

## Hazard Communication Standard: Safety Data Sheets

The Hazard Communication Standard (HCS) (29 CFR 1910.1200(g)), revised in 2012, requires that the chemical manufacturer, distributor, or importer provide Safety Data Sheets (SDSs) (formerly MSDSs or Material Safety Data Sheets) for each hazardous chemical to downstream users to communicate information on these hazards. The information contained in the SDS is largely the same as the MSDS, except now the SDSs are required to be presented in a consistent user-friendly, 16-section format. This brief provides guidance to help workers who handle hazardous chemicals to become familiar with the format and understand the contents of the SDSs.

The SDS includes information such as the properties of each chemical; the physical, health, and environmental health hazards; protective measures; and safety precautions for handling, storing, and transporting the chemical. The information contained in the SDS must be in English (although it may be in other languages as well). In addition, OSHA requires that SDS preparers provide specific minimum information as detailed in Appendix D of 29 CFR 1910.1200. The SDS preparers may also include additional information in various section(s).

Sections 1 through 8 contain general information about the chemical, identification, hazards, composition, safe handling practices, and emergency control measures (e.g., fire fighting). This information should be helpful to those that need to get the information quickly. Sections 9 through 11 and 16 contain other technical and scientific information, such as physical and chemical properties, stability and reactivity information, toxicological information, exposure control information, and other information including the date of preparation or last revision. The SDS must also state that no applicable information was found when the preparer does not find relevant information for any required element.

The SDS must also contain Sections 12 through 15, to be consistent with the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS), but OSHA will not enforce the content of these sections because they concern matters handled by other agencies.

A description of all 16 sections of the SDS, along with their contents, is presented below:

### Section 1: Identification

- Identity: Vitamin/Mineral Premix
- Trade Names: Dr. Register Calcium Supplement Plus NNQ8K8
- Manufacturer: Dr. Register N4415 469<sup>th</sup> Street Menomonie, WI 54751 Tel: 715-232-0402
- Emergency: Call 24 Hour Emergency Response, Dr. Register 715-232-0402

- Calcium is used to close the esophageal groove, the rumen is bypassed, and the drench is absorbed quickly in the omasum and abomasiums. The calcium blood levels longer. The energy found in calcium propionate as well as propylene glycol, an aid to the fresh cow, b vitamins in high amounts stimulate the appetite, electrolytes help rehydrate the cow after freshening and the selenium and vitamin e, stimulate the immune system. Also included in the Jumpstart is niacin to help avoid ketosis, cobalt, vitamin c and other trace minerals to stimulate the immune system, amino acids to increase absorption of calcium.

## Section 2: Hazard(s) Identification

- Flammable Limits: LEL      NA      UEL      NA
- Signal word: NA
- Hazard statement(s): Not Combustible
- Pictograms: NA
- Precautionary statement(s): NA
- Description of any hazards not otherwise classified: NA
- No unknown toxicity

## Section 3: Composition/Information on Ingredients

### Substances

- Vitamin/Mineral Premix contain some of the following:
- 
- Cas # Calcium Chloride 10043-52-4, Calcium Propionate 4075-81-4, Folic Acid, Riboflavin, Pyridoxine Hcl, Glycerin, Water
- Stable under ordinary conditions of use and storage.

### Mixtures

- Same information required for substances.
- The chemical name and concentration (i.e., exact percentage) of all ingredients which are classified as health hazards and are: NA
- The SDS is used for a group of substantially similar mixtures

## Section 4: First-Aid Measures

Route of Entry:

Inhalation- May irritate the respiratory tract. May increase the incidence of upper respiratory infections (pneumonia).

Skin- May cause irritation.

Ingestion- May cause abdominal pain and nausea. Cobalt, Copper, Zinc & Selenium salts may have oral human lethal doses in the range of 50 to 500mg/kg.

Carcinogenicity: NTP No LARC Monographs No

Signs & Symptoms of Exposure: Ingestion of large doses of mineral salts usually causes vomiting, but the acute effects are described as nausea, chills and diarrhea. Eye or skin irritation may occur following ingredient contact.

Aggravation of Pre-existing Conditions: Respiratory irritation could be expected from the inhalation of premix dusts.

Emergency and First Aid Procedures: If Inhaled, Remove to fresh air and seek medical attention for any breathing difficulties.

In case of skin contact, wash with soap and water. Seek medical attention if skin becomes red and irritated.

In case of eye contact, flush eyes immediately with water for at least 15 minutes. Seek medical attention if irritation persists.

