COOPER COMPANIES

NEW CHEMICAL/SUBSTANCE USAGE APPROVAL REQUISITION

DIVISION Breeder DEPARTMENT Egg Farms

PRODUCT NAME Hydrogen Peroxide 70% DATE 1/22/14

MANUFACTURED BY: Clem Group SUPPLIED BY: _____

INSTRUCTIONS

Attach a copy of (1) Product Information Sheet, (2) the supplied Material Safety Data Sheets and (3) Make sure appropriate PPE & Emergency Equipment is on site for this product before submitting for usage approval. Complete each question fully, use N/A for sections that are Not Applicable. Date and sign form.

SECTION I

WHERE USED & PURPOSE: Breeder Farms to disinfect eggs

WHERE STORED (Bldg./Room): Egg Room - PERIOD OF USAGE: ___ Days ___ Months ✓ Years

Product previously used: ___ YES ✓ NO - DAILY MAXIMUM AMOUNT ON HAND: 55gal or less

Type of Storage Container: 55gal drum - AMOUNT PER CONTAINER: 55gal

H.M.I.G: 3 Health 1 Flammability 1 Reactivity H Protective Equipment

CHEMICAL NAME (Dominant): Hydrogen Peroxide - STATUS: ___ Solid ✓ Liquid ___ Gas ___ Pure ___ Mixture

Any special precautions or hazards? Store under 120° & away from direct light Gloves/Gogles

SECTION II

WHAT WILL THIS CHEMICAL/SUBSTANCE REPLACE? List current supplier and chemical/substance trade name. Hydrogen Peroxide 7%

IS THIS A DUPLICATION? ___ YES X NO, IF YES, why? Be specific _____

SECTION III

DISPOSITION OF REPLACED CHEMICAL/SUBSTANCE. Complete appropriate line.

___ Return to supplier for Credit Return Authorization # _____

✓ Use up prior to new substance usage. Date you will run out varies by farm

___ Container and contents to be disposed of. List disposal service and estimated cost. _____

Requested by: Brad Donley Signature: B Day

DO NOT MARK BELOW THIS LINE

USAGE APPROVED ✓ DATE 1/23/14 USAGE DENIED ___

COMMENTS: Gloves + Goggles when Handling Barrel.

SAFETY DIRECTOR: _____ PURCHASING: _____

Please Return to Safety Manager prior to Ordering

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MATERIAL SAFETY DATA SHEET
HYDROGEN PEROXIDE 20%

SECTION I: PRODUCT IDENTIFICATION

Manufacturers Name: Chemical Services, Inc.
Manufacturers Address: 2600 Thunderhawk Court
Manufacturers City, State, Zip: Columbus, Ohio 43228
Manufacturers Phone/Fax Number: 937-898-5566 937-898-7602
CHEMTREC: 800-424-9300 (24 Hour Emergency Telephone)

Product Name/Type: HYDROGEN PEROXIDE 20%
Date Prepared: January 17,2014
Prepared by: Joe Wilson
HMIS Rating: Health:3 Fire: [redacted] **Reactivity:1 Personal Protection:** H

SECTION II: INGREDIENTS

Chemical Name	CAS Number	% Volume	OSHA	ACGIH
Hydrogen Peroxide	7722-84-1	20	1 ppm	1 ppm
Water	7732-18-5	80	N/A	N/A

SECTION III: PHYSICAL DATA

Boiling Point: 103°C/218°F
Freezing Point: 15°C/6°F
pH: (as is) 2.0 to 3.5
Solubility in Water: Yes
Vapor Density (Air = 1): N/D
Volatile % (wgt): 100
Specific Gravity (H_2O = 1): 1.07 @ 20°C/4°C
Evaporation Rate (BuAc = 1): N/D
Vapor Pressure: 28 mmHg @ 30°C
Appearance /Odor: Clear, colorless liquid with no odor
Coefficient of water/oil distribution: N/D
Fish Toxicity: Not expected
Biodegradation: N/D

SECTION IV: FIRE AND EXPLOSION DATA

Flash Point: Non-flammable
Auto ignition: None
Flammable Limits in Air, by % Volume: Upper: None **Lower:** None
Extinguishing Media: Flood with water
Special Fire Fighting Procedures: Product is non-combustible. On decomposition releases oxygen which may intensify fire.
Unusual Fire and Explosion Hazards: On decomposition releases oxygen which may intensify fire

