MSDS #DN5S
DeoxIT DN5 - 5% Aerosol

DeoxIT (DN5S-6) is compatible with most materials. However, in large-scale use we recommend compatibilty testing for the specific applications. Contact manufacturer for guidelines and assistance. Sprays include Genetron 141b as the carrier solvent to assist flushing away contaminants. It is fast to evaporate but may attack some plastics. Once it evaporates, a thin layer of DeoxIT remains. Only thin layers are required for maximum performance. If solvents are not desired, use the 100% liquid (MSDS#PDP100L) or spray (MSDS#PDP100S).

Note: Ideal for general purpose applications. Contains Genetron 141b as the carrier solvent- it is non-flammable and safe on most materials. Apply a short burst to metal surface and operate device to assist breaking up of oxide layers. Use lint-free applicators on accessible surfaces and wipe until surface appears clean. In inaccessible areas, flush away oxides with DeoxIT DN5, CaiKleen 41, CaiKleen A/V or CaiKleen IPA. As a final step, spray a short burst of DeoxIT for protection.

Selection Guide:	Spray Type	Flammable/ NonFlammable	Carrier Solvent Evaporation Rate
ProGold G5 (G5S-6, G5MS-15), DeoxIT D5 (D5S-6, D5MS-15), PreservIT P5 (P5S-6)	Aerosol	Flammable	2-3 minutes
ProGold GP5 (GP5S-6), DeoxIT DP5 (DP5S-6)	Pump	Nonflammable	days
*DeoxIT DN5 (DN5S-6)	Aerosol	Nonflammable	10-15 seconds
ProGold GXP (GXP5S-6), R5 Power Booster (R5PS-6)	Pump	Nonflammable	10-15 seconds
ProGold GX5 (GX5-6, GX5MS-15), R5 Power Booster (R5S-6, R5MS-15)	Aerosol	Nonflammable	10-15 seconds

*** Contains 141b solvent. For industrial use only. Safe on most plastics. Test for compatibilty recommended.**

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

1.1 COMMERCIAL PRODUCT NAME (PRODUCT CODE NO.):
DeoxIt DN5 Spray, 200 ml (DN5S-6)

1.2 COMPANY:

CAIG Laboratories, Inc.
12200 Thatcher Court
Poway, CA 92064 U.S.A.
PREPARED BY: Mark K. Lohkemper
REVISION DATE: 06-16-2003
FORM #: DN5S

CUSTOMER SERVICE:
CAIG: 1-858/486–8388

EMERGENCY:
CHEMTREC: 1-800/424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 HAZARDOUS SYMBOL(S) C.A.S. WT.

INGREDIENTS	No.	% RANGE
a) Genetron 141b	1717-00-6	75%
b) Dymel 134A	811-97-2	20%
c) DeoxIT	Non-hazardous	5%

2.2 OSHA HAZARDOUS COMPONENTS (29CFR1910.1200)
a) Genetron 141b
b) Dymel 134A
TSCA INVENTORY: All ingredients are listed on the TSCA inventory.
EC DIRECTIVE: Complies with EC Directive 91/155/EEC

3. HAZARDS IDENTIFICATION

Nonflammable solvent blend. Liquid will irritate eyes and skin under repeated or prolonged exposure. Breathing high concentrations of product vapor may produce drowsiness or headache. Product may be hazardous to fish & wildlife and may contaminate waterways.
California Proposition 65: The California list of chemicals, "known to cause cancer or reproductive toxicity" is so extensive it requires more clarification, research and evaluation. Meanwhile, all chemicals distributed by, or manufactured by CAIG Laboratories, shall be assumed to be on the list or contain detectable amounts of chemical listed.

