SAFETY DATA SHEET

I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

IDEAS ADDITIVES LLC
625 SOUTH MAIN STREET
LOMBARD, ILLINOIS 60148

I. PHYSICAL DATA

PRODUCT NAME: **Phicide Sodium**
CHEMICAL FAMILY: Industrial Fungicide and Bactericide
FORMULA: Trade Secret

INFORMATION PHONE: 1-800-274-2010
EMERGENCY PHONE: 1-800-424-9300

II. HAZARDOUS IDENTIFICATION

NFPA RATING (SCALE 0-4) Health = 2 Flammability = 1 Reactivity = 0

EMERGENCY OVERVIEW: Do not ingest. Do not inhale dust. Use adequate ventilation and wash after handling.

GHS CLASSIFICATION:

Health	**Environmental**
Acute Toxicity: Cat. 4 Eye Irritation: Cat. 1 Skin Irritation: Cat. 1	Acute Aquatic Toxicity: Cat. 2 Chronic Aquatic Toxicity: Cat. 2

GHS LABEL ELEMENTS:
Symbol(s):



Signal Word

Danger

Hazard Statements

Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Precautionary Statements

Wear protective gloves/protective clothing/eye protection/face protection IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position 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 exposed or you feel unwell: Call a doctor/physician.

III. COMPOSITION/ INFORMATION ON INGREDIENTS

COMPONENT: Trade Secret
CAS NUMBER:

Water	7732-18-5	58-60%
Sodium 2-pyridinethiol-1-oxide	3811-73-2	40-42%

IV. FIRST AID MEASURES

EYE CONTACT: Wash eyes with water for at least 30 minutes. If irritation persists, get medical attention.
SKIN CONTACT: Wash affected area with soap and water for approximately 30 minutes
INHALATION: Remove exposed person to fresh air.
INGESTION: Do not induce vomiting. Get immediate medical attention.

V. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use carbon dioxide, foam, sand or sodium bicarbonate.
SPECIAL FIRE FIGHTING PROCEDURES: Avoid breathing vapors or dusts. Use self-contained breathing apparatus with full face piece and protective clothing.
UNUSUAL FIRE AND EXPLOSIVE HAZARDS: None known.

VI. ACCIDENTAL RELEASE MEASURES

IF MATERIAL IS RELEASED OR SPILLED: Contain spill and transfer to suitable containers.

Stop leak if you can do it without risk.
Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. If material is too viscous for pumping scrape it up with shovels into suitable containers for recycle or disposal.
Large Spills: Dike far ahead of spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

VII. HANDLING AND STORAGE

HANDLING: Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if product gets inside. Then wash thoroughly and put on clean clothing. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing

STORAGE: Keep container closed. Do not store above 130°F. Protect form direct sunlight. Avoid contamination from any source, including metals, dust and organic material.

VIII. EXPOSURE CONTROLS/ PERSONAL PROTECTION

SKIN PROTECTION: Wear appropriate protective gloves to prevent direct contact.

EYE PROTECTION: Wear safety goggles to prevent eye contact with substance.

RESPIRATORY PROTECTION: Under certain circumstances where airborne concentration are expected to exceed exposure limits, select a NIOSH/MSHA approved respirator based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

OTHER PROTECTIVE EQUIPMENT: Impervious apron if needed to avoid prolonged or repeated skin contact.

ENGINEERING CONTROLS: Good general ventilation and/or local exhaust ventilation at the point of generation is recommended.

PERSONAL PROTECTIVE EQUIPMENT (Pictograms):



IX. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:	109°C
FREEZING/MELTING POINT:	-25 to -30°C
VAPOR PRESSURE:	19 mmHg @ 25°C
SOLUBILITY IN WATER:	Dispersible
pH:	8.05 @ 20°C
SPECIFIC GRAVITY:	1.2535 g/cm3
VISCOSITY @ 25°C:	5.52 cps
APPEARANCE:	Yellowish Liquid
MOLECULAR WEIGHT:	149.17
FLASH POINT:	N/A (Aqueous solution- will not burn)
FLAMMABLE LIMITS	**LOWER:** N/A **UPPER:** N/A

X. STABILITY AND REACTIVITY

STABILITY:	This product is stable at ambient temperatures.
CONDITIONS TO AVOID:	Extreme heat or cold.
INCOMPATIBILITY:	Avoid contact with strong acids and strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS:	Exposure to high temperatures, such as those associated with fires cause product decomposition, resulting in the release of carbon monoxide, carbon dioxide, and other decomposition products.
HAZARDOUS POLYMERIZATION:	Will not occur.

XI. TOXICOLOGY INFORMATION

POTENTIAL ACUTE HEALTH EFFECTS:

Eye:	Contact with the eyes would be expected to cause irritation consisting of reversible redness, swelling and mucous discharge to the conjunctiva. No corneal involvement or visual impairment would be expected.
Skin:	Skin contact may cause irritation consisting of transient redness. This irritant effect would not result in permanent damage. Clinical

signs of toxicity would be similar to those observed from inhalation exposure.

