Material Safety Data Sheet (MSDS)

According to E.U. Directives 91/155/EWG

Revision: 01.02.2000

Index:

Product Name: Ruthenium 535

1. Identification and Company Name

1.1. Product Name:
Ruthenium 535

1.2. Address / Phone No:
Solaronix SA
Rue de l’Ouriette 129
H-1170 Aubonne /Switzerland
Tel +41 21 821 22 80
Fax + 41 21 821 22 89
e-mail : toby@solaronix.com
internet : http://www.solaronix.com

1.3. Emergency Phone No:
+41 01 251 51 51
Swiss Toxicological Information Center

2. Product Description

Chemical characterization of composition: Polypyridyl ruthenium(II) complex
Contains: bis(isothiocyanato) ruthenium(II)-bis-2,2’bipyridine 4,4’dicarboxylic acid
Content: 99 % vol.
CAS Reg. No: 141460-19-7
EU-Label: S 22-24/25

3. Summary

Irritant.
Experimental substance, not fully tested.

4. First Aid Measures
4.1. Eye Contact
Rinse with plenty of water. Obtain medical attention.

4.2. Skin Contact
Remove contaminated clothing. Wash skin with water.

4.3. Inhalation

4.4. Ingestion
Unlikely to be hazardous when swallowed.

4.5. Symptoms

5. Fire and Explosion

5.1. Extinguishing Media
Water
Unsuited: Not known

5.2. Special Indications in Case of Fire
Not known

6. Spillage / Accidental Release

6.1. After Spillage / Leakage
Large quantities: wash-up spillage area with water
Small quantities: wash-up spillage area with water

6.2. Cleaning of Equipment
Clean with water

7. Handling and Storage

7.1. Handling
Avoid contact with skin and eyes
Avoid breathing dust

7.2. Storage: At room temperature

8. Personal Protection
8.1. Working Hygiene

8.2. Personal Equipment

Gloves: Yes
Eye Protection: Yes
Body Protection: None
Respirators: None

9. Physical and Chemical Data

9.1. Form
Solid

9.2. Aspect
Dark violet powder

9.3. Odor
None

9.4. Phase Change
Decomposed at ~ 250 °C

9.5. Flash Point °C
Not applicable

9.6. Ignition Temperature °C
Not applicable

9.7. Exposure Hazard
Not applicable

9.8. Density Kg/dm3
Not available

9.9. Vapor Pressure
Not applicable

9.10. Viscosity
Not applicable

9.11. pH Value
9.12. Solubility in Water:
Completely soluble at pH > 9

9.13. Separation Coefficient n-Octanol / Water
Not available

10. Stability and Reactivity

10.1. Conditions to Avoid
None known

10.2. Incompatible Materials
None Known
Hazardous Decomposition Products: Not available
Hazardous Reactions: None known

11. Toxicological Data
LD50 Acute Oral: Not available
Skin Irritation: Weak
Eye Irritation: Irritating

12. Environmental Data Components Data
Fish Toxicity LC50: Not available
Effect on Effluent Treatment WGK (Water Danger/Protection): 0 (self classification)

13. Waste Disposal
Disposal should be in accordance with local, state or national legislation.
Neutralization: dilute with water
Disposal of Empty Containers: wash with alcaline water.

14. Transport
Regulations: Class UN No.
ADR/RID: Not restricted
ICAO/IATA-DGR: Not restricted
IMDG-Code: Not restricted
Further Informations: Not classified as hazardous for transport
15. Regulatory Information

Indication According to EU-Rules:

   S22 Do not breath dust
   S24 Avoid contact with skin
   S25 Avoid contact with eyes

16. Other Informations