

M A T E R I A L S A F E T Y D A T A S H E E T

Developmental Therapeutics Program, DCT
 National Cancer Institute
 Executive Plaza North, Room 831
 6130 Executive Boulevard
 Rockville, Maryland 20852

NSC 650426

Revision Date: October 13, 1994

SECTION I. MATERIAL IDENTIFICATION

Common Name: NSC D650426

CAS: Not available

Molecular Weight: 590.7

Molecular Formula: $C_{28}H_{43}N_7O_7$

Other Designations: KRN5500, Spicamycin analogue.

SECTION II. INGREDIENTS AND HAZARDS

Ingredient Name	Percent	Exposure Limits
NSC D650426	100%	NOT YET ESTABLISHED

Toxicity Data:

In Vitro Activity:

NSC D650426 has been designated as a potent toxin based on its inhibition of cell growth in vitro.

In Vivo Activity:

The lethality of NSC D650426 administered intravenously as a single dose in several species is listed below:

Mouse	LD ₅₀ =151.8 mg/Kg
Rat	LD ₅₀ =143.2 mg/Kg
Dog	4 mg/Kg was lethal to 4 of 4 dogs
Monkey	7.5 mg/Kg was lethal to 1 of 3 animals

SECTION III. PHYSICAL DATA

Appearance & Odor: odorless powder

MP: 208-213°C

BP: N/A

Solubility (%): Virtually insoluble in water

SECTION IV. FIRE AND EXPLOSION DATA

Flash Point: UNKNOWN

Autoignition Temperature: UNKNOWN

Flammability Limits: LEL %: UNKNOWN

UEL %: UNKNOWN

Extinguishing Media: Water, carbon dioxide, or dry chemical as appropriate to the surrounding fire.

Unusual Fire or Explosion Hazards: No unusual fire or explosion hazard is known to exist.

Special Fire-fighting Procedures: Evacuate personnel to a safe area. Fire fighters should use protective clothing and a self-contained breathing apparatus.

Hazardous Combustion Products: Thermal decomposition may produce carbon monoxide and other toxic substances. Since specific products of combustion are unknown, as a precaution, assume they are hazardous.

SECTION V. REACTIVITY DATA

Compound Stability: Stability studies have not yet been carried out.

Chemical Incompatibilities: Unknown at this time.

Conditions To Avoid: Unknown at this time.

Hazardous Decomposition Products: Unknown at this time.

SECTION VI. HEALTH HAZARD INFORMATION

Summary of Risks: The carcinogenicity and teratogenicity of NSC D650426 are unknown.

Primary Entry Routes: Inhalation, ingestion, and skin and/or eye contact.

Target Organs: The target organs of toxicity are not known at this time.

Medical Conditions Which May Be Aggravated By Contact: UNKNOWN

Signs & Symptoms of Overexposure: The effects of overexposure to this drug in the workplace are not known at this time. It is anticipated that acute or chronic overexposure could lead to damage of bone marrow, liver, kidney, lymphoid tissue, GI tract and possibly reproductive organs or could be fatal. NSC D650426 is cytotoxic and will produce severe toxic effects to rapidly dividing tissues upon overexposure.

Acute Effects: UNKNOWN

Chronic Effects: UNKNOWN

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For Eye Contact: Immediately flush eyes with copious amounts of water for at least 15 minutes. Consult an ophthalmologist.

For Skin Contact: Remove contaminated clothing. Wash skin with plenty of soap and water. Consult a physician. Chemically decontaminate clothing and then launder before reuse or incinerate.

For Inhalation: Remove victim promptly to clean air. Administer artificial respiration if victim is not breathing. If breathing is difficult give oxygen. Consult a physician.

For Ingestion: Remove residual drug. Consult a physician. Provide supportive treatment. No specific antidote exists.

SECTION VII. SPILL, LEAK AND DISPOSAL PROCEDURES
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Spill/Leak Cleanup Procedures:

These should be conducted according to the "DTP (NCI) Generic Safe Handling Procedures for Potent Toxic Drugs" (10/13/92): Evacuate area. Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard after use. Avoid raising aerosols by promptly covering the spilled compound with damp paper towels. Pick up compound with additional towels, place in a bag, and hold for waste disposal. Sodium hypochlorite may degrade NSC D650426 to relatively nontoxic derivatives; use of this is advisable. Expose the contaminated area to the bleach solution for one hour. Afterwards, first wipe the area with paper towels soaked in bleach solution and then with paper towels wet with water. Ventilate area after compound pick-up and decontamination is complete. Dispose of contaminated clean-up materials properly.

Waste Management/Disposal:

Incineration, at a temperature not less than 1000°C, is the recommended method of disposal. Observe all Federal, state, and local laws concerning the disposal of hazardous material or waste. Dissolve solids in a 10% solution of sodium hypochlorite. Add water miscible organic solvent to drug solutions and then treat with the bleach solution. Contaminated glassware, syringes, wipe-up materials, etc., should also be flushed with the bleach solution to reduce residues of toxic materials.

SECTION VIII. SPECIAL PROTECTION INFORMATION

Personal Protective Equipment:

- Goggles:** Wear chemical safety goggles when handling NSC D650426.
- Gloves:** Wear rubber or latex gloves, not polyvinylchloride, when handling NSC D650426.
- Respirator:** Wear NIOSH-MSHA approved respirator.
- Other:** Wear protective laboratory coat.

Workplace Considerations:

Ventilation: Laboratory operations should be conducted in a chemical fume hood, glove box, or ventilated cabinet equipped with mechanical exhaust to the outside.

Safety Stations: Safety shower and eye bath should be accessible.

The personal protective equipment listed above should be worn at all times when handling NSC D650426. Avoid contact and inhalation. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

SECTION IX. SPECIAL PRECAUTIONS

Storage Segregation: Store in a tightly-closed container, protected from light, at -20°C. Use of a secondary container is recommended.

Other Precautions: The user should be made aware that NSC D650426 is an investigational substance. It is a highly potent cytotoxic agent. Handling as a solid or a solution should be carried out with extreme care to avoid personal exposure. Hazards associated with exposure to NSC D650426 may as yet be unknown. This material should be handled only by those trained in the handling of potentially hazardous material.

For Non-Emergency Information:

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| Decontamination Procedures
301-496-8780 | Chief, Pharmaceutical Resources Branch |
| Material Safety Data Sheets
301-496-8795 | Project Officer, Drug Synthesis And
Chemistry Branch |
| Toxicity Data
301-496-8777 | Chief, Toxicology Branch |

The information in this document was compiled primarily from secondary sources. The information is believed to be correct and accurate, but no warranty is expressed or implied.