Ingestion: If ingested, gastroenteritis may occur with nausea, vomiting lethargy and diarrhea. This material causes vomiting; therefore this would be expected to occur shortly (within 5-10 minutes) following exposure.

Inhalation: If inhaled, mild irritation may result to the throat, upper respiratory tract and lungs. Any irritation would be transient with no permanent damage expected. Clinical signs from exposure may include tremors, ataxia, and convulsions.

Acute Toxicity:

Inhalation LC50:	2.7 mg/L (4 hrs, rat)
Dermal LD50:	1.8 g/kg (rabbit)
Oral LD50:	1.5 g/kg (rat)
Irritation:	irritant to skin and eyes

POTENTIAL CHRONIC HEALTH EFFECTS:

Chronic effects: No chronic skin effects would be expected except those noted for acute skin exposure. Irritation to respiratory tract, but there is no evidence that exposure will produce impairment of lung function. Skeletal muscle atrophy and peripheral nerve damage characterized by general muscle weakness have been reported in animal studies. While the effects are possible with human exposure, based on the evaluation of the animal data these effects are unlikely to occur under industrial use. The production of vomiting would provide protection against systemic toxicity. Chronic toxicity via this route is highly unlikely.

Target organs: Skeletal muscle atrophy has been observed from inhalation, dermal or oral exposure in rats. In addition dermal exposure to rats showed evidence of damage to peripheral nerves. Exposure to monkeys at several times the dose given to rats gave no indication of either muscle or nerve damage. Although these effects are possible with human exposure, the evaluation of the animal toxicological data makes the above effects unlikely from industrial product use.

Carcinogenicity: The carcinogenicity has been evaluated through animal study and it was found not to be carcinogenic. This product is not known or reported to be carcinogenic by any reference source including IARC, OSHA, NTP, EPA.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Developmental effects: Fertility was shown to be reduced but only indirectly because of impaired hind limb muscle function. Sodium pyrithione does not exert a direct effect on reproductive performance of post-natal

development. This material does not produce fetal malformations from dermal exposure. Fetal toxicity was noted, but only at doses which produced maternal toxicity.

XII. ECOLOGICAL INFORMATION

This product is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, ponds, streams, estuaries, oceans or public waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System permit and the permitting authority has been notified in writing prior to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional office of the EPA. This product is a chelating agent and should not be used with other chelating agents of chlorine.

Toxicity to aquatic and avian species:
Bluegill sunfish: 96hr LC50: 7.6-9.6 mg/L rainbow trout: 96 hr LC50: 6.6-8.0 ug/L daphnia magna: 48 hr LC50: 22 ug/L bobwhite quail: acute oral LD50: 441 mg/kg

XIII. DISPOSAL INFORMATION

WASTE DISPOSAL: Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state and local regulations.

XIV. TRANSPORTATION INFORMATION

No classifications currently assigned.

XV. REGULATORY INFORMATION

STATUS:
US (TSCA): Y
CANADA (DSL): Y
EUROPE (EINECS/ELINCS): Y
AUSTRALIA (AICS): Y
CHINA (IESCS): Y
JAPAN (ENCS): Y
SOUTH KOREA (KECI): Y

Y= All ingredients are on the inventory or exempt from listing
N= One or more non-exempt ingredients are not on the inventory

SECTION 302 EXTREMELY HAZARDOUS CHEMICALS:

Component	CAS#	% by Wt.
None		

SECTION 311/312 HAZARDOUS CHEMICALS:

Component	CAS#	% by Wt.
None		

SECTION 313 TOXIC CHEMICALS:

Component	CAS#	% by Wt.
None		

SARA TITLE III:
ACUTE (IMMEDIATE HEALTH HAZARD): Yes
CHRONIC (DELAYED HEALTH HAZARD): Yes
SUDDEN PRESSURE RELEASE: No
FIRE HAZARD: No
REACTIVE HAZARD: No

CERCLA (Comprehensive Environment Response, Compensation and Liability Act):

There is no calculable reportable quantity (RQ) for this product. This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986.

U.S. STATE REGULATIONS:

NEW JERSEY RIGHT-TO-KNOW:
No NJ Right-To-Know components exist in this product.

PENNSYLVANIA RIGHT-TO-KNOW:
No PA Right-To-Know components exist in this product.

CALIFORNIA PROPOSITION 65 CARCINOGENS:
No CA Proposition 65 Carcinogens exist in this product.
CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS:
No CA Proposition 65 Reproductive Toxins exist in this product.

CLEAN WATER ACT: Under section 311 (b) (4) of this act, contamination of surface waters by petroleum products must be reported immediately to the National Response Center.

XVI. OTHER INFORMATION

TSCA (TOXIC SUBSTANCE CONTROL ACT) STATUS:

All components of this formula are included in the TSCA inventory. This product does not contain nor was manufactured with Class 1 or 11 ozone depleting chemicals, Section 611 of the Clean Air Act.