4. FIRST-AID MEASURES

4.1 SKIN CONTACT: Wash with soap & water. Seek medical attention if irritation persists.
4.2 EYE CONTACT: Immediately flush with plenty of water. Remove any contact lenses and continue flushing for at least 15 minutes. Seek medical attention if irritation develops or persists.
4.3 INGESTION: Seek medical attention immediately. Induce vomiting only as directed by medical personnel.
4.4 INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

5. FIRE-FIGHTING MEASURES

5.1 FLASH POINT: 240°C
5.2 FLAMMABLE LIMITS, % VOL.:
LOWER = NA, UPPER = NA
5.3 EXTINGUISHING MEDIA: **Suitable** - Alcohol foam, water fog, dry chemical, CO2. **Not to be used:** Water.
5.4 SPECIAL EXPOSURE HAZARDS: Carbon dioxide, carbon monoxide, hydrocarbons.
5.5 SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: As in any fire, wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS: Wear respiratory protection in confined spaces and appropriate personal protective equipment; eye protection, chemically resistant gloves. Ventilate area and remove all sources of ignition.
6.2 ENVIRONMENTAL PRECAUTIONS: Avoid runoff into sewers and ditches that lead to waterways.
6.3 METHODS OF CLEAN UP: Observe recommendations for personal protective equipment detailed in Section 8. For large spills, absorb with inert material such as sand, clay or dirt and place in sealed metal container for disposal. Since products are not normally used in large quantities and product is non-hazardous, absorb with inert material and discard as you would mineral oil.

7. HANDLING AND STORAGE

7.1 STORAGE: Store in a cool, dry place, away from heat, sparks or flames. Keep container tightly closed when not in use. Do not store in direct sunlight. Keep out of reach of children.
7.2 HANDLING: Avoid prolonged or repeated contact with skin, eyes or clothing. Avoid breathing product vapor for extended periods of time. Use only with adequate ventilation. General ventilation should be adequate, but use local exhaust ventilation in confined spaces or at points of excessive discharge. Avoid activities that could cause splashing of the spilled material or create mists.
KEEP OUT OF REACH OF CHILDREN

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING PROTECTIVE MEASURES: General ventilation should be sufficient to control airborne vapor levels. Local exhaust ventilation should be used if large amounts are released.
8.2 PERSONAL PROTECTIVE EQUIPMENT
RESPIRATORY PROTECTION: Full-face respirator mask equipped with acid gas/organic vapor cartridge or fume hood or other type of local exhaust ventilation.
EYE PROTECTION: Wear safety glasses, splash goggles or a full-face shield depending on the amount of exposure and likelihood of a splash hazard.
HAND PROTECTION: Wear chemically resistant rubber gloves with repeated exposure.

OTHER: None required for normal conditions of industrial use.
8.3 INDUSTRIAL HYGIENE: Wash hands before eating or smoking when using this product.
8.4 NFPA and HMIS Codes:

	NFPA	HMIS
Health	-	1
Flammability	-	0
Reactivity	-	1
Personal Protection	-	-

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 FORM: Liquid- see 1.1 for description
9.2 COLOR: Light red
9.3 ODOR: Etheral/hydrocarbon odor.
9.4 BOILING POINT: 89.6°F
9.5 MELTING POINT: N/A
9.6 RELATIVE DENSITY: N/E
9.7 VAPOR PRESSURE: 10 @ 70°F
9.8 SPECIFIC GRAVITY (H20=1): 1.24 @ 70°F
9.9 VISCOSITY (Water=1): approx. 1

10. STABILITY AND REACTIVITY

10.1 HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon and unburned hydrocarbons.
10.2 CONDITIONS TO AVOID: Do not spray around open flames, sparks, or hot metal surfaces.
10.3 HAZARDOUS REACTIONS: Hazardous exothermic polymerization will not occur. Not sensitive to pressure, light or shock. Will not react with water. Does not require the use of stabilizers. Will not degrade to unstable products. Change in color signifies exposure to ultraviolet light or exceeding shelf life; discard solution.
10.4 MATERIALS TO AVOID: Strong oxidizing agents.

