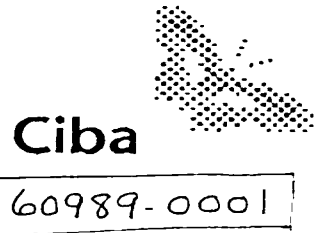


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Ciba Specialty Chemicals Corporation  
 USA  
 Additives (52239-00)  
 540 White Plains Road  
 P.O. Box 2005  
 Tarrytown, NY 10591-9005

8am to 5pm Phone: (800) 431-2360  
 24-Hour Health/Environmental Emergency  
 Phone: (800) 873-1138

E-Z WAX RELEASE



Rev. 06-14-00 ✓

Effective Date: 1/11/99

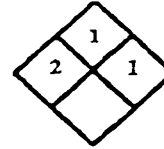
**Material Safety Data Sheet**

MSDS No: 2447

**1. PRODUCT IDENTIFICATION**

Trade Name: Atmer AS 990/2 Zinc Pastilles

Intended Use: Anti-Static Agent



NFPA RATING

HEALTH	2
FLAMMABILITY	1
REACTIVITY	1
PROTECTIVE EQUIPMENT	

HMSIS RATING

**Important Use Information:**  
 This material is not intended for use in products for which prolonged contact with mucous membranes or abraded skin, body fluids, or abraded skin, or implantation within the human body, is specifically intended, unless the finished product has been tested in accordance with national and international applicable safety regulations. Because of the wide range of such potential uses, Ciba Specialty Chemicals Corporation is not able to recommend this material as safe and effective for such uses and assumes no liability for such uses.

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

O S H A	CAS#	CHEMICAL IDENTITY	EXPOSURE LIMITS					CARCINOGEN STATUS		
			ACGIH		OSHA		CIBA IEL	IARC	NTP	OSHA
TWA	STEL	STEL	PEL							
*	557-05-1	Zinc stearate	Not Estab-lished	Not Estab-lished	Not Estab-lished	Not Estab-lished	Not Estab-lished	Not Rev-iewed	Not Rev-iewed	Not Rev-iewed
		Common Name: Zinc stearate Concentration: 30 - 50 % by wt								
	63231-67-4	Amorphous silica	Not Estab-lished	Not Estab-lished	Not Estab-lished	Not Estab-lished	Not Estab-lished	Yes	Not Rev-iewed	Not Rev-iewed
		Common Name: Syobloc 45 Concentration: 1 - 5 % by wt								
	68155-33-9	Ethoxylated Stearyl Amines	Not Estab-lished	Not Estab-lished	Not Estab-lished	Not Estab-lished	Not Estab-lished	Not Rev-iewed	Not Rev-iewed	Not Rev-iewed
		Common Name: Atmer AS 990 Concentration: 30 - 50 % by wt								

\* = OSHA Hazardous Ingredient

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Atmer AS 990/2 Zinc Pastilles

Additives Division  
Clba Specialty Chemicals**3. HAZARDS IDENTIFICATION****Emergency Overview****Appearance:**

White to off-white pastilles

**Flammability:**

This product is not flammable and presents no unusual hazard if involved in a fire.

**Environmental:**

The aquatic toxicity of this product has not been fully assessed. Avoid spillage or leakage to a body of water.

**Health:**

This product may cause eye, skin and respiratory irritation. Avoid contact.

**Disposal:**

Sweep or shovel spilled material and place into a sealable container. Dispose in accordance with local, state and federal regulations. Incineration is recommended. This product is not a hazardous waste under RCRA.

**Primary Route of Entry:**

Dermal, inhalation, ingestion

**Eye:**

This product may cause eye irritation.

**Skin:**

May cause skin irritation, especially after prolonged or repeated exposure.

**Swallowing:**

This product may be harmful if swallowed

**Inhalation:**

This product may cause respiratory irritation.

Note: Refer to Section 11, Toxicological Information for details

**4. FIRST AID MEASURES****First Aid for Eye:**

Following eye contact, flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.

**First Aid for Skin:**

Following skin contact, wipe away excess material with a dry towel. Then wash affected areas with plenty of water and soap, if available, for several minutes. Get medical attention if irritation occurs.

**First Aid for Inhalation:**

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops, or if breathing becomes difficult.

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If swallowed, give at least 3-4 glasses of water, but DO NOT induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

**Note to Physician:**

Treat irritation of eyes, skin, and respiratory tract symptomatically.

