



MATERIAL SAFETY DATA SHEET

CLOCK CLEANING CONCENTRATE

PCN(s): 133, 134

Publication Date: 11/18/ 05

REV: E

1. SUPPLIER AND EMERGENCY INFORMATION

L&R Manufacturing Company
577 Elm Street, P.O. Box 607
Kearny, NJ 07032 - 0607 USA

Product Information
Call: 201-991-5330

Emergency Phone Numbers:

For emergencies involving a spill, leak, fire or accident contact:
CHEMTREC - 800-424-9300
within the United States or 703-527-3887
for international collect calls.

2. COMPOSITION/INFORMATION ON INGREDIENT

Component	CAS Number	Percentage
Water	7732-18-5	10-20
Isopropyl Alcohol	67-63-0	20-25
Oleic Acid	112-80-0	5-10
Pine Oil	8002-09-3	5-10
Ammonium Hydroxide 25° Be	1336-21-6	30-40

3. HAZARDS IDENTIFICATION

Physical appearance and odor: Hazy yellow/green liquid with strong ammonia odor.

A: WARNING STATEMENT:

Good industrial hygiene practices should be used when handling this material.

Acute Eyes: Direct contact causes irritation, redness and possible tearing.

Acute Skin: Prolonged or repeated contact causes redness, and drying of the skin.

Acute Inhalation: Breathing high concentrations of vapors or mist causes irritation to the nose and drowsiness.

B: POTENTIAL HEALTH EFFECTS:

Acute Ingestion: Not known, but would be expected to cause nausea and diarrhea.

Chronic Effects: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

4. FIRST AID MEASURES

Eye Exposure: Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention..

Skin Exposure: Wash thoroughly with water. If irritation or redness develops, seek medical attention.

Inhalation: If respiratory irritation or distress occurs, move victim to fresh air. Seek medical attention if irritation or distress continues.

Ingestion: Seek immediate medical attention. DO NOT INDUCE VOMITING.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE: Skin contact may aggravate existing skin disease.

5. FIRE FIGHTING MEASURES

FIRE HAZARD DATA:

FLASH POINT: 93 °F (33.9° C)

METHOD USED: Tag Closed Cup

Flammability limits (vol / vol%) : Lower: No Data Upper: No Data

Extinguishing Media: Extinguish with dry chemical, CO₂ or a BC/ABC extinguisher.

Special Fire Fighting Procedures: None known

Unusual Fire and Explosion Hazards: May be ignited by excess heat, sparks or flames. Closed containers may explode due to build up of pressure when exposed to extreme heat.

Hazardous Decomposition Materials: (under fire condition) Oxides of carbon and ammonia vapor.

6. ACCIDENTAL RELEASE MEASURES

Cleanup and Disposal of Spill: Biodegradable product. Mop up spill and dispose of by dilution to a sanitary sewer system as permitted by local, state and federal regulations.

Environmental and Regulatory Reporting: Not required

7. HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures: 39 to 90 °F. Protect from freezing.

HANDLING: AVOID CONTACT WITH SKIN, EYES OR CLOTHING .

8. EXPOSURE CONTROL/PERSONAL PROTECTION

General: These recommendations provide general guidance for handling of this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. When developing safe handling procedures, do not overlook the need to clean and dispose of the material. Waste resulting from the use of this product should be handled in accordance with Section 13: Disposal Considerations.

Exposure Guidelines: Exposure limits are recommended worker breathing limits. The following limits apply to this material:

INGREDIENTS

Isopropyl Alcohol

Oleic Acid

Pine oil

Ammonium hydroxide 25 ° Be.

Water

LIMITS

400 PPM OSHA/ AACGIH TWA

None Established

100 PPM ACGIH TWA

50 PPM (as ammonia) OSHA/PEL

None established

8. EXPOSURE CONTROL/PERSONAL PROTECTION CONTINUED

Engineering Controls: Normal room ventilation

Respiratory Controls: For reasonable uses of this material, respiratory protection should not be necessary.

Eye/Face Protection: Safety glasses to protect from splashing.

Skin Protection: Rubber or plastic gloves to avoid drying and irritation to the skin.

Work Practice Control: Normal hygiene in the work area should be taken when working with or handling this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Appearance: Yellow/green hazy liquid.

pH: Approx. 11.5 as concentrate

Water Solubility: Soluble

Freezing Point Range: Not established

Vapor Pressure: Not established

Percent volatile by volume: Approx. 85% as water and alcohol

Odor: Strong ammonia odor.

Specific Gravity: 0.915

Melting Point Range: Not available

Boiling Point : 210- 212 ° F

Vapor Density: Not established

VOC (calculated) : 2.08 lbs./ gal or 249.3 gms / l.

10. STABILITY AND REACTIVITY

Chemical Stability:

This material is stable under normal handling and storage conditions as described in Section 7.

Conditions to be avoided: Heat, open flame.

Materials/Chemicals to be avoided: Strong acids, strong oxidizing agents, aluminum.

Decomposition type: Thermal Oxides of carbon and nitrogen.

Hazardous Polymerization: WILL NOT OCCUR

Avoid the following to inhibit hazardous polymerization: NOT APPLICABLE

11. TOXICOLOGICAL INFORMATION

Acute Eye Irritation: Irritating to eyes.

Acute Skin Irritation: No test data found for product.

Acute Dermal Toxicity: No test data found for product.

Acute Respiratory Irritation: No test data found for product.

Acute Inhalation Toxicity: No test data found for product.

Acute Oral Toxicity (rat): LD50 = 74 gm/kg .for oleic acid

LD50 = 3200 mg/kg for Pine Oil

LD50= 350 mg/kg for ammonium hydroxide

LD50= 5045 mg/kg for isopropyl alcohol

Chronic Toxicity: This product does not contain any substances that are considered by OSHA, NTP, IARC OR ACGIH to be a probable or suspected human carcinogens. No additional test data was found for this product.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data found for ingredients.

13. DISPOSAL CONSIDERATIONS

This product is biodegradable and can be, with dilution, disposed in sanitary sewer system where permitted by local, federal and state regulations.

14. TRANSPORTATION INFORMATION

For domestic ground transport this is classified as ORM-D. For air or export, it is classified as Flammable liquid n.o.s. (Contains Isopropyl Alcohol), 3, Un1993, PG III. Do not stack cartons more than five high.

15. REGULATORY INFORMATION:

Inventory Issues: All components of this product are listed on the U.S. TSCA, Canadian DSL, European EINECS/ELINS chemical listings.

16. OTHER INFORMATION

National Fire Protection Association

Hazard Rating, NFPA

Health

2

Flammability

3

Reactivity

0

General

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MSDS CHANGES

REV

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DATE

11/18/05

DESCRIPTION OF CHANGE

Reissued

Disclaimer: The information herein is given in good faith but no warranty expressed or implied is made.

Prepared By: L&R Manufacturing Company

Date: 02/06/99

Product Name: **CLOCK CLEANING CONCENTRATE**