



Material Safety Data Sheet

HOUGHTO-PREP ZP

1. Chemical Product and Company Identification

Product Name	HOUGHTO-PREP ZP	Emergency Phone Number	24 HOUR - (800) 424-9300 (CHEMTREC)
Company Name	Houghton International Inc. Madison & Van Buren Aves Valley Forge, PA 19482	FAX	(610) 666-1376
Website	www.houghtonintl.com	Customer Service	(888) 459-9844
Telephone	(610) 666-4000		

2. Hazardous Ingredients

Component	Cas No	% by Weight	Hazards
Nitric Acid	7697-37-2	< 1	TLV: 2 ppm PEL: 2 ppm STEL: 4 ppm Other:
Phosphoric Acid	7664-38-2	<1	TLV: 1 mg/m ³ PEL: 1 mg/m ³ STEL: 3 mg/m ³ Other:

N/E - Not Established; N/A - Not Applicable; Mfr - Manufacturer Recommendation

3. Hazards Identification

Primary Entry Routes	EYES, SKIN, INHALATION
Acute Effects	
Inhalation	AVOID BREATHING MISTS OF PRODUCT AND/OR DILUTIONS, WHICH MAY CAUSE IRRITATION OF UPPER RESPIRATORY TRACT.
Eye	MAY CAUSE SEVERE EYE IRRITATION OR CHEMICAL BURNS. MAY CAUSE PERMENANT DAMAGE.
Skin	MAY CAUSE SEVERE SKIN IRRITATION OR CHEMICAL BURNS. BLISTERING MAY OCCUR.
Ingestion	INGESTION MAY CAUSE SEVERE IRRITATION OR CORROSIVE BURNS TO MOUTH, THROAT AND DIGESTIVE TRACT.
Carcinogenicity	THIS PRODUCT DOES NOT CONTAIN ANY COMPONENT REPORTABLE AS A CARCINOGEN UNDER 29 CFR 1910.1200.



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3. Hazards Identification - continued

Medical Conditions
Aggravated by LongTerm
Exposure

PRE-EXISTING SKIN AND RESPIRATORY CONDITIONS MAY BE AGGRAVATED
BY EXPOSURE.

Chronic Effects

UNKNOWN

HMIS:

Health	3
Flammability	0
Reactivity	0

* indicates that there may be chronic health effects present

4. First Aid Measures

Inhalation

IF INHALED, REMOVE TO A SOURCE OF FRESH AIR.

Eye Contact

IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. GET IMMEDIATE
MEDICAL ATTENTION.

Skin Contact

FLUSH SKIN WITH LARGE AMOUNTS OF WATER. REMOVE CONTAMINATED
CLOTHING AND LAUNDRER BEFORE REUSING. CONSULT PHYSICIAN IF
IRRITATION PERSISTS.

Ingestion

IF INGESTED, DO NOT INDUCE VOMITING. RINSE MOUTH AND THROAT WITH
WATER. GIVE WATER, MILK OR MILK OF MAGNESIA. CONSULT PHYSICIAN.

Note to Physicians

NO SPECIFIC ANTIDOTE KNOWN. BASED ON INDIVIDUAL REACTIONS OF
THE PATIENT, THE PHYSICIAN'S JUDGMENT SHOULD BE USED TO CONTROL
SYMPTOMS AND CLINICAL CONDITIONS.

N/A - Not Applicable

5. Fire Fighting Measures

Flash Point

N/A - PRODUCT CONTAINS WATER.

Autoignition Temperature

N/D

LEL

N/A

UEL

N/A



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5. Fire Fighting Measures - continued

Extinguishing Media	SUITABLE EXTINGUISHING MEDIA FOR THE SURROUNDING FIRE SHOULD BE USED.
Unusual Fire or Explosion Hazards	PRODUCT IS STRONGLY ACIDIC. IF PRODUCT IS SPILLED, WEAR PROTECTIVE GEAR.
Fire Fighting Instructions	USE WATER TO KEEP FIRE-EXPOSED CONTAINERS COOL. WEAR PROTECTIVE GEAR DURING FIREFIGHTING.
NFPA:	
Health	3
Flammability	0
Reactivity	0
Special	COR