**5. FIRE FIGHTING MEASURES****Flash Point:**

~ 204°C (- 399.20 °F)

**Flash Point Method Used:**

Pensky-Martens Closed Cup Test (ASTM D-93)

**Extinguishing Media:**

Carbon dioxide, dry chemical, foam, water mist.

**Fire Fighting Instructions:**

Use self-contained breathing apparatus.

**Unusual Hazards:**

Decomposition and combustion products may be toxic.

**6. ACCIDENTAL RELEASE MEASURES****Spill or Release Procedures:**

Sweep or vacuum and place into sealable container for disposal. Wear protective equipment as specified below.

**7. HANDLING AND STORAGE****Handling:**

In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid contact with eyes and prolonged or repeated skin contact. Avoid breathing or ingesting dust, especially prolonged or repeated breathing of dust. Use only with adequate ventilation. For industrial use only.

**Storage:**

Keep container tightly closed when not in use and during transport.

**Explosion Hazards:**

- *For All Packages:*

**DANGER! EXPLOSION RISK**

- Risk of explosion if an air-dust mixture forms
- Avoid creating dusty conditions
- Empty only into grounded containers
- If container is larger than 550 US gallons (2m<sup>3</sup>) in volume, or when flammable solvents are present, the container must be inerted or the system otherwise designed to prevent or contain an explosion - seek expert advise.

*In addition, for products packaged in fused-lined (coated) fiber drums, fiber drums with conductive liners, steel drums, steel pails, and Ciba supplied bulk bags, the following instructions also apply:*

- Always ground this package before emptying

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The user is responsible for designing a system that safely handles solid additives and to ensure proper training of employees in the system's use.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:**

Work in well-ventilated areas. Do not breathe dust.

**General Protection:**

Wear coveralls.

**Eye/Face Protection:**

In cases where there is likelihood of eye contact, wear chemical goggles.

**Skin Protection:**

Wear impervious gloves as a standard handling procedure.

**Respiratory Protection:**

Wear dust mask or respirator in conditions where dust arises from use.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:**

White to off-white pastilles

**Odor:**

Mild ammoniacal

**Boiling Point:**

68155-33-9 Atmer AS 990  
> 200°C (> 392.00 °F)

557-05-1 Zinc stearate  
Decomposes

**Evaporation Rate:**

68155-33-9 Atmer AS 990  
Negligible

**Freezing/Melting Point:**

68155-33-9 Atmer AS 990  
75°C ( 167.00 °F)

557-05-1 Zinc stearate  
109-111°C

**Specific Gravity:**

68155-33-9 Atmer AS 990  
9.06 (water = 1)

557-05-1 Zinc stearate  
1.095

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**Vapor Density:**68155-33-9 Atmer AS 990  
Not Applicable**% Volatile:**68155-33-9 Atmer AS 990  
Negligible557-05-1 Zinc stearate  
Negligible from open container in 4 hrs. @ 38 °C**Viscosity:**68155-33-9 Atmer AS 990  
< 100 at 100°F (37.78 °C)**Vapor Pressure:**68155-33-9 Atmer AS 990  
Not Applicable  
557-05-1 Zinc stearate  
-5 x 10<sup>(-2)</sup> mmHg at 20°C**pH:**557-05-1 Zinc stearate  
(0.1% in water)**Solubility:**68155-33-9 Atmer AS 990  
Negligible in Water  
557-05-1 Zinc stearate  
< 0.1 % in Water at 25°C (77.00 °F)**10. STABILITY AND REACTIVITY****Chemical Stability:**

Stable.

**Incompatibility with other Materials:**

Strong oxidizers such as hydrogen peroxide, bromine, and chromic acid will react rapidly with strong mineral acids.

**Hazardous Decomposition Products:**

Thermal decomposition and burning may produce carbon monoxide, carbon dioxide, nitrogen oxides and other toxic organic compounds.

**Conditions to Avoid:**

None known.

**11. TOXICOLOGICAL INFORMATION****Acute Oral Toxicity:**

Not known

**Acute Dermal Toxicity:**

Not known

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Additives Division  
Ciba Specialty Chemicals**Acute Inhalation Toxicity:**  
May cause respiratory irritation**Skin Irritation:**  
May cause skin irritation**Eye Irritation:**  
May cause eye irritation**Sensitization:**  
Not known**Mutagenicity:**  
557-05-1 Zinc stearate  
Ames/E. coli test: Non-mutagenic**12. ECOLOGICAL INFORMATION****Acute Toxicity to Fish:**  
557-05-1 Zinc stearate  
Zebra fish, 96-hour, LC50: > 100 ppm**Acute Toxicity to Algae:**  
557-05-1 Zinc stearate  
Green algae, 0-72 hour, EC50: 1.1 ppm**Other Toxicity Data:**  
No ecological data are available**13. DISPOSAL CONSIDERATIONS****Disposal Considerations:**  
Unspecified: Incinerate in a chemical incinerator equipped with an after-burner and scrubber. Follow all federal, state and local regulations.**14. TRANSPORT INFORMATION**

This product is not regulated by any means of transport.

