

Material Safety Data Sheet

To comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

CLOR-N-OIL 20, 50, 100 or 500 PCB SCREENING KIT

Section I --- Manufacturer

Manufacturer's Name:

Dexsil Corporation

Emergency Telephone Number:

USA (800) 424-9300 (CHEMTREC)

INT'L (202) 483-7616

Address:

One Hamden Park Drive
Hamden, CT 06517

Telephone Number:

(203) 288-3509

Date Prepared: 09-09-05

Date Reviewed: 09-09-05

Section II --- Identification of Hazardous Ingredients

The CLOR-N-OIL PCB Screening Kit consists of one test tube containing two ampules, one test tube containing two ampules and an aqueous solution, and another separate ampule. All versions of Clor-N-Oil (20, 50, 100, 500) contain less than or equivalent amounts of the compounds listed below.

<u>Component</u>	<u>Ingredients</u>	<u>TLV/(PEL)</u>	<u>CAS#</u>	<u>Component as % of Total Liquid</u>
Ampule 1 (gray color)	[Sodium]* dispersed in oil	2 mg/m ³ /(2 mg/m ³)	7440-23-5	1.78%[0.36%]*
Ampule 2 (blue-dot)	[Naphthalene]* in Diglyme Sol'n	50 mg/m ³ /(50 mg/m ³) 5 ppm	91-20-3 111-96-6	1.97%/[0.49%]*
Ampule 3 (colorless)	[Mercuric] *Nitrate in water	0.1 mg/m ³ /(0.1 mg/m ³)	10045-94-0	7.76%/ [20 : 0.0035%]* [50 : 0.005%]* [500 : 0.026%]*
Ampule 4 (red-green)	Ethanol	1900 mg/m ³ /(1900 mg/m ³)	00064-17-5	4.07%
Ampule 5 (colorless)	Organo-Sulfur Cmpd.	1 mg/m ³ /(1 mg/m ³)	Proprietary	5.18%
Aqueous Sol'n	[Sulfuric Acid]* in water	1 mg/m ³ /(1 mg/m ³)	7664-93-9	79.19%/[1.58%]*

[*Bracketed component reported as % of total liquid in kit]

Section III --- Physical Characteristics

<u>Property</u>	<u>Ampule1</u>	<u>Ampule2</u>	<u>Ampule3</u>	<u>Ampule4</u>	<u>Ampule5</u>	<u>Ag. Sol'n</u>
Boiling Pt.° C	NA	185	100	78	100	>100
Vapor Pressure mm Hg @ 21°C	NA	0.5	18	44	18	16
Solubility in Water	reacts	75%	complete	miscible	miscible	complete
Specific Gravity	0.86	0.95	1.02	0.79	1.17	1.03
Percent Volatile	none	100	none	99	none	none
Evaporation Rate Butyl Acetate =1	NA	0.36	NA	2.7	NA	NA
Appearance	gray	colorless	colorless	red-green	colorless	colorless
Odor	none	ether-like	none	pleasant	NA	none

Section IV --- Fire and Explosion Hazard

Flash Point	Ampule 1	212°F
	Ampule 2	162°F
	Ampule 3	NA
	Ampule 4	48°F
	Ampule 5	NA

Flammable Limit Unknown

Extinguishing Media DO NOT USE WATER ON A SODIUM FIRE. Dry chemical, foam, CO₂.

Special Fire Fighting Procedures Do not use water. Wear SCBA. Avoid breathing sodium oxide fumes that will form on combustion.

Section V --- Reactivity Data

Stability All components are stable.

Incompatible With Do not expose broken sodium ampule to moisture. Keep from strong oxidizers.

Hazardous Decomposition Productions Sodium will form hydrogen and sodium oxide when moisture is present. Diglyme may form peroxides on exposure to air. Other solutions are stable.

Hazardous Polymerization Will not occur.

Conditions to Avoid Moisture with sodium ampule.

Section VI --- Health Hazard Information

First Aid

In case of contact with reagents, rinse well with water. In case of inhalation, remove to fresh air.

Eye Contact

For all kit components, flush eyes with large amounts of water for 15 minutes. Seek medical attention.

Skin contact

Flush with large amounts of water. Use soap and water to wash away organic components.

Inhalation

In case of inhalation, remove to fresh air.

Toxicological Information

Harmful if inhaled or swallowed. May cause skin burns. Ingestion will cause burns of the gastrointestinal tract. Mercuric nitrate and ethanol (methanol component) are identified on lists in CERCLA, SARA Sec. 313 and on TSCA. Naphthalene is identified in the SARA Sec. 313 list.

Section VII --- Spill, Leak and Disposal Procedures

Spills and Leaks *Ampule 1 - Sodium Ampule*
Cover with dry soda ash or salt. Store in a well-ventilated area away from moisture.

Ampule 2 - Naphthalene/Diglyme Ampule
Absorb completely and dispose of as organic waste.

Ampule 3 - Mercuric Nitrate Ampule
Absorb completely and flush area with water.

Ampule 4 - Ethanol Ampule
Solvent absorbent recommended for spills. Flush area with water.

Ampule 5 - Disposal Ampule
Absorb completely and flush area with water.

Aqueous Solution
Absorb completely and flush area with water.

