

SAFETY DATA SHEET

1. PRODUCT AND DOCUMENT IDENTIFICATION

Product Identity: Dehorning Paste

Product Code: DHP, 005-18

Product Use: This product is used to prevent the development of horns in young calves up to 8 weeks of age.

Manufactured by: Radix Laboratories, Inc.
1334 International Drive
Eau Claire, WI 54701

Emergency Telephone: (800) 424-9300
Date Prepared: November 18, 2016
Replaces issue of: N/A

Information Telephone: (715) 833-0644
Contact: Radix Laboratories Inc.
Prepared By: Daniel Donnelly

2. HAZARD(S) IDENTIFICATION:

Hazard Classification:

- Acute Toxicity – Category 3
- Eye Corrosion – Category 1A
- Skin Corrosion – Category 1A
- Skin Sensitization – Category 1

Signal Word: DANGER!

Hazard Statements:

- Avoid swallowing
- Causes severe skin burns and eye damage
- Can cause blindness, permanent scarring and death
- Toxic if swallowed or upon contact with skin.

Pictograms:



Precautionary statements:

Prevention: Do not breathe mist or vapor. Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves/protective clothing/eye protection/face protection.

Response: If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. 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. Wash contaminated clothing before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. COMPOSITION/ INFORMATION ON INGREDIENT(S):

<u>Component</u>	<u>CAS NO.</u>	<u>% w/v</u>
Calcium Hydroxide	1305-62-0	28.8
Sodium Hydroxide	1310-73-2	44.5
Other Contents below reportable limits		73.3

4. FIRST-AID MEASURES:

Inhalation:

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist. Give oxygen difficulty breathing continues. If not breathing, give artificial respiration and get medical attention immediately.

Skin contact:

Take off immediately all contaminated clothing. Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or poison control center immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present. Continue rinsing. Occasionally lift lower and upper eyelids during this period. Call a physician or poison control center immediately. Get medical attention if irritation develops.

Ingestion:

Call a physician or poison control center immediately. Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Only induce vomiting if directed by medical personnel. Do not give anything orally to an unconscious person.

Most important symptoms/effects, acute and delayed:

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed:

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. FIRE-FIGHTING MEASURES:

Extinguishing Media: Surround fire with appropriate fire extinguishing chemicals such as dry chemical/CO₂, foam and even water spray is effective for cooling.

Special Fire Fighting Procedures: Usual fire fighting equipment including self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: None

6. ACCIDENTAL RELEASE MEASURES

Clean up of Released/Spilled Material: Ventilate area of spill, collect material for disposal. Wear protective equipment during clean up. After clean up, flush area with water.

Waste Disposal Method: Dispose as non-hazardous waste at facility operating in compliance with applicable federal, state and local regulations.

7. HANDLING AND STORAGE:

Handling and Storing Precautions: Store at room temperature under dry conditions. Avoid extremes in temperature. Handle with care to avoid breakage or spillage. Do not store in direct sunlight. Store out of reach of children. Wear gloves when handling. Avoid direct contact with hands.

8. EXPOSURE CONTROL/ PERSONAL PROTECTION:

Occupational exposure limits

US. OSHA: Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
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Sodium hydroxide (CAS 1310-73-2)	PEL	2 mg/m ³
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US. ACGIH: Threshold Limit Values

Calcium hydroxide (CAS 1305-62-0)	Ceiling	2 mg/m ³
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Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m ³
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US. NIOSH: Pocket Guide to Chemical Hazards

Sodium hydroxide (CAS 1310-73-2)	Ceiling	2 mg/m ³
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Biological limit values: No biological exposure limits noted for the ingredient(s).

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. Eye wash facilities and emergency shower must be available when handling this product.

Appropriate engineering controls:

Individual protection measures, such as personal protective equipment (PPE).

Eye/face protection: Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection:

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Hand protection:

Other Wear appropriate chemical resistant clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment.

