


Horizons Incorporated

Safety Data Sheet

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

1. Product and Company Identification	
Product Name	Liquid Sealing Concentrate
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	
H302 H332 H312 H316 H320 H317 H350 H335	Acute toxicity, Oral – Category 4 Acute toxicity, Inhalation – Category 4 Acute toxicity, Dermal – Category 4 Skin corrosion/irritation – Category 3 Serious eye damage/eye irritation – Category 2B Skin sensitization – Category 1B Carcinogenicity – Category 1A Specific target organ toxicity – Single exposure – Category 3
GHS Label Elements	
Hazard Pictogram	
Signal Word	Danger
Hazard Statements	
H350 H302+H332 H312 H316 H320 H317 H335	May cause cancer Harmful if swallowed or inhaled Harmful in contact with skin Causes mild skin irritation Causes eye irritation May cause an allergic skin reaction May cause respiratory irritation
Precautionary Statements	
P201 P202 P261 P264 P270 P271 P272 P280 P361+P364 P301+P330 P312 P302+P352 P305+P351+P338 P333+P337+P313 P308+P313 P404 P403+P233	Obtain special instructions before use Do not handle until all safety precautions have been read and understood Avoid breathing mists, vapors, & spray Wash thoroughly after handling Do not eat, drink, or smoke when using this product Use only in a well-ventilated area Contaminated work clothing should not be allowed out of the workplace Wear protective gloves & clothing, and eye & face protection Take off immediately all contaminated clothing and wash before reuse IF SWALLOWED: Rinse mouth. Call a poison center/doctor if you feel unwell IF ON SKIN, wash with plenty of water IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If skin rash or eye irritation occurs or persists, get medical advice/attention If exposed or concerned: Get medical advice/attention Store locked up Store in a well-ventilated place. Keep container tightly closed

3. Composition/Information on Ingredients

Components/ Materials	CAS Number	%
Nickel Acetate Tetrahydrate	6018-89-9	<10
Sodium Thiosulfate Pentahydrate	10102-17-7	<5
Sodium salt of condensed sulfonated naphthalene.	9084-06-4	<3
Acetic Acid	64-19-7	<1

Nickel Acetate is subject to the reporting requirements of section 313 of SARA 313 Title III (40CFR part 372)

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	Only induce vomiting at the instruction of medical personnel. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

5. Fire Fighting Measures

Flammable Properties	Flash point – non-flammable
Flammable Limits	
Lower Flammable Limit	Not applicable
Upper Flammable Limit	Not applicable
Hazardous Combustion Products	Carbon monoxide
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	Absorb spill with an inert material and place in a chemical waste container
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 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. Keep containers sealed when not in use.

8. Exposure Control/Personal Protection

Exposure Limits				
Chemical Name	CAS No.	OSHA	ACGIH	NIOSH
Nickel Acetate Tetrahydrate	6018-89-9	0.1mg/m ³ TWA	0.1 mg/m ³ TWA	0.015mg/m ³ TWA
Sodium Thiosulfate Pentahydrate	10102-17-7	ND	ND	ND
Sodium salt of condensed sulfonated naphthalene.	9084-06-4	ND	ND	ND
Acetic Acid	64-19-7	10 ppm TWA	10 ppm TWA	10 ppm TWA
				ND – Not Determined

Engineering Controls	Control airborne concentrations below the exposure limits. Use only with adequate ventilation. Local exhaust ventilation may be necessary. Keep sealing baths covered whenever possible.
Respiratory Protection	When respiratory protection is required, use a NIOSH approved air-purifying respirator equipped with a combination high efficiency filter and 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, when handling chemical products.
Eye Protection	Use safety glasses with side shields or, preferably, chemical goggles.

9. Physical and Chemical Properties

Boiling Point	>100°C
Specific Gravity	1.05 – 1.10
% Volatiles	85% (water, acetic acid)
Solubility in Water	Soluble in all proportions
pH	5.3-5.6
Odor	Vinegar odor
Form	Liquid
Color	Green
VOC	30g/L

10. Stability and Reactivity

Chemical Stability	Stable under normal storage conditions
Conditions to Avoid	None
Incompatibility	Strong oxidizing agents
Hazardous Decomposition Products	None
Hazardous Polymerization	Will not occur

11. Toxicological Information

Results of component toxicity test performed:	
Data for Nickel Acetate Tetrahydrate (CAS 6018-89-9)	Acute Toxicity Data: Oral LD50: 350 mg/kg (rat). Oral LD50: 410 mg/kg (mouse). Chronic effects on humans: Causes damage to the following organ: lungs, skin, nose/sinuses. Carcinogenic effects: Classified 1 (proven for humans) by IARC, 1 (known to be human carcinogen) by NTP, + (proven) by NIOSH, classified A4 (not classifiable for humans or animals) by ACGIH. Other toxic effects on humans: Very hazardous in case of skin contact (sensitizer), of inhalation (lung irritant, lung sensitizer). Inhalation of this material may cause sensitive individuals to develop eczema and/or asthma.
Data for Sodium Thiosulfate Pentahydrate (CAS 10102-17-7)	Acute Toxicity Data: Oral LD50: 2700 mg/kg (mouse).
Data for Sodium salt of condensed sulfonated naphthalene (CAS 9084-06-4)	No data
Data for Acetic Acid (CAS 64-19-7)	Acute Toxicity Data: Oral LD50 (rat): 3310 mg/kg. Inhalation LC50 (mouse): > 5620 ppm/1H. Dermal LD50 (rabbit): 1060 mg/kg.

12. Ecological Information

The following properties are ESTIMATED from the components of the preparations.	
Potential Toxicity:	
Toxicity to scenedesmus subspicatus (EC50)	0.8 mg/l/48H
Persistence and degradability	ND
Chemical Oxygen Demand (COD)	ND
Biochemical Oxygen Demand (BOD)	ND
Chemical Fate Information	ND
Note: Inhibition of bacterial flora > 0,0025 mg/l	

13. Disposal Considerations

Soluble nickel salts may be precipitated with caustic for reclamation or disposal. 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	Nickel acetate tetrahydrate
SARA 313 Components	Nickel acetate tetrahydrate
SARA 311/312 Hazards	Acute health Hazard, Chronic Health Hazard
Clean Water Act (CWA) 307	Nickel acetate tetrahydrate
State Regulations	
Massachusetts Right To Know Components	Nickel acetate tetrahydrate
Pennsylvania Right To Know Components	Nickel acetate tetrahydrate
New Jersey Right To Know Components	Nickel acetate tetrahydrate
California Proposition 65 Components	This product contains a chemical known to the State of California to cause cancer.
NESHAP	Nickel acetate sealing baths are subject to the compliance requirements of NESHAP (National Emission Standard for Hazardous Air Pollutants). Since the resultant nickel concentration falls below the threshold limit for the rule, this rule does not apply to Liquid Sealing Concentrate baths that are diluted in accordance with the manufacturer's instructions.

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.