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SECTION V: REACTIVITY DATA

Stability: Yes
Reacts with: Air ☐ Water ☐ Heat ☒ Oxidizers X Acids Alkalis X Metals ☒ None ☐
Incompatibility: Excessive heat or contamination could cause product to become unstable Halogenated compounds, Reducing agents, wood, paper and other combustibles, iron and other heavy metals, copper alloys and caustic. Materials to Avoid : Dirt, organics, cyanides and combustibles such as wood, paper, oils, etc.
Hazardous Polymerization: N/A
Hazardous Decomposition Products: Oxygen which supports combustion.

SECTION VI: STORAGE AND HANDLING

Precautions to be taken in Handling Storage: For Industrial and Institutional use only. Do not use in confined spaces. Keep material in original containers.
Other Precautions: Store in cool areas out of direct sunlight and away from combustibles.
Waste Disposal Method: As directed by federal, state and local
Precautions to be taken in handling and storage: Avoid free fall of liquids, ground containers when pouring. Store and use below 120° F and always away from direct heat.
Ventilation: Local exhaust is preferable, but any mechanical means that will keep vapors to a limit.
Protective Material Types: Rubber or latex gloves, Goggles or Face Shield..

SECTION VII: HEALTH AND FIRST AID

Carcinogen NTP: Not Established
Carcinogen IARC: Not Established
Carcinogen OSHA: Not Established
Primary Routes(s) of Entry: Inhalation: Yes Skin: Yes Eyes: Yes Ingestions Yes
Acute Effects of Overexposure:

Eyes: Corrosive to eyes, (possibly severe), chemical burns, eye damage, and blindness.
Skin: May cause irritation (possibly severe) and chemical burns.
Inhalation: Corrosive to nose, throat and lungs.
Ingestion: May cause irritation (possibly severe), chemical burns, nausea, and vomiting.

First Aid Measures:
Eyes: Flush with large amounts of cool running water for at least 15 minutes. Forcibly hold eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds is essential to achieve maximum effectiveness. If irritation develops seek medical attention.

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Skin: Immediately flush contaminated areas with water. Remove contaminated clothing and footwear. Wash contaminates areas with plenty of soap and water. Wash clothing before reuse. Discard footwear which cannot be decontaminated. If irritation develops seek medical attention.

Inhalation: For excessive inhalation remove to fresh air. Attempt to provide fresh air by ventilation. If breathing is difficult, have a trained person administer oxygen. If respiration or pulse has stopped, have a trained person administer Basic Life Support (Cardio-Pulmonary Resuscitation/Automatic External Defibrillator) and **Call for EMERGENCY SERVICES IMMEDIATELY (911).**

Ingestion: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Give large quantities of water (if available, give several glasses of milk). If vomiting occurs spontaneously, keep airway clear and give more water. **Call for EMERGENCY SERVICES IMMEDIATELY (911).**

SECTION VIII – SPECIAL PROTECTION DATA

Eye/Face Protection: Eye Protection when pouring, Goggles or full face shield recommended against contact when appropriate. (ANSI Z87.1)

Respiratory Protection: If concentrations in excess of 10 ppm are expected use approved self-contained breathing apparatus. Do not use oxidizable sorbants such as activated carbon.

A respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant use of a respirator.

Skin Protection: Liquid proof rubber or neoprene gloves. Rubber or neoprene footwear (avoid leather). Impervious clothing materials such as rubber, neoprene, nitrile or polyvinyl chloride (avoid cotton, wool and leather). Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

Other Equipment: Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1).

Engineering Controls: Handle products in a well ventilated area.

If product is handled in an open system, the use of process enclosures, local exhaust ventilation and/or other engineering controls should be considered to control airborne levels to below recommended exposure limits or below acceptable levels where there are no limits.

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SECTION IX – SPILL OR LEAK PROTECTION

Spills: Dike area. Dilute with a large volume of water and hold in a pond or diked area until hydrogen peroxide decomposes. Hydrogen peroxide may be decomposed by adding sodium metabisulfite or sodium sulfite after diluting to about 5%. Dispose according to methods outlined for waste disposal. Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

Emergency Response Guide Number: 140

Waste Disposal Method: Comply with Federal, State and Local Rules and Regulations regarding any disposal of waste material as classified by Title 40, Environmental Protection Agency.

