

MATERIAL SAFETY DATA SHEET

Section 1 - Product and Company Information

Product Name: Dye 535 or N3

Section 2 - Composition/Information on Ingredient

Substance Name: cis-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)-ruthenium(II)
CAS # 141460-19-7
Formula: C₂₆H₂₀O₁₀N₆S₂Ru

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful by inhalation, in contact with skin and eyes, irritant

Full Toxicological properties of this compound have not been thoroughly tested.
Exercise due care!

Section 4 - First Aid Measures

ORAL EXPOSURE

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE

In case of contact, immediately wash skin with soap and copious amounts of water.

EYE EXPOSURE

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

FLASH POINT:

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Carbon Dioxide, Dry chemical powder, water spray

FIREFIGHTING

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazards: Emits toxic fumes under fire conditions.

Section 6 - Accidental Release Measures

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Avoid dust formation

METHODS FOR CLEANING UP

Pick up and store for disposal clean surface with water

Section 7 - Handling and Storage

HANDLING

User Exposure: Avoid prolonged or repeated exposure

STORAGE

Store in cool well ventilated place, keep tightly closed

Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS

Safety shower and eye bath.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Hand: Compatible chemical-resistant gloves.

Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES

Wash thoroughly after handling. Wash contaminated clothing before reuse.

Section 9 - Physical/Chemical Properties

Appearance Physical State: Dark purple powder

Molecular Weight 741.7

pH N/A

BP/BP N/A

MP/MP 250 Decompose

Flash point: N/A

Freezing Point N/A

Vapor Pressure N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

SG/Density N/A

Bulk Density N/A/
Odor Threshold N/A
Volatile% N/A
N/A = not available

Section 10 - Stability and Reactivity

STABILITY

Stable: Stable under normal conditions.

Materials to Avoid: Strong oxidizing agents, moisture, air sensitive

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Toxic fumes of carbon monoxide, carbon dioxide, tin oxides

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: will not occur

Section 11 - Toxicological Information

ROUTE OF EXPOSURE

Skin Contact: may cause skin irritation.

Skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: may cause eye irritation.

SIGNS AND SYMPTOMS OF EXPOSURE

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

RID/ADR

Not Restricted

IMDG

Not Restricted

IATA

Not Restricted

Section 15 - Regulatory Information

Not available

COUNTRY SPECIFIC INFORMATION

Not available

Section 16 - Other Information

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Intatrade Chemicals GmbH, shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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