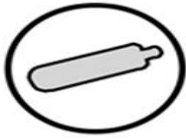


WHMIS Assignment

1. Write the meaning for each WHMIS symbol



2. Explain the difference between these safety hazard symbols.



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3. For each product below, identify  
(A) whether the hazard is the contents or the container  
(B) the type of hazard



4. Why are symbols used on chemical containers rather than words to represent a hazard?

## Material Safety Data Sheet (MSDS) Assignment

1. Refer to your MSDS sheet on Nitro Liquid Drain Opener to complete the Hazmat diagram below.
  - A) Color each diamond as indicated by the information below
  - B) Insert on each diamond the hazard rating given on the MSDS
  - C) Based on the information provided on the MSDS, what specific hazard should be written on the white diamond



2. Read through the Nitro MSDS sheet to determine what 2 WHMIS symbols must be provided on the container.



3. What preventative measures (safety protection) must be taken when handling this substance?



# MATERIAL SAFETY DATA SHEET (MSDS)

## Nitro

*Liquid Drain Opener*

*Acid Cleaners*

SECTION I ▶ PRODUCT IDENTIFICATION		
Product Name	Product Type	WHMIS Classification
Nitro	Liquid Drain Opener	D1A, E

SECTION II ▶ HAZARDOUS INGREDIENTS				
Chemical Name	Cas Registry No.	%	Toxicity	
Sulphuric Acid	7664-93-9	60-100	LD50 ORAL(RAT) 2.1g/kg	
			LC50 (RAT) 510 mg/m <sup>3</sup> (2 hours)	

SECTION III ▶ PHYSICAL DATA					
Appearance	Odour	pH	Boiling Point	Specific Gravity	Solubility in Water
Colourless or tan colored liquid	Unscented	<1.0	290 °C	1.8	100 %

SECTION IV ▶ FIRE AND EXPLOSION HAZARD DATA	
Flash Point (°C): None	Extinguishing media: Not Applicable
Special fire fighting procedures: Avoid direct use of water which can generate heat and cause splattering.	
Unusual fire and explosion hazards: Can react with oxidizing and reducing agents to cause fires and explosions. Can react with metals to produce flammable hydrogen gas.	

SECTION V ▶ TOXICOLOGICAL PROPERTIES	
HAZARD RATING: Health = 3 Flammability = 0 Reactivity = 3	<b>Rating System</b> 0 = Insignificant 1 = Slight 2 = Moderate 3 = High 4 = Extreme
Swallowing: Very corrosive to digestive tract, teeth, etc.	
Inhalation: Very corrosive to mucous membrane and lungs.	
Skin Absorption: Effect unknown by toxicity is expected.	
Skin Contact: Very corrosive; causes severe burns.	
Eye Contact: Very corrosive; causes severe injury.	
Special Warning: None	

SECTION VI ▶ FIRST AID MEASURES	
Ingestion: Do not induce vomiting. Rinse mouth with water. Drink large quantities of milk or water. Call a physician immediately.	
Inhalation: Remove to fresh air. Apply artificial respiration if necessary. Call a physician.	
Skin: Wash thoroughly with water for at least 15 minutes. Call a physician.	
Eyes: Flush thoroughly with water for at least 15 minutes. Call a physician immediately.	

SECTION VII ▶ REACTIVITY DATA	
Stable: Yes	
Conditions to avoid: Do not add water directly to acid.	
Incompatibility with other materials: Directly added water, organic compounds, alkalies, oxidants, metals.	
Hazardous decomposition products: Sulphur oxides, acid fumes, H <sup>2</sup> , Gas	
Hazardous polymerization: Will not occur.	

SECTION VIII ▶ PREVENTIVE MEASURES	
Hand protection: Neoprene, PVC or rubber gloves	
Eye protection: Goggles or face shield	
Ventilation: General	
Respiratory protection: Use respirator if misty conditions prevail.	
Other protective equipment: Neoprene, PVC or rubber apron when handling large quantities.	
Steps to be taken in case material is released or spilled: Ventilate area. Wear protective gear. Neutralize small spills with soda ash or lime and wash down with large quantities of water. Never add water directly to spill or an explosive reaction and splattering may result.	
Waste disposal method: Flush neutralized material into waste systems in accordance with municipal, provincial and federal regulations.	
Precautions to be taken in handling and storage: Normal handling processes. Inside storage at 4-40 °C recommended.	
Other precautions: Follow label use instructions.	
UN: 1830	TDG Class: 8 (9.2) Packing Group: II
TDG Emergency Telephone Number: 613-996-6666 (COLLECT)	

SECTION IX ▶ PREPERATION DATA	
Prepared by: M. Mikoluk	Last updated: September 1, 2014
Location: Dustbane Products Limited, 25 Pickering Place, Ottawa, Ontario, K1G 5P4 – 613-745-6861	