

Material Safety Data Sheet

IDENTITY (Trade name and chemical name)
Espacer 300Z

SECTION I.

Manufacturer's Name:

ELECTRONICS BUSINESS HEADQUARTERS
SHOWA DENKO K.K.

Address:

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Tokyo 105, Japan

Emergency Telephone Number:

+81-3-5470-3277

Telephone Number for Information:

+81-3-5470-3277

SECTION II. - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))

Aqueous solution of poly[isothianaphthenediyl sulfonate] and surfactants(trade secret).

OSHA PEL: N.A. ACGIH TLV: N.A. Other Limits Recommended: None

SECTION III. - Physical/Chemical Characteristics

Specific Gravity (H₂O = 1): 1.001 ~ 1.007

Boiling Point: about 100 °C (212 ° F)

Melting Point: 0 °C (32 ° F)

Vapor Pressure (mm Hg): about 24 mmHg (25°C)

Vapor Density (Air= 1): about 0.6

Evaporation Rate (Butyl acetate =1): not available

Solubility in Water: Freely miscible with water

Appearance and Odor: Dark blue liquid with slightly sulfur odor

pH : 3.0~ 6.0

SECTION IV. -- Fire and Explosion Hazard Data

Flash Point (Method Used): N.A.

Flammable Limits LEL: N.A. UEL: N.A.

Extinguishing Media: N.A.

Special Fire Fighting Procedures: N.A.

Unusual Fire and Explosion Hazards: N.A.

SECTION V. - Reactivity Data

Stability:

Unstable

Conditions to Avoid:

Stable

Incompatibility (Materials to Avoid): Alkaline materials

Hazardous Decomposition or Byproducts: SO_x on combustion of the polymer

Hazardous Polymerization:

May Occur

Conditions to Avoid:

Will Not Occur

SECTION VI. - Health Hazard Data

Route(s) of Entry : Inhalation Skin? Ingestion?

Health Hazards (Acute and Chronic):

Acute toxicity

Acute Oral Toxicity : In a single oral dose test in CD rats, no death resulted at a dose level of 2,000 mg of Espacer 300/kg body weight.

Acute Dermal Irritation: No dermal irritation response was observed at the test site of rabbits at any time during 72 hour observation period. Espacer 300Z was classified as

non-irritant to skin.
Acute Eye Irritation : In a single ocular instillation of test in rabbits, the instillation of Espacer 300Z caused a very slight to moderate initial pain response.

Chronic toxicity: No test data have been obtained.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Signs and Symptoms of Exposure:

Direct contact may irritate eyes.
Mist inhalation may irritate respiratory passages.

Medical Conditions:

Generally Aggravated by Exposure
Unknown

Emergency and First Aid Procedures:

Skin contact : Wash the skin thoroughly with a lot of water with soap. Remove contaminated clothing immediately.
Eye contact : Flush eyes with low pressure water for at least 15 minutes.
Inhalation of mist: Remove the affected person to fresh air immediately.
Ingestion : In case of a small amount ingestion, watch a sign and symptom for some time. If symptoms are observed, seek medical aid immediately. In case of a large amount ingestion, immediately seek medical aid.
If symptoms are serious, immediately seek medical aid.

SECTION VII. — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled:

Wipe out with rags and incinerate the used rags. Wear protective rubber gloves and goggles at the time of the wipe and incineration.

Waste Disposal Method:

Fully observe the applicable laws and regulations.

Precautions to Be Taken in Handling and Storing:

Be sure to wear rubber gloves and goggles in handling the product.
Store the product at 5 ± 3 °C in a refrigerator.

Other Precautions:

Since the product has weak acidity and its toxicity has not been fully determined, the same handling precautions as those required for known acids like acetic acid should be exercised.

SECTION VIII. — Control Measures

Respiratory Protection (Specify Type):

Not normally required for vapor

Ventilation: Local Exhaust : Not normally required for vapor

- Mechanical (General)
- Special
- Other

Protective Gloves:

Safety rubber gloves

Eye Protection:

Safety goggles

Other Protective Clothing or Equipment:

Eye bath

Work/Hygienic Practices:

Wash hands thoroughly with water after handling.

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