Disposal *Pipette*
May contain residual PCBs, dispose of in accordance with all applicable federal, state and local environmental regulations.

Test Tube 1
Contents include reacted oil sample and organic liquid, and may contain residual PCBs. Dispose of as an organic waste in accordance with all applicable federal, state and local environmental regulations.

Test Tube 2
Upon completion of test including the addition of ampule 5, contents pass US EPA TCLP test. Dispose of in accordance with all applicable federal, state and local environmental regulations.

Section VIII --- Special Protection Information

Respiratory protection	None required during normal use.
Ventilation	Perform test only in a well-ventilated area.
Protective gloves	Always wear rubber gloves when performing the CLOR-N-OIL test. Viton gloves are recommended for use with PCBs.
Eye protection	Wear safety glasses.
Other protective equipment	Wear appropriate safety equipment (electrical) when performing the test on site.

Section IX --- Special Precautions and Comments

Storage and Handling Information

Store test kits in a cool, dry place. Check expiration date prior to performing test.

DOT Class (As originally packaged by Dexsil Corporation.)

Approval CA-9610010, Packaging conforms to conditions and limitations specified in 49 CFR 173.4.

NA=Not available or not applicable

NF=Not found

NE=Not Established

The information in this Material Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and the Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the precautions and danger of these chemicals for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes.

Exposure to this product may have serious adverse health effects. These chemicals may interact with other substances. Since the potential uses are so varied, Dexsil cannot warn of all of the potential dangers of use or interaction with other chemicals or materials. Dexsil warrants that the chemicals meet the specifications set forth on the label.

DEXSIL DISCLAIMS ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, ITS MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE.

The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Dexsil will periodically revise this Material Safety Data Sheet.

CHEMTREC emergency telephone number is to be used ONLY in the event of CHEMICAL EMERGENCIES involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to the Customer Service Dept. at 1-203-288-3509.

For additional information, contact Dexsil.

Rev. 4



U.S. Department
of Transportation

**Research and
Special Programs
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

APPROVAL CA-9610010

(First Revision)

ISSUED BY THE COMPETENT AUTHORITY OF THE UNITED STATES

1. **APPROVAL HOLDER:** Dexsil Corporation
One Hamden Park Drive
Hamden, CT 06517
2. **REGULATORY AUTHORITY:** 49 CFR § 173.4(c) - Approval for small quantity packaging.
3. **SYNOPSIS:** Dexsil Corporation is authorized to offer for transportation) or transport the materials described in paragraph 5(a) in accordance with the provisions of this approval.
4. **BASIS:** This approval is issued in response to Dexsil Corporation's applications dated October 11, 1996 and September 24, 1997.
5. **PERIOD OF VALIDITY AND CONDITIONS OF APPROVAL:** This approval does not provide relief from any requirements of the Hazardous Materials Regulations except as stated herein. This approval shall remain valid until terminated by the Associate Administrator for Hazardous Materials Safety. This revision supersedes all previous versions of this approval.

(a) **Approved Materials:** Only the following material(s) may be transported under the terms of this approval.

Hazardous materials description -- proper shipping name	Hazard Class/ Division	Identi- fication Number	Packing Group
Alkali metal dispersions	4.3	UN1391	I
Calcium Hydride	4.3	UN1404	I

(b) **Packaging:** (i) The hazardous materials must be packed in sealed glass ampules with no more than 0.35 grams of material per ampule

(ii) The glass ampules must then be packaged in tubular plastic casings which are packaged in plastic test tubes and placed in a fiberboard box. The fiberboard boxes are sealed in a foil bag and placed into a UN4G box. Up to four boxes are placed into another UN4G box in such a manner that resists movement of the fiberboard boxes during normal transportation.

(c) Testing: Packaging must comply with all applicable requirements of 49 CFR 173.4 and 173.27(c).

(d) Additional Marking Requirements: Each package, and overpack if used, prepared under the provisions of this approval must be plainly marked with the approval number.

6. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel, cargo aircraft only and passenger aircraft.

7. SPECIAL PROVISIONS:

(a) A copy of this approval must be maintained at each facility from which shipments are offered for transportation under the terms of this approval and made available to the carrier upon request.

(b) Any person who offers for transportation or transports the above described package(s) may do so under the authority of this approval if all requirements and conditions of this approval are met.

8. GENERAL PROVISIONS:

(a) Failure by any person to comply with the terms and conditions of this approval and the Hazardous Materials Regulations, 49 CFR Parts 171-180, may result in the suspension or revocation of that person's authority to use this approval. Failure to comply may also subject that person to penalties prescribed by 49 U.S.C. § 5123 and 5124. This approval may be modified, suspended or terminated in its entirety if that action is justified in light of changes in circumstances, including additional information not available when this approval was issued. Unless immediate modification, suspension or termination is necessary to avoid imminent material harm to person or property, before action is taken, that person will be notified and provided

with an opportunity to show why the proposed action should not be taken.

(b) Each "Hazmat employee", as defined in 49 CFR § 171.8, who performs a function subject to this approval must be provided training on the requirements and conditions of this approval in addition to the training required by 49 CFR §§ 172.700 through 172.704.

Issued at Washington, D.C.

for Christine E. Whitney
Alan I. Roberts
Associate Administrator
for Hazardous Materials Safety

NOV 5 1997

(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention DHM-32