**15. REGULATORY INFORMATION****US Federal Regulations:****Clean Air Act - Hazardous Air Pollutants (HAP):**  
This product contains no hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act.**Clean Air Act - Ozone Depleting Substances (ODS):**  
This product neither contains, nor was manufactured with, a Class I or Class II ozone depleting substance (ODS). We have relied on our suppliers labeling their products. None have done so.

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**Clean Water Act - Priority Pollutants (PP):**

This product contains no chemicals listed under the U.S. Clean Water Act Priority Pollutant List.

**Occupational Safety and Health Act (OSHA):**

This product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard (29 CFR 1910.1200). Its hazards are:

Fire; sudden release of pressure (explosion) hazard.  
Immediate (acute) health hazard.**Resource Conservation and Recovery Act (RCRA):**

This product is not considered to be a hazardous waste under RCRA (40 CFR 261).

**SARA Title III: Section 302 - Extremely Hazardous Substances (EHS):**

This product contains no chemicals regulated under Section 302 as extremely hazardous substances.

**SARA Title III: Section 304 - CERCLA:**

This product contains no chemicals regulated under Section 304 as extremely hazardous chemicals for emergency release notification ("CERCLA" List).

**SARA Title III: Section 311/312 - Hazard Communication Standard (HCS):**

This product is regulated under Section 311-312 (40 CFR 370).

**SARA Title III: Section 313 Toxic Chemical List (TCL):**

This product is (or contains) a toxic chemical for routine annual Toxic Chemical Release Reporting under section 313 (40 CFR 372).

Category Name: ZINC COMPOUNDS

Percent in Composition: 20.00 - 50.00 % by wt

**TSCA Section 5(e) - Consent Order / SNUR:**

This product is not subject to a Section 5(e) Consent Order or Significant New Use Rule (SNUR).

**TSCA Section 8(b) - Inventory Status:**

All chemical(s) comprising this product are listed on the TSCA inventory.

**TSCA Section 12(b) - Export Notification:**

This product does not contain any chemicals subject to Section 12(b) export notification.

**Additional Federal Information:**

This product is not subject to a Section 5(f)/6(a) rule.

**International Regulations:****Canadian Inventory Status:**

This product contains only chemicals which are currently listed on the Canadian Domestic Substance List or the Canadian Transitional List.

**European Inventory Status (EINECS):**

This product contains only chemicals which are currently listed on the European Inventory of Existing Commercial Chemical Substances (EINECS).

**State Regulations:****California Proposition 65:**

This product does not contain any chemicals currently on the California list of Known Carcinogens and Reproductive Toxins.

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**Effective Date: 01/11/99****Atmer AS 990/2 Zinc Pastilles****Additives Division  
Ciba Specialty Chemicals****Massachusetts Right-to-Know:**

The following is required composition information:

Chemical Name: Zinc stearate  
CASRN: 557-05-1**New Jersey Right-to-Know:**

The following is required composition information:

Chemical Name: Zinc stearate  
Common Name: Zinc stearate  
CASRN: 557-05-1Chemical Name: Ethoxylated Stearyl Amines  
Common Name: Atmer AS 990  
CASRN: 68155-33-9Chemical Name: Amorphous silica  
Common Name: Syobloc 45  
CASRN: 63231-67-4**Pennsylvania Right-to-Know:**

The following is required composition information:

Chemical Name: Zinc stearate  
Common Name: Zinc stearate  
CASRN: 557-05-1  
Comment: Environmental Hazardous SubstanceChemical Name: Ethoxylated Stearyl Amines  
Common Name: Atmer AS 990  
CASRN: 68155-33-9  
Comment: Not on Pennsylvania Hazardous Substance ListChemical Name: Amorphous silica  
Common Name: Syobloc 45  
CASRN: 63231-67-4  
Comment: Not on Pennsylvania Hazardous Substance List**16. OTHER INFORMATION****MSDS No:** 2447**Disclaimer:**

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein.

**Information Contact:**

For technical information contact your technical sales representative. For additional health / safety / regulatory information, contact the Product Safety Customer Coordinator at (914) 785-4288.