



AGROTAIN International L.L.C.

One Angelica Street
St. Louis, Missouri 63147
1-888-547-4140

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Material Safety Data Sheet

Emergency Number: Transportation: (CHEMTREC) 800.424.9300

IDENTIFICATION

PRODUCT NAME: HYDREXX
CAS NO.: Mixture
CHEMICAL FAMILY: Organic amide mixture
DOT CLASS: Not regulated by DOT

COMPOSITION

COMPOSITION (Typical)	%	CAS NO.
N-(n-butyl)-thiophosphoric triamide	Proprietary	94317-64-3
Organic nitrogen (dicyandiamide)	Proprietary	461-58-5
Other non-hazardous ingredients	Proprietary	N.A.

PHYSICAL DATA

SPECIFIC GRAVITY: NA
DENSITY @ 20°C: 29 lbs/ft³
SOLUBILITY IN WATER: Soluble
pH: 7.5 - 8.2
APPEARANCE AND ODOR: White powder with emerald speckles, slight ammonia odor
MELTING POINT: Not applicable

FIRE & EXPLOSION

FLASH POINT: > 200° C
FLAMMABLE LIMITS: Not applicable
EXTINGUISHING MEDIA: Use extinguishing media required to suppress surrounding fire. Firefighters and emergency personnel should use self-contained breathing apparatus and full protective clothing.

REACTIVITY DATA

STABILITY: HYDREXX is stable under all normal conditions.
INCOMPATIBILITY (Materials to avoid): Strong oxidizing agents, extreme heat and fire.
HAZARDOUS DECOMPOSITION PRODUCTS: ammonia, formaldehyde, hydrogen sulfide and melamine.
HAZARDOUS POLYMERIZATION: Will not occur.

HEALTH HAZARD

OSHA PERMISSIBLE EXPOSURE LIMIT OR ACGIH TLV: None established. If fume or dust is present follow a respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/state requirements whenever workplace conditions warrant respirator use.

ROUTES OF ENTRY: Lungs (breathing), eyes, skin. Ingestion (swallowing) of large amounts is unlikely.

EFFECTS OF OVEREXPOSURE:

Short Term: May cause irritation of the skin, eyes, nose or throat. Ingestion (swallowing) could cause gastrointestinal disturbances, including nausea, vomiting, abdominal pain, or diarrhea.

Long Term: May aggravate pre-existing diseases of the eyes, skin, or respiratory system.

TOXICOLOGICAL INFORMATION¹

ACUTE INHALATION: No data

ACUTE SKIN: rat LD₅₀ > 2000 mg/kg
ACUTE ORAL: rat LD₅₀ = 2823 mg/kg
IRRITATION: EYES: severe irritant (rabbit) SKIN: not an irritant or sensitizer
NOAEL (rats): 445 mg/kg/day
NOEL (rats) = 200 mg/kg/day (males only) in a 90-day repeated dose study
CHRONIC EFFECTS/CARCINOGENICITY: No data.
MUTAGENICITY: Two Ames, *in vitro* mammalian cell gene mutation, and *in vivo* mammalian chromosome damage tests were each negative. Substance has a very low toxicity to aquatic organisms and has no effect on the growth of soil bacterial populations.
ACUTE AQUATIC for NBPT: 96-hour LC₅₀(Bluegill) = 1,140 mg/L 48-hour EC₅₀(Daphnia magna) = 290 mg/L
LC₅₀(Daphnia magna) = 350 mg/L NOEL (Daphnia magna) = 150 mg/L
96-hour EC₅₀(freshwater algae) = 280 mg/L NOEL (freshwater algae) = 75 mg/L

EMERGENCY AND FIRST AID PROCEDURES:

Eyes: Flush thoroughly with running water for at least 15 minutes, including under the eyelids. See a physician if discomfort or irritation persists.

Skin: If irritation occurs, wash with water and mild detergent

Inhalation: Remove to fresh air. Get medical attention if discomfort persists.

Ingestion: Never give anything by mouth to an unconscious person. If conscious, give large amounts of water to dilute, then induce vomiting. Get medical attention if a large amount of HYDREXX is swallowed.

SPILL AND DISPOSAL

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Don personal protective equipment. Sweep up or vacuum spillage and collect in suitable container and use per label directions. If contaminated with other materials, collect in suitable containers.

WASTE DISPOSAL METHOD: Consult appropriate regulatory agencies, and dispose in accordance with applicable federal, state, and local regulations.

PROTECTION

RESPIRATORY PROTECTION: If fume or dust is present follow a respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/state requirements whenever workplace conditions warrant respirator use.

EYE PROTECTION: Tight-fitting goggles are recommended to reduce liquid or spray exposure to the eyes.

SKIN PROTECTION: Always wear proper personal protection (recommend long sleeves and long pants and ANSELL EDMONT NEOX Neoprene gloves Number 9-912 or equivalent).

VENTILATION: Use with adequate ventilation.

OTHER PROTECTIVE Measures: Washing facilities should be available. Do not eat drink or smoke when handling this product. Wash contaminated clothing before reuse.

STORAGE REQUIREMENTS - Store in cool, dry well ventilated area away from sources of ignition. Keep containers closed when not in use.

UNITED STATES TSCA (Toxic Substance Control Act): N-(n-butyl) thiophosphoric triamide (NBPT) is subject to a Significant New Use Rule (SNUR) codified in 40 CFR § 721.6090. In compliance with all applicable sections of TSCA NBPT is subject to a Section 5(e) consent order based on the anticipated large-scale exposure. As a consequence, it is also subject to Section 12(b) export notification obligations.

THE RESPONSIBILITY TO PROVIDE A SAFE WORKPLACE REMAINS WITH THE USER. THE USER SHOULD CONSIDER THE HEALTH HAZARDS AND SAFETY INFORMATION CONTAINED HEREIN AS A GUIDE AND SHOULD TAKE THOSE PRECAUTIONS REQUIRED IN AN INDIVIDUAL OPERATION TO INSTRUCT EMPLOYEES AND TO DEVELOP WORK PRACTICE PROCEDURES FOR A SAFE WORK ENVIRONMENT.

THE INFORMATION CONTAINED HEREIN IS, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, ACCURATE. HOWEVER, BECAUSE THE CONDITIONS OF HANDLING AND USE ARE BEYOND OUR CONTROL, WE MAKE NO GUARANTEE OF RESULTS AND ASSUME NO LIABILITY FOR DAMAGES INCURRED BY USE OF THIS MATERIAL. IT IS THE RESPONSIBILITY OF THE USER TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

¹ listed data is for the ingredient NBPT