If ingested, give large quantities of water to induce vomiting. Never give anything by mouth to an unconscious person. Call a physician immediately.

## Section 5: Fire-Fighting Measures

- Flash Point: Not combustible.
- Flammable Limits: LEL NA UEL NA

- Extinguishing Media: Foam, CO2, dry chemical or water.
- Special Fire Fighting Procedures: In the event of fire. Wear full protective clothing and NIOSH approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive mode.
- Unusual Fire and Explosion Hazards: Not combustible.

## Section 6: Accidental Release Measures

- Material Release or Spill Precautions: Should a spill occur, ventilate area. Clean-up personnel require respiratory protection. Recover uncontaminated material for use. Vacuum or sweep remaining material keeping dust to a minimum.
- Consulting experts when needed, and wear appropriate protective clothing.
- Other Precautions: Observe good personal hygiene. Wash after handling.

## Section 7: Handling and Storage

- Handling and Storing Precautions: Protect containers from damage and keep closed when not in use.

## Section 8: Exposure Controls/Personal Protection

- Respiratory Protection: Use NIOSH approved particulate respirator if dust is generated or is anticipated. USBM approved schedule 21b respirator or equal is recommended.
- Ventilation: A system of local and/or general exhaust is recommended to keep employee exposure below the Airborne Exposure Limits. Local exhaust is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH Document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.
- Protective Gloves: Yes.
- Eye Protection: Safety goggles are recommended.
- Other Protective Clothing or Equipment: Use other protective equipment when necessary in order to avoid prolonged exposure to skin.
- Work and Hygienic Practices: Observe Good personal hygiene. Wash after handling.

## Section 9: Physical and Chemical Properties

- Appearance (physical state, color, etc.): White, Brown, Red, Blue and gray mixtures of Minerals/Vitamins

- Upper/lower flammability or explosive limits: NA
- Odor: Slight odor from Minerals/Vitamins
- Vapor pressure: NA
- Odor threshold: Minimal
- Vapor density: NA
- pH: NA
- Relative density: Slightly dense
- Melting point/freezing point: NA
- Solubility(ies): Some components may be water soluble
- Initial boiling point and boiling range: NA
- Flash point: Not Combustible
- Evaporation rate: NA
- Flammability (solid, gas): LEL NA UEL NA
- Partition coefficient: NA
- Auto-ignition temperature: NA
- Decomposition temperature: NA
- Viscosity: Slightly dense

## Section 10: Stability and Reactivity

- Stability: Stable under ordinary conditions of use and storage.
- Conditions to avoid: Extreme heat.
- Incompatibility (materials to avoid): NA
- Hazardous Decomposition/Byproducts: May decompose if heated and produce irritating or toxic combustion products.
- Hazardous Polymerization: Will not occur.

## Section 11: Toxicological Information

- Not Applicable

## Section 12: Ecological Information (non-mandatory)

This section provides information to evaluate the environmental impact of the chemical(s) if it were released to the environment. The information may include:

- Generally the ingredients in this premix are in the Non-Toxic Category.

## Section 13: Disposal Considerations (non-mandatory)

- Waste Disposal Method: Dispose of unreclaim material in a RCRA-approved waste facility.

## Section 14: Transport Information (non-mandatory)

This section provides guidance on classification information for shipping and transporting of hazardous chemical(s) by road, air, rail, or sea. The information may include: NA

## Section 15: Regulatory Information (non-mandatory)

- Generally ingredients in this premix are in the non-toxic category.

## Section 16: Other Information

Observe good personal hygiene. Wash after handling.

### References

OSHA, 29 CFR 1910.1200(g) and Appendix D. United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), third revised edition, United Nations, 2009. These references and other information related to the revised Hazard Communication Standard can be found on OSHA's Hazard Communication Safety and Health Topics page, located at:

<http://www.osha.gov/dsg/hazcom/index.html>.

Disclaimer: This brief provides a general overview of the safety data sheet requirements in the Hazard Communication Standard (see 29 CFR 1910.1200(g) and Appendix D of 29 CFR 1910.1200). It does not alter or determine compliance responsibilities in the standard or the Occupational Safety and Health Act of 1970. Since interpretations and enforcement policy may change over time, the reader should consult current OSHA interpretations and decisions by the Occupational Safety and Health Review Commission and the courts for additional guidance on OSHA compliance requirements. Please note that states with OSHA-approved state plans may have additional requirements for chemical safety data sheets, outside of those outlined above. For more information on those standards, please visit:

<http://www.osha.gov/dcsp/osp/statestandards.html>.