11. TOXICOLOGICAL INFORMATION

11.1 ROUTES OF EXPOSURE
SKIN CONTACT: Repeated or prolonged contact may cause dryness of skin, wash with soap and water and apply hand cream. Seek medical attention if irritation persists. Gloves are recommended.
EYE CONTACT: Contact with liquids, mists or vapors of this product can cause acute eye irritation, stinging and swelling.
INGESTION: Harmful if swallowed. May cause acute irritation of the linings of the mouth, nose and throat. Vomiting may result, causing aspiration of material into the lungs, with the production of chronic pulmonary edema chemical pneumonia.
INHALATION: Harmful if product vapors are inhaled in high concentrations. May cause irritation to the lining of the lungs, with subsequent chronic pulmonary edema. Acute irritation of the mouth and nasal passages may result from overexposure. Displacement of oxygen by chemical vapors may lead to drowsiness or unconsciousness.
FURTHER INFORMATION: None of the components of this product are known to have carcinogenic, mutagenic, teratogenic, sensitization effects. Breathing high vapor concentrations for long periods of time may lead to narcosis.
TOXICITY STUDIES OF 141B:
Acute Inhalation: Albino rats (Spraque-Dawley) 4 hr-LC50 62,000ppm. Subchronic Inhalation: Increase Cholesterol/Decrease Body weight 20,000ppm, NOEL 8,000ppm.
Oral: Non-toxic, > 5 gm/Kg bodyweight. Cardiac Sensitization Threshold: 10,000 ppm Teratology, Rat-Maternal and Fetal Tox 20,000ppm. NOEL 8,000ppm
Reproduction (2-generation) Rat: reduced Fertility and reduced body weight 20,000ppm.
Genetic Studies: Ames Assay not active. CHO Cell (GAS) Positive, Up to 10%. CHO Cell (Liquid) Not active, up to 13mg/L. Human Lympho cyte, Not Active, up to 35%. HGPRT-V79, Not Active, up to 35%. In Vivo Mouse Micronucleus, Not Active, up to 36,000ppm. FOR ADDITIONAL INFORMATION CONTACT ALLIED SIGNAL CHEMICALS.
11.2 CANCER INFORMATION: No ingredients listed as human carcinogens by NTP or IARC.
11.3 REPRODUCTIVE EFFECTS: None
11.4 TERATOGENIC EFFECTS: None
11.5 MUTAGENIC EFFECTS: None

12. ECOLOGICAL INFORMATION

In large quantities, water runoff may cause environmental damage.
ENVIRONMENTAL IMPACT DATA (percent by weight)

CFC: 0.0%	HCFC: 75.0%	CL.SOLV.: 0.0%
VOC: 1.0%	HFC: 0.0%	ODP: 0.0%

13. DISPOSAL CONSIDERATIONS

13.1 PREPARATION: Product waste is suitable for fuels blending for energy recovery or disposal by incineration. Product may be recoverable by distillation or recycling.
13.2 PACKAGING: Package, transport and dispose of in accordance with local or national regulations that apply to substances & preparations of this nature.

14. TRANSPORTATION INFORMATION

14.1 DOT
Shipping Name: Consumer Product
Class: ORM-D
UN No.: Not Required

14.2 IMDG
Shipping Name: Aerosol Products
Class: 2
UN No.: 1950
IMDG Code: Page 2102
Label: Not Required

14.3 IATA
UN No.: ID-8000
Class: 9
Label: Consumer Commodity: ORM-D
Subsidiary Risk: None
Package Instructions: 910

EMS: Chemtrec-USA
MFAG No.: #DN5S
Marine Pollutant: No

15. REGULATORY INFORMATION

15.1 SECTION 313 SUPPLIER NOTIFICATION: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning Community Right-To-Know Act of 1986 (40 CFR 372: NONE
15.2 TOXIC SUBSTANCES CONTROL ACT (TSCA):
All ingredients of this product are listed on the TSCA inventory.
15.3 WHMIS: Not regulated. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.
EC HAZARD WARNING LABEL
Symbol and Classification: Nonflammable Aerosol
Risk Phrases: Harmful if swallowed
Safety Phrases: Keep away from sources of ignition - No smoking.Avoid contact with eyes. In case of insufficient ventilation, wear suitable respiratory equipment. Keep out of reach of children. Contains: 141B
To be disposed of as hazardous waste. Users should also refer to any local or national regulations that apply to substance or preparations of this nature.

16. OTHER INFORMATION

Keep away from heat, sparks and other sources of ignition. Do not expose to heat or temperature above 120°F. Use in well ventilated areas.

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