
MATERIAL SAFETY DATA SHEET
AgION™ Powder Type AJ, AG, AV, AW,
Rev: 6
Issued: 12/08/04

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER

AgION Technologies Inc.
60 Audubon Rd.
Wakefield, MA. 01880
781-224-7100

PRODUCT SERIES: AJ, AG, AV, AW

2. COMPOSITION/INFORMATION ON INGREDIENTS

Single product or mixture: Mixture

Product Ingredients: Sodium Aluminosilicate (Zeolite), silver, zinc, ammonium

Chemical Formula: $X_{\frac{2}{n}}O - Na_2O - Al_2O_3 - 2SiO_2$, X = cations listed above

CAS #:	Zeolite A	68989-22-0	> 75%
	Silver	7440-22-4	0.3 – 2.5%
	Zinc	7440-66-6	0.0 – 14.4%
	Ammonium	7664-41-7	0.0 – 2.5%
	Water	7732-18-5	0.0 – 18.0%

3. HAZARDS IDENTIFICATION

Emergency Overview:

CAUTION: 1-2 MICRON DUST—MAY CAUSE IRRITATION.

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

HMIS Rating

Health	1
Flammability	0
Reactivity	0
Protective Equipment	

Potential Known Health Effects:

Inhalation:

Irritation of upper respiratory tract (irritant dust)

Ingestion:

None known

Skin Contact:

Mild irritation (hygroscopic dust)

Eye Contact:

Irritation due to foreign body (irritant dust)

Chronic Exposure:

None known

Aggravation of Pre-existing Conditions:

No information available

4. FIRST AID MEASURES

Inhalation:

Remove to fresh air. Obtain medical attention for any breathing difficulty

Ingestion:

If large amounts are swallowed, get medical advice.

Skin Contact:

Wash exposed area with soap and water. Obtain medical attention if irritation develops.

Eye Contact:

Immediately flush with water; obtain medical attention if prolonged feeling of foreign body.

5. FIRE FIGHTING MEASURES

Fire:

Not known to be flammable or combustible; not known to be a fire hazard.

Explosion:

Non-reactive.

Fire extinguishing media:

Use any conventional means suitable for extinguishing the surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Clean-up personnel require protective clothing and respiratory protection from dust. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.0. Collect and dispose of material in compliance with all federal, state and local laws and regulations.

7. HANDLING AND STORAGE

Powder is hygroscopic; Keep in tightly closed containers, stored in cool, dry, ventilated area. Protect against physical damage. Handle powder in well ventilated area; appropriate respirator should be worn if local ventilation is inadequate.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits:

OSHA 1910.1000 Table Z-3 Mineral Dust

Permissible Exposure Limit (PEL)

Respirable fraction: 5mg/m³

Total dust: 15 mg/m³

As with any fine powder, avoid generating dust.

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is preferred to help control the emissions of the contaminant at the source, preventing its dispersion through the work area.

Personal Respirators (NIOSH Approved)

If the exposure limit is exceeded, a half-face respirator with filter appropriate for 1-micron dust may be worn per appropriate guidelines.

Skin Protection:

Wear protective gloves and clean body covering clothing (ex. Lab Coat)

Eye Protection:

Wear protective eyeglasses; ensure maintenance of eye wash stations in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White powder, odorless
Volatility: None
True specific gravity: 2.1
Bulk density: 0.5 g/cm³
pH: 7-9 (1g AgION/100 ml water)
Solubility: Insoluble in water

10. STABILITY AND REACTIVITY

Chemical Stability: Stable
Oxidizing Property: None
Hazardous Decomposition: None

11. TOXICOLOGICAL INFORMATION

Acute toxicity Rat oral LD50: 5,000 mg/kg
Chronic toxicity NOEL: 0.011g/kg body weight/day (rat)

Ingredient	CASRN	NTP Carcinogens		IARC Category
		Known	Anticipated	
Zinc	7440-66-6	No	No	None
Silver	7440-22-4	No	No	None
Zeolite A	68989-22-0	No	No	None

12. ECOLOGICAL INFORMATION

Material contains Silver and Zinc.

13. DISPOSAL INFORMATION

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal laws and regulations may differ from federal disposal law and regulations. Dispose of container and unused containers in compliance with federal, state and local laws and regulations.

14. TRANSPORTATION INFORMATION

Not Regulated

15. REGULATORY INFORMATION

The following table identifies applicable international chemical inventory lists for the AgION product constituents:

Ingredient/ CASRN	TSCA	EC	Japan	Australia	Korea	Canada -DSL	Canada -NDSL	Philippines	China
Zinc 7440-66-6	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Silver 7440-22-4	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
Zeolite A 68989-22-0	Exempt	Unk	Unk	Unk	Unk	Yes	Yes	Unk	Yes

16. OTHER

The data contained herein is based on information that AgION Technologies believes to be reliable but no expressed or implied warranty, representation or undertaking is made with regard to the completeness or accuracy of such data or its suitability for a given situation. Such data relates only to the specific product described and not to such product in combination with any other product and no employee, representative or agent of AgION Technologies is authorized to vary any of the data AgION Technologies and its employees, representatives and agents disclaim all liability or responsibility for any actions taken or foregone on reliance upon such data.