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:

Boiling Point: N/A

Vapor Pressure (mm Hg, 20°C): N/A

Vapor Density (Air = 1): N/A

Freezing Point: N/A

Solubility in Water: Partially

Appearance : White viscous paste

Lower Explosive Limit: N/A

Relative Density: N/A

Flamability(gas): N/A

Viscosity: unknown

Specific Gravity (20°C): 1.6

Evaporation Rate: N/A

Odor Threshold: N/A

Autoignition: N/A

Odor: No odor

Melting Point: N/A

Upper Explosive Limit: N/A

Flamability(solid): N/A

Decomposition Temperature: N/A

pH: 13-14

10. STABILITY AND REACTIVITY:

Stability: Stable with normal storage conditions and use

Conditions to Avoid: Avoid direct sunlight for long periods and high temperatures

Incompatibility (Materials to Avoid): Strong acids. Acids. Strong oxidizing agents. Oxidizing agents.

Hazardous Decomposition or Byproducts: Thermal degradation will produce carbon dioxide as well as carbon monoxide.

Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION:

Information on likely routes of exposure:

Inhalation: May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact: Causes severe skin burns.

Eye contact: Causes serious eye damage.

Ingestion: Causes digestive tract burns.

Symptoms related to the physical, chemical and toxicological characteristics:

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result.

Information on toxicological effects:

Acute toxicity: Not available.

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Causes serious eye damage.

Respiratory or skin sensitization: Not a respiratory sensitizer.

Skin sensitization: This product is not expected to cause skin sensitization.

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Germ cell mutagenicity:

Carcinogenicity: This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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 an aspiration hazard.

Chronic effects: Prolonged inhalation may be harmful.

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.

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: 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:

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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 \leq 2 or \geq 12.5, or corrosive to steel]
Dispose of in accordance with local regulations. Empty containers or liners may retain some

13. (con't.) product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Waste from residues / unused products:

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:

DOT

UN number: UN3266

UN proper shipping name Corrosive liquid, basic, inorganic, n.o.s. (Sodium hydroxide, Calcium hydroxide)

Transport hazard class(es)

Class - 8

Subsidiary risk -

Label(s) - 8

Packing group II

Special precautions for user: Read safety instructions, SDS and emergency procedures before handling.

Special provisions: B2, IB2, T11, TP2, TP27

Packaging exceptions: 154

Packaging non bulk: 202

Packaging bulk: 242

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not established. Not regulated as dangerous goods.

DOT PLACARD: (Not required for small quantities).



15. REGULATORY INFORMATION:

US federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1. One or more components are not listed on TSCA.

CERCLA Hazardous Substance List (40 CFR 302.4):

Calcium hydroxide (CAS 1305-62-0) Listed.

Sodium hydroxide (CAS 1310-73-2) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate Hazard - Yes

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

Hazard categories:

SARA 302 Extremely hazardous substance: Not listed.

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.

Safe Drinking Water Act (SDWA) : Not regulated.

US state regulations:

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100): Not listed.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a)): Sodium hydroxide (CAS 1310-73-2)

US. Massachusetts RTK - Substance List:

Calcium hydroxide (CAS 1305-62-0)

Sodium hydroxide (CAS 1310-73-2)

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

Calcium hydroxide (CAS 1305-62-0)

Sodium hydroxide (CAS 1310-73-2)

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

Calcium hydroxide (CAS 1305-62-0)

Sodium hydroxide (CAS 1310-73-2)

US. Rhode Island RTK:

Calcium hydroxide (CAS 1305-62-0)

Sodium hydroxide (CAS 1310-73-2)

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.

International Inventories:

Country(s) or region Inventory name On inventory (yes/no)*:

Australia Australian Inventory of Chemical Substances (AICS): No

Canada Domestic Substances List (DSL): No

Canada Non-Domestic Substances List (NDSL): No

Country(s) or region Inventory name On inventory (yes/no)*:

China Inventory of Existing Chemical Substances in China (IECSC): No

Europe European Inventory of Existing Commercial Chemical Substances (EINECS): No

Europe European List of Notified Chemical Substances (ELINCS): No

Japan Inventory of Existing and New Chemical Substances (ENCS): No

Korea Existing Chemicals List (ECL): No

New Zealand New Zealand Inventory: No

Philippines Philippine Inventory of Chemicals and Chemical Substances (PICCS): Yes

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory: No

*A "Yes" indicates that all components of this product comply 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

16. OTHER INFORMATION:

Issue date: 02-05-2020

Version # 01

Disclaimer:

The manufacturer cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.