NFPA

HEALTH HAZARD
4-Deadly
3- Extreme Danger
2- Hazardous
1-Slightly Hazardous chemical change
0-Normal Material heated

FIRE HAZARD
Flash Points
4-Below 73°F
3-Below 100°F
2-Above 100°F, Not exceeding 200°F
1-Above 200°F
0-Will not burn

REACTIVITY
4-May detonate
3-Shock and heat may detonate
2-Violent
1-Unstable if
0-Stable

Table 3.8 Acute Toxicity

Acute toxicity	Cat. 1	Cat. 2	Cat. 3	Cat. 4	Category 5
Oral (mg/kg)	≤ 5	> 5 ≤ 50	> 50 ≤ 300	> 300 ≤ 2000	Criteria: ▪ Anticipated oral LD50 between 2000 and 5000 mg/kg; ▪ Indication of significant effect in humans;* ▪ Any mortality at class 4;* ▪ Significant clinical signs at class 4;* ▪ Indications from other studies.* *If assignment to more hazardous class is not warranted.
Dermal (mg/kg)	≤ 50	> 50 ≤ 200	> 200 ≤ 1000	> 1000 ≤ 2000	
Gases (ppm)	≤ 100	> 100 ≤ 500	> 500 ≤ 2500	> 2500 ≤ 5000	
Vapors (mg/l)	≤ 0.5	> 0.5 ≤ 2.0	> 2.0 ≤ 10	> 10 ≤ 20	
Dust & mists (mg/l)	≤ 0.05	> 0.05 ≤ 0.5	> 0.5 ≤ 1.0	> 1.0 ≤ 5	

Figure 4.11

ACUTE ORAL TOXICITY - Annex 1					
	Category 1	**Category 2**	**Category 3**	**Category 4**	**Category 5**
LD_{50}	£ 5 mg/kg	> 5 < 50 mg/kg	³ 50 < 300 mg/kg	³ 300 < 2000 mg/kg	³ 2000 < 5000 mg/kg
Pictogram					No symbol
Signal word	Danger	Danger	Danger	Warning	Warning
Hazard statement	Fatal if swallowed	Fatal if swallowed	Toxic if swallowed	Harmful if swallowed	May be harmful if swallowed

Table 3.9 Skin Corrosion/Irritation

Skin Corrosion Category 1			Skin Irritation Category 2	Mild Skin Irritation Category 3
Destruction of dermal tissue: visible necrosis in at least one animal			Reversible adverse effects in dermal tissue Draize score: ≥ 2.3 < 4.0 or persistent inflammation	Reversible adverse effects in dermal tissue Draize score: ≥ 1.5 < 2.3
Subcategory 1A Exposure < 3 min. Observation < 1hr,	Subcategory 1B Exposure < 1hr. Observation < 14 days	Subcategory 1C Exposure < 4 hrs. Observation < 14 days		

Table 3.10 Eye Effects

Category 1 Serious eye damage	Category 2 Eye Irritation	
Irreversible damage 21 days after exposure Draize score: Corneal opacity ≥ 3 Iritis > 1.5	Reversible adverse effects on cornea, iris, conjunctiva Draize score: Corneal opacity ≥ 1 Iritis > 1 Redness ≥ 2 Chemosis ≥ 2	
	Irritant Subcategory 2A Reversible in 21 days	**Mild Irritant** Subcategory 2B Reversible in 7 days

Figure 4.9

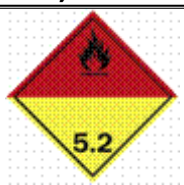
GHS Pictograms and Hazard Classes

		
▪ Oxidizers	▪ Flammables ▪ Self Reactives ▪ Pyrophorics ▪ Self-Heating ▪ Emits Flammable Gas ▪ Organic Peroxides	▪ Explosives ▪ Self Reactives ▪ Organic Peroxides
		
▪ Acute toxicity (severe)	▪ Corrosives	▪ Gases Under Pressure

		
▪ Carcinogen ▪ Respiratory Sensitizer ▪ Reproductive Toxicity ▪ Target Organ Toxicity ▪ Mutagenicity ▪ Aspiration Toxicity	▪ Environmental Toxicity	▪ Irritant ▪ Dermal Sensitizer ▪ Acute toxicity (harmful) ▪ Narcotic Effects ▪ Respiratory Tract ▪ Irritation

Figure 4.10

Transport "Pictograms"		
		
Flammable Liquid Flammable Gas Flammable Aerosol	**Flammable solid Self-Reactive Substances**	**Pyrophorics (Spontaneously Combustible) Self-Heating Substances**
		
Substances, which in contact with water, emit flammable gases (Dangerous When Wet)	**Oxidizing Gases Oxidizing Liquids Oxidizing Solids**	**Explosive Divisions 1.1, 1.2, 1.3**
		
Explosive Division 1.4	**Explosive Division 1.5**	**Explosive Division 1.6**
		

Compressed Gases	Acute Toxicity (Poison): Oral, Dermal, Inhalation	Corrosive
		
Marine Pollutant	**Organic Peroxides**	

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IDEAS ADDITIVES LLC
Revision Date: October 8, 202610/8/2026