N/A - Not Applicable; ND - Not Determined; > - Greater Than; < - Less Than

6. Accidental Release Measures

Spill or Release Procedures	WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT. NEUTRALIZE SPILL WITH SODA ASH OR DILUTE ALKALI, DILUTE WITH WATER AND MOP UP THOROUGHLY.
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7. Handling and Storage

Handling Precautions	CAUTION! PRODUCT IS ACIDIC. WEAR RECOMMENDED PROTECTIVE EQUIPMENT. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.
Storage Requirements	STORE AWAY FROM STRONG ALKALI. KEEP CONTAINERS CLOSED WHEN NOT IN USE. EMPTY CONTAINERS MAY RETAIN PRODUCT RESIDUE. PRECAUTIONS APPLY TO EMPTY CONTAINERS.

8. Exposure Controls/Personal Protection

Engineering Controls	PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW THE EXPOSURE LIMITS IN SECTION 2.
Personal Protective Equipment	



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8. Exposure Controls/Personal Protection - continued

Eye/Face Protection	WEAR SAFETY GOGGLES OR FACE SHIELD.
Skin Protection	USE RUBBER GLOVES AND LONG SLEEVES TO MINIMIZE SKIN EXPOSURE. USE APRON OR OVERALLS IF SPLASHING IS POSSIBLE.
Respiratory Protection	RESPIRATORY PROTECTION REQUIRED IF APPLICABLE EXPOSURE LIMITS ARE EXCEEDED. RECOMMENDED IN MISTING CONDITIONS.
Other	EYE WASH AND SAFETY SHOWER RECOMMENDED.

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, or applying cosmetics.

9. Physical and Chemical Properties

Appearance	TRANSPARENT, FAINTLY AMBER LIQUID	Water Solubility	COMPLETE
Odor	SLIGHT ACIDIC ODOR	Boiling Point	215° F
Vapor Pressure (mmHg)	AS WATER	Evaporation Rate (BuAc = 1)	<1
Vapor Density (Air = 1)	AS WATER		
Specific Gravity (Water = 1)	1.0204		
pH (Neat)	2.8		
pH (Dilution)			
At Percent	1		
pH	2.96		

N/D - Not Determined; N/A - Not Applicable; > - Greater Than; < - Less Than

10. Stability and Reactivity

Stability	THIS PRODUCT IS STABLE AT ROOM TEMPERATURE IN CLOSED CONTAINERS UNDER NORMAL STORAGE AND HANDLING CONDITIONS.
Chemical Incompatibilities	STRONG OXIDIZERS, STRONG ALKALIES.



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10. Stability and Reactivity - continued

Hazardous Decomposition Products

OXIDES OF PHOSPHORUS, NITROGEN

Hazardous Polymerization

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

11. Toxicological Information

NO DATA AVAILABLE

12. Ecological Information

NO DATA AVAILABLE

13. Disposal Considerations

Disposal

FOLLOW PERTINENT REGULATIONS FOR DISPOSAL. IT IS THE RESPONSIBILITY OF THE PRODUCT USER TO DETERMINE, AT THE TIME OF DISPOSAL, WHETHER A MATERIAL CONTAINING THE PRODUCT OR DERIVED FROM THE PRODUCT SHOULD BE CLASSIFIED AS A HAZARDOUS WASTE. (40 CFR 261.20-24)

RCRA Hazardous Waste Number

D002 (CORROSIVITY)

14. Transportation Information

Proper Shipping Name

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID AND NITRIC ACID), 8, UN 3264, II.

15. Regulatory Information

TSCA Section 8(b)

ALL OF THE COMPONENTS IN THIS PRODUCT ARE ON THE TSCA INVENTORY.

CERCLA Reportable Quantity

NONE

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SARA Title III, Section 313

THIS PRODUCT CONTAINS NO TOXIC CHEMICAL SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372.

Ozone Depleting
Substances

THIS PRODUCT WAS NOT MANUFACTURED, DOES NOT CONTAIN, AND WAS NOT PACKAGED USING ANY CLASS I OR CLASS II OZONE DEPLETING SUBSTANCE AS DEFINED BY THE CLEAN AIR ACT.

16. Other Information

Prepared By

GARY CARL

Title

MANAGER, PRODUCT SAFETY

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