



Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

1. Product and Company Identification	
Product Name	Zip and Tray Fixer
Manufacturer's name	Horizons Incorporated
Address	18531 South Miles Road Cleveland, Ohio 44128
Emergency Telephone Number	(216) 475-0555
Information Telephone Number	(216) 475-0555

2. Hazards Identification	
GHS Classification	
H303 H333 H313 H316 H319 H335	Acute toxicity, Oral – Category 5 Acute toxicity, Inhalation – Category 5 Acute toxicity, Dermal – Category 5 Skin corrosion/irritation – Category 3 Serious eye damage/eye irritation – Category 2A Specific target organ toxicity – Single exposure – Category 3
GHS Label Elements	
Hazard Pictogram	
Signal Word	Warning
Hazard Statements	
H303 H313 H333 H316 H319 H335	May be harmful if swallowed May be harmful in contact with skin May be harmful if inhaled Causes mild skin irritation Causes serious eye irritation May cause respiratory irritation
Precautionary Statements	
P280 P264 P261 P270 P271 P304+P340 P305+P351+P338 P332+P337+P313 P312 P404 P403+P233	Wear protective gloves and eye/face protection Wash thoroughly after handling Avoid breathing mists, vapors, & spray Do not eat, drink, or smoke when using this product Use only in a well-ventilated area IF INHALED: Remove person to fresh air and keep comfortable for breathing IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If skin or eye irritation occurs or persists: Get medical advice/attention Call a poison center/doctor if you feel unwell Store locked up Store in a well-ventilated place. Keep container tightly closed

3. Composition/Information on Ingredients		
Components/ Materials	CAS Number	%
Ammonium Thiosulfate	7783-18-8	30-40
Acetic Acid	64-19-7	1-5
Sodium Sulfite	7757-83-7	1-5

4. First Aid Measures	
Inhalation	Promptly remove to fresh air. Get medical attention if irritation persists.
Skin Contact	Flush skin with water after contact. Wash contaminated clothing before reuse.
Eye Contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
Ingestion	If conscious, immediately give 2 to 4 glasses of water. Induce vomiting only at the instruction of medical personnel. Call a physician or poison control center immediately.

5. Fire Fighting Measures	
Flammable Properties	Flash point – non-flammable
Flammable Limits	
	Lower Flammable Limit
	Upper Flammable Limit
Hazardous Combustion Products	Carbon monoxide, ammonia, nitrogen oxides, sulfur dioxide.
Unusual Fire/Explosion Hazards	None
Extinguishing Media	Use that of surrounding fire
Special Firefighting Procedures	Wear self-contained breathing apparatus & protective clothing to prevent contact with skin and eyes.

6. Accidental Release Measures	
Small Spill	Flush to sewer with large amounts of water, if permitted by Federal, State and local laws. Otherwise, absorb spill with an inert material and place in a chemical waste container. Neutralize remaining liquid with soda ash (sodium carbonate) solution.
Large Spill	Contain spilled liquid with sand or earth. Absorb spill with an inert material and shovel into a chemical waste container. Prevent runoff from entering into storm sewers and ditches which lead into natural waterways

7. Handling and Storage	
Handling	Avoid contact with eyes. Keep container closed. Use only in a well ventilated area. Wash thoroughly after handling. Avoid prolonged or repeated breathing of mists and vapors. Avoid prolonged or repeated contact with skin.
Storage	Store between 65-85°F, preferably between 68-75°F. Keep containers sealed when not in use.

8. Exposure Control/Personal Protection				
Exposure Limits				
Chemical Name	CAS No.	OSHA	ACGIH	NIOSH
Ammonium Thiosulfate	7783-18-8	ND	ND	ND
Acetic Acid	64-19-7	10 ppm TWA	10 ppm TWA	10 ppm TWA
Sodium Sulfite	7757-83-7	5mg/m ³ TWA	ND	ND
ND – Not Determined				
Engineering Controls	Control airborne concentrations below the exposure limits. Use only with adequate ventilation. Local exhaust ventilation may be necessary.			
Respiratory Protection	When respiratory protection is required, use a NIOSH approved air-purifying respirator equipped with an acid gas canister. For emergency and other conditions where exposure limits may be greatly exceeded, use an approved positive-pressure, self-contained breathing apparatus or positive-pressure air line with auxiliary self-contained air supply.			
Skin Protection	For brief contact, no precautions other than clean body-covering clothing should be needed. Use chemical resistant gloves, such as nitrile or polychloroprene.			
Eye Protection	Use safety glasses with side shields or, preferably, chemical goggles.			

