
|--------------------|---|
| LD50 oral rat | 2660 mg/kg (Rat; Acute Oral Toxicity Literature study; >2600 mg/kg bodyweight; Rat; Experimental value) |
| LD50 dermal rabbit | > 2000 mg/kg Rabbit; Experimental value; FIFRA (40 CFR) |

Information on likely routes of exposure

| | |
|-----------------------------|---|
| Inhalation: | High concentrations of dust may irritate the throat and respiratory system and cause coughing |
| Skin corrosion/irritation : | Prolonged contact causes skin irritation. |
| Eye damage/irritation : | Causes serious eye irritation |
| Ingestion: | May cause discomfort if swallowed. |
| Carcinogenicity : | Not classified. |
| Reproductive toxicity : | Not classified. |

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|---|--|
| Specific target organ toxicity (single exposure) | Not classified. |
| Specific target organ toxicity (repeated exposure) | Not classified. |
| Potential adverse human health effects and symptoms | The product can cause methemoglobinemia. |
| Symptoms/injuries after skin contact: | Causes skin irritation. |
| Symptoms/injuries after eye contact: | Causes serious eye irritation |
| Symptoms/injuries after inhalation: | Dust may cause respiratory irritation. |
| NTP (National Toxicology Program): | Substance not listed. |
| IARC (International Agency for Research on Cancer): | Substance not listed. |

12. ECOLOGICAL INFORMATION

| | |
|-------------------|--|
| Ecology - general | Classification concerning the environment: not applicable. |
| Ecology - water | Mild water pollutant (surface water) Ground water pollutant Maximum concentration in drinking water: 50 mg/l (nitrate) Not harmful to algae (EC50 >1000 mg/l) Slightly harmful to invertebrates (Daphnia) (EC50 (48h): 100 - 1000 mg/l) Slightly harmful to plankton (EC50: 100 - 1000 mg/l) Slightly harmful to fishes (LC50 100-1000 mg/l) |

Potassium nitrate (7757-79-1)

| | |
|---|---------------------------------------|
| LC50 fishes 1 | 162 mg/l (96 h; Pisces) |
| LC50 other aquatic organisms 1 | 39 mg/l (96 h; Daphnia magna) |
| EC50 other aquatic organisms 1 | 200 - 1000 mg/l (Plankton) |
| LC50 fish 2 | 1378 mg/l (96 h; Poecilia reticulata) |
| LC50 other aquatic organisms 2 | 490 mg/l (48 h; Daphnia magna) |
| TLM fish 1 | 3000 mg/l (96 h; Lepomis macrochirus) |
| TLM fish 2 | 162 mg/l (96 h; Gambusia affinis) |
| Threshold limit other aquatic organisms 1 | 39 mg/l (96 h; Daphnia magna) |
| Threshold limit other aquatic organisms 2 | 490 mg/l (48 h; Daphnia magna) |

Ammonium nitrate (6484-52-2)

| | |
|---------------|---------------|
| LC50 fishes 1 | 447 mg/l 48-h |
|---------------|---------------|

Calcium nitrate, anhydrous (10124-37-5)

| | |
|----------------|--|
| LC50 fish 1 | 1378 mg/l 96-h (OECD 203, with potassium nitrate) |
| EC50 Daphnia 1 | 490 mg/l 48-h (no guideline followed, fresh water, with potassium nitrate) |

Boric acid (10043-35-3)

| | |
|-------------------------|---|
| LC50 fishes 1 | 100 ppm (96 h; Salmo gairdneri (Oncorhynchus mykiss); Soft water) |
| EC50 Daphnia 1 | 658 - 875 mg/l (48 h; Daphnia magna) |
| LC50 fish 2 | 79 ppm (96 h; Salmo gairdneri (Oncorhynchus mykiss); Hard water) |
| EC50 Daphnia 2 | 19,7 mg/l (336 h; Daphnia magna) |
| TLM fish 1 | 1800 ppm (24 h; Gambusia affinis) |
| Threshold limit algae 1 | 5 mg/l (672 h; Elodea sp.) |



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Boric acid (10043-35-3)

| | |
|---------------------------------|---|
| Threshold limit algae 2 | 0.4 - 0.8,336 h; Chlorella sp.; Growth |
| Persistence and degradability | Preparation based on substances which are readily biodegradable. |
| Biochemical oxygen demand (BOD) | Not applicable |
| Chemical oxygen demand (COD) | Not applicable |
| ThOD | Not applicable |
| BOD (% of ThOD) | Not applicable |
| Bioaccumulative potential | No bioaccumulation or biomagnifications are expected based on substance properties (Log Pow < 1). |
| Mobility in soil | Low potential for adsorption (based on substance properties). Soluble in water. |
| Other adverse effects | May cause eutrophication. |

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| | |
|---------------------------------|--|
| Waste disposal recommendations: | Recycle excess product if at all possible. Avoid sewage and landfill disposal. |
| Waste containers : | Do not use metal waste containers. |
| Reference to other sections: | See section 8 for exposure control information. |

14. TRANSPORT INFORMATION

DOT UN 1479 OXIDIZING SOLID, N.O.S. (CONTAINS Potassium Nitrate, Ammonium nitrate), 5.1, PG III

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations.. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

OSHA Hazard Communication Standard

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

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312
 No Hazards

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313 contain the following:.

| Chemical name/component | CAS# |
|-------------------------|-----------|
| Potassium nitrate | 7757-79-1 |



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|----------------------------|------------|
| Ammonium nitrate | 6484-52-2 |
| Calcium nitrate, anhydrous | 10124-37-5 |

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

16. OTHER INFORMATION

Other information

Date of Preparation: 01/18/2016

Version: 1.0

Disclaimer: The information provided in this Safety Data Sheet is correct to the best of our knowledge and belief at the date of its publication. The information is designed only as guidance for safe handling, use, storage, transportation, and disposal, and is not to be considered a warranty (express, implied, merchantability or fitness for any particular purpose) or quality specification. The information relates only to the specific material designated therein.