

[Titavest Spinel Liquid]

EC Safety Data Sheet

Date : 04 / 08 / 95

1. Name of Material or Compound and Manufacturer

- 1.1 Product Name : Titavest Spinel Liquid
- 1.2 Manufacturer : J. MORITA MFG. CORP., 680, Higashihama Minami-cho Fushimi-ku, Kyoto, JAPAN, ZIP : 612
- 1.3 Supplier : J. MORITA EUROPE GMBH, Justus-von-Liebig-Str. 27a 63128 Dietzenbach. Telephone : +49 - 06074 - 836 - 0
- 1.4 Information Source Department : J. MORITA MFG. CORP. Technical Development Department, Material and Machine Development Group.
- 1.5 Emergency Telephone Number : + 81 - 75 - 611 - 2141

2. Description of Ingredients and / or Components

Chemical Characteristics of Compounds and /or Mixtures

- 2.1 Description : Mixture containing mainly magnesium oxide
- 2.2 Dangerous or harmful ingredients : None
- 2.3 Additional Comments :

CAS-NO	Name	Ratio of Content (wt %)
142 - 72 - 3	Magnesium acetate	20 ~ 30
64 - 17 - 5	Ethy Alcohol	2 ~ 5

3. Possible Dangers

- 3.1 Name of Danger : None
- 3.2 Specific nature of danger to humans and environment : None

4. Emergency Procedures

- 4.1 After inhalation : Provide fresh air
- 4.2 After Contact with skin : Wash off immediately with soap and water
- 4.3 After contact with eyes : Immediately wash out eyes thoroughly with a large quantity of water and consult a doctor
- 4.4 After ingestion : Immediately consult a doctor.

5. Procedures if material catches on fire

- 5.1 Fire extinguishing material : Product is NOT flammable
- 5.2 Specific dangers concerning the flammable contents of the material and/or the production of gases: Irritant gases
- 5.3 Special equipment for extinguishing fires : Alcohol resistant foam

6. Actions in case of accidental spillage or escape

- 6.1 Protection of humans : Thorough ventilation with fresh air
 6.2 Environmental protection : Must not be mixed with drain, surface or sewer water
 6.3 Procedure for cleaning and / or absorption : Collect with materials such as sand or sawdust that bind with the liquid. Dispose of collected materials according to local regulations

7. Handling and Storage

Handling

- 7.1 Instructions for safe handling : Specified area requires ventilation
 7.2 Instructions to prevent fire or explosion : Store in dark area; avoid direct sunlight.

Storage

- 7.3 Requirements for storage area and container : Store only in unopened original container.
 7.4 Instruction concerning storage with other materials : Do not store with foodstuffs.
 7.5 Other storage instructions : Store in tightly closed well sealed container.
 7.6 Storage Class : None

8. Procedures for protection of individuals to exposure and limit of exposure

- 8.1 Additional instructions for preparation of technical facilities : Provide adequate ventilation in case of production of dust
 8.2 Elements and their limits which must be observed in the workplace : None
 8.3 Protective equipment for personnel
 8.3.1 Inhalation Protection : Filter respirator
 8.3.2 Hand Protection : Gloves
 8.3.3 Eye Protection : Safety Glasses
 8.3.4 General Body Protection : Apron
 8.3.5 Protective and Hygienic Procedures : Do not inhale fumes

9. Physical and Chemical Characteristics

9.1 Appearance

- 9.1.1 Form : powder
 9.1.2 Color : Transparent
 9.1.3 Odor : Slightly alcoholic odor

ph	Neutral	Spontaneous combustibility	Not applicable
Boiling point and range	100 ~ 120 °C	Melting point and range	-30 ~ -5 °C
Vapor Pressure	Not applicable	Density	at 20°C 1.1
Solvency	Not applicable	Viscosity	<10 cps

10. Safety and Reactivity

- 10.1 Conditions to be avoided : Do not store at temperatures greater than 50°C.
 10.2 Materials to be avoided : Reacts with strong acids
 10.3 Dangerous Products of Decomposition : Irritating Gas
 10.4 Other : None

11. Toxicity

- 11.1 Dangerous Toxins
 Magnesium acetic acid Intravenous Mouse
- 11.2 Specific symptoms appearing in animal tests : toxicological items are concerning the main ingredient.
- 11.3 Skin Reaction : Slightly irritating
 11.4 Eye reaction : Slightly irritating

12. Ecological Observations

- 12.1 General Description : Product must not pass through drain.

13. Disposable**Product**

- 13.1 Recommendations : Follow local codes for waste disposal
 13.2 Waste Material Code Number : Nonorganic material
 13.3 Contaminated containers : Contaminated containers must be aired out appropriately and then washed and made fit for recycling.

14. Transportation and shipping

- 14.1 Overland transportation, Opinion : Permitted
 14.2 Sea Transportation, Opinion : Permitted

15. Proscriptions

- 15.1 Product label and warnings :
 This is not compulsory for this product, but safety warnings are advised
- 15.2 R Warnings None
 15.3 S Warnings None
 15.4 Combustible Fluid Classification None
 15.5 Water Moisture Danger Classification None

16. Other

- 16.1 Department providing data sheet : J. MORITA MFG. CORP. Technical Development Department, Material and Machine Development Group.
 16.2 Responsible Individuals : Mr. OGINO, NISHIMURA and TANAKA.
 Telephone : + 81 - 75 - 611 - 2141