SECTION X – TRANSPORTATION REQUIREMENTS

DOT Proper Shipping Name:
Hydrogen peroxide, aqueous solutions with 20% hydrogen peroxide
DOT Hazardous Class: 5.1 (Oxidizer)
DOT UN Number: UN 2014
DOT Packaging Group: PG II
DOT Hazardous Substances: N/A
Labels: (Oxidizer) (Corrosive)
DOT ERG Number: 140
DOT Marine Pollutant(s): Only in high concentrations
Additional Description Requirements: NONE
WHMIS Classification: Class C (Oxidizer), Class D, Div. 2, Subdiv. B. (Toxic) Class E (Corrosive) Ingredient Disclosure List: Listed

SECTION XI – TOXICOLOGICAL INFORMATION

LD50 Dermal 1350 mg/kg (Rabbit)

TOXICITY:

The severity of the tissue damage is a function of its concentration, the length of tissue contact time, and local tissue conditions. After exposure there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes, and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact.

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Inhalation will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis. Skin contact with this material may cause severe irritation and corrosion of tissue. Repeated exposure may cause dermatitis. Eye contact can cause severe irritation, corrosion with possible corneal damage and blindness. Ingestion may cause irritation, corrosion/ulceration, nausea, and vomiting.

SECTION XII – ECOLOGICAL INFORMATION

Toxicity:
EYE EFFECTS: Extremely irritating/corrosive (rabbit) (35% hydrogen peroxide) [FMC Study Number: I83-748]
SKIN EFFECTS: Mildly irritating after 4 hours exposure (rabbit) (35% hydrogen peroxide) [FMC Study Number: I83-747]
DERMAL LD_{50}: >2000 mg/kg (rabbit) (35% hydrogen peroxide) [FMC Study Number: I83-746]
ORAL LD_{50}: =1193 mg/kg (rat) (35% hydrogen peroxide) [FMC Study Number: I83-745]
INHALATION LC_{50}: >0.17 mg/L (rat) (50% hydrogen peroxide) [FMC Study Number: I89-

ECOTOXICOLOGICAL INFORMATION: Channel catfish 96 hour LC50 = 37.4 mg/L
Fathead minnow 96 hour LC50 = 16.4 mg/L
Daphnia magna 24 hour EC50 = 7.7 mg/L
Daphnia pulex 48 hour LC50 = 2.4 mg/L
Freshwater snail 96 hour LC50 = 17.7 mg/L

Persistence: This material will dissipate into to water and oxygen fairly quickly.

Bioaccumulation: This material is not expected to bioconcentrate in organisms.

SECTION XIII – DISPOSAL CONSIDERATIONS
Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local heath and environmental regulations.

SECTION XIV – REGULATORY INFORMATION
U.S. Federal Regulations: OSHA Standard 29 CFR 1910.1200 requires that information be provided to employee regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you and it is your legal duty to make all information in this Material Safety Date Sheet available to your employees.
TSCA: All components of this product that are required to be on the TSCA inventory are listed on the inventory.

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SARA/TITLE III Hazard Categories:

Immediate (Acute) Health:	☒ Yes No
Delayed (Chronic) Health:	☒ Yes No
Fire Hazard:	☐ Yes X No
Reactive Hazard:	☒ Yes No
Sudden Release of Pressure:	☐ Yes X No

As per the requirements of 40 CFR 372.45, the following components of this blend are listed in Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986.

Chemical Name	CAS Number	Maximum % By Weight
NONE		

State Regulations: Consult your local State laws for applicability.

International Regulations: Consult the regulations of the importing country.

SECTION XV – OTHER INFORMATION

MSDS LEGEND
ACGIH – American Conference of Governmental Industrial Hygienists
CAS – Chemical Abstracts Service Registry Number
CEILING – Ceiling limit (15 minutes)
DOT – Department of Transportation Administration
N/A – Not Applicable
N/D – Not Determined
N/E – Not Established
OSHA – Occupational Safety and Health Administration
PEL – Permissible Exposure Limit (OSHA)
STEL – Short Term Exposure Limit (15 minutes)
TDG – Transportation of Dangerous Goods (Canada)
TLV – Threshold Limit Value (ACGIH)
TWA – Time Weighted Average (8 Hours)
WHMIS – Worker Hazardous Materials Information System (Canada

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