9. Physical and Chemical Properties

Boiling Point	107°C
Specific Gravity	1.25
% Volatiles	57%
Solubility in Water	Soluble in all proportions
pH	4.8-5.0
Odor	Sharp vinegar odor
Form	Liquid
Color	Colorless
VOC	38.4 g/L (0.39 lb/gal)

10. Stability and Reactivity

Chemical Stability	Stable under normal storage conditions
Conditions to Avoid	Strong acid or alkaline conditions
Incompatibility	Strong acids and alkalis
Hazardous Decomposition Products	Sulfur dioxide evolves when made acidic (pH<4) Ammonia evolves when made alkaline (pH>7)
Hazardous Polymerization	Will not occur

11. Toxicological Information

Results of component toxicity test performed:	
Data for Ammonium Thiosulfate (CAS 7783-18-8)	Acute Toxicity Data: Oral LD50: 2890 mg/kg (rat). Inhalation LC50: > 2260 mg/m ³ (rat).
Data for Acetic Acid (CAS 64-19-7)	Acute Toxicity Data: Oral LD50 (rat): 3310 mg/kg. Inhalation LC50 (mouse): > 5620ppm/1H. Dermal LD50 (rabbit): 1060 mg/kg.
Data for Sodium Sulfite (CAS 7757-83-7)	Acute Toxicity Data: Oral LD50: 820 mg/kg (mouse). Can cause allergic reactions (headaches, difficulty in breathing, rapid heart rate and anaphylaxis) to susceptible individuals.
This product does not contain any compounds listed by NTP or IARC or regulated by OSHA as a carcinogen	

12. Ecological Information

The following properties are ESTIMATED from the components of the preparations.	
Potential Toxicity (based on acetic acid):	
Toxicity Bluegill (fresh water)	TLm = 75ppm/96H
Toxicity to Goldfish (fresh water)	TLm = 100ppm/96H
Toxicity to Shrimp (aerated water)	LC50 = 100-330 ppm/48H
Persistence and degradability	Readily biodegradable
Chemical Oxygen Demand (COD)	< 1 g/g
Biochemical Oxygen Demand (BOD)	< 1 g/g
Chemical Fate Information	ND

13. Disposal Considerations

Small quantities may be discharged to sewers. Note that Federal, State and local laws governing disposal of materials can differ. Ensure proper disposal compliance with proper authorities before disposal.
Contact a licensed professional waste disposal service to dispose of large quantities of this material

14. Transport Information

Proper Shipping Name	Chemicals, N.O.S., Not D.O.T. Regulated
UN No.	None
IATA Class	Not Regulated
Packing Group	Not applicable

15. Regulatory Information	
U.S. Federal Regulations	
TSCA Section 8 (b) Inventory	All components are listed on the TSCA Chemical Inventory
OSHA	Hazardous by definition of Hazard Communications Standard (29CFR1910.1200)
SARA Hazard Category	
SARA 302 Components	None
SARA 313 Components	None
SARA 311/312 Hazards	Acute health Hazard, Chronic Health Hazard
State Regulations	
Massachusetts Right To Know Components	Acetic acid
Pennsylvania Right To Know Components	Acetic acid
New Jersey Right To Know Components	Acetic acid
California Proposition 65 Components	None

16. Other Information
HMIS
H – 2
F – 0
R – 0
PPE – B
The information in this material safety data sheet should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations & management, and for persons working with or handling this product. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions but does not purport to be all inclusive. Horizons Incorporated shall not be held liable for any damage resulting from handling or from contact with the above product.