MATERIAL SAFETY DATA SHEET

FLOW FREE Alkaline Drain Cleaner

Version Number: 1

Preparation date: 2005-10-27

1. PRODUCT AND COMPANY IDENTIFICATION		
Product name:	FLOW FREE Alkaline Drain Cleaner	
MSDS #:	MS0600036	
Product code:	U23003	
Recommended use:	Specialty Cleaner.	
Manufacturer, importer, supplier: Unisource Worldwide, Inc. 6600 Governors Lake Parkway Norcross, GA 30071 Phone: 770-447-9000 MSDS Internet Address: www.unisourcelink.com		
Emergency telephone number:	1-888-660-6737	

	2. HAZARDS IDENTIFICATION		
	EMERGENCY OVERVIEW		
	• DANGER		
	 POISON 		
	 CORROSIVE 		
	 CAUSES EYE AND SKIN BURNS 		
	 HARMFUL OR FATAL IF SWALLOWED 		
 DO NOT MIX WI 	TH ACIDS, TOILET BOWL CLEANERS, AMMONIA, OR ANY OTHER CHEMICAL		
Principle routes of exposure:	Eye contact		
	Skin contact		
	Inhalation		
Eye contact:	Corrosive		
	Causes permanent eye damage, including blindness		
Skin contact:	Corrosive		
	May cause permanent damage		
Inhalation:	 May cause irritation and corrosive effects to nose, throat and respiratory tract 		
Ingestion:	Corrosive		
	May cause burns to mouth, throat and stomach		

3. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS

Ingredient	CAS#	Weight %
Potassium hydroxide	1310-58-3	10 - 30%
Sodium hydroxide	1310-73-2	10 - 30%

HAZARDOUS COMPONENTS

Ingredient	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide	273 mg/kg (rat)	Not available	Not available
Sodium hydroxide	140 mg/kg (rat)	Not available	Not available

	4. FIRST AID MEASURES
Eye contact:	 Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open Get medical attention immediately
Skin contact:	Flush immediately with plenty of water for at least 15 minutes
	Get medical attention immediately
Inhalation:	If breathing is affected, remove to fresh air
	Get medical attention immediately

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Ingestion:	Do not induce vomiting Immediately drink one cupful of water or milk
	 Never give anything by mouth to an unconscious person Get medical attention immediately
Aggravated Medical Conditions:	 Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc., may be more susceptible to irritating effects

	5. FIRE-FIGHTING MEASURES			
Suitable extinguishing media:	Dry chemical, water spray, foam, carbon dioxide			
Specific hazards:	Not applicable			
Unusual hazards:	Corrosive material (See sections 8 and 10)			
Specific methods:	No special methods required			
gear	reathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective			
Extinguishing media which must n	ot be used for safety reasons:			
No information available				

	6. ACCIDENTAL RELEASE MEASURES
Personal precautions:	Ensure adequate ventilation
	Use personal protective equipment
Environmental precautions	Use appropriate containment to avoid environmental contamination
and clean-up methods:	Sweep up and shovel into suitable containers for disposal
	Keep in suitable and closed containers for disposal
	Use a water rinse for final clean-up

	7 HANDLING AND STORAGE		
Handling:	Avoid contact with skin, eyes and clothing		
	Do not taste or swallow		
	Avoid breathing vapors or mists		
	Use only with adequate ventilation		
	Remove and wash contaminated clothing and footwear before re-use		
	Wash thoroughly after handling		
	Product residue may remain on/in empty containers		
	• All precautions for handling the product must be used in handling the empty container and		
	residue		
	FOR COMMERCIAL AND INDUSTRIAL USE ONLY.		
Storage:	Keep tightly closed in a dry, cool and well-ventilated place		
	Protect from freezing		
	Store in a cool, dry, well ventilated area away from heat or open flame		
	Keep out of the reach of children		

**************************************	EXPOSURE CONTROLS/PERSONAL PROTECTION				
Engineering measures to reduce					
 Good general ventilation shoul 	d be sufficient to control airborne levels				
 Respiratory protection is not re 	quired if good ventilation is maintained				
Personal Protective Equipment					
Eye protection:	Chemical splash goggles				
Hand protection:	Chemical resistant gloves				
	Neoprene gloves				
Skin and body protection:	Protective footwear				
	If major exposure is possible, wear suitable protective clothing and footwear				

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Respiratory protection:	 If aerosols, mists, or vapors are not adequately controlled by ventilation, use appropriate respiratory protection to avoid over-exposure A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice

Personal protective equipment



Ingredient	CAS#	ACGIH	OSHA	Mexico
Potassium hydroxide	1310-58-3	2 mg/m³ (Ceiling)		
Sodium hydroxide	1310-73-2	2 mg/m³ (Ceiling)	2 mg/m^3	2 mg/m³ (Ceiling)

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Physical State:	Liquid		Appearance:	Aqueous solution		
Color:	Colourl	ess	Odor:	Odorless		
Specific gravity:	1.410		pH:	>13.0		
Dilution pH:	No info	rmation available.	Density:	11.75 lbs/gal		
Bulk density:	No info	rmation available	Vapor density:	No information available		
Evaporation rate:	No info	rmation available	Solubility:	Soluble		
VOC:	No info	rmation available	Viscosity: No information available			
Solubility in other solvents:		No information available				
Partition coefficient (n-octanol/water):		No information available				
Boiling point/range:		Not determined				
Melting point/range:		Not determined				
Flash point:				>200 (°F) >93.3 (°C)		
Decomposition temperature:			Not determined			
Autoignition temperature:			No information available			

	10. STABILITY AND REACTIVITY			
Stability:	The product is stable			
Polymerization:	Hazardous polymerisation does not occur.			
Hazardous decomposition products:	None reasonably foreseeable.			
Materials to avoid:	Do not mix with any other product or chemical			
	Ammonia			
	• Acids			
Conditions to avoid:	Do not freeze			
	Do not mix with any other product or chemical			

	11. TOXICOLOGICAL INFORMATION
Acute toxicity	Corrosive Oral LD50 estimated to be < 50 mg/kg
Component Information:	See Section 3
Chronic toxicity:	None known
Specific effects	
Carcinogenic effects:	None known
Mutagenic effects:	None known
Reproductive toxicity:	None known
Target organ effects:	None known

12. ECOLOGICAL INFORMATION

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Environmental Information:	 When used for its intended purpose this product should not cause adverse effects in the environment
	13. DISPOSAL CONSIDERATIONS
Waste from residues / unused products:	Dispose of according to all federal, state and local applicable regulations
	14. TRANSPORT INFORMATION
DOT/TDG:	Please refer to the Bill of Lading/receiving documents for up to date shipping information
	15. REGULATORY INFORMATION
International Inventories	
All components of this product are	e listed on the following inventories: U.S.A. (TSCA).
U.S. Regulations	
California Proposition 65: This pro	oduct is not subject to the reporting requirements under California's Proposition 65
SARA 311/312 Hazard Categories	
Immediate:	Y
Delayed:	N
Fire:	N
Reactivity:	N
Sudden Release of Pressure:	N
Canada	

STATE RIGHT TO KNOW

WHMIS hazard class:

Ingredient	CAS#	NJRTK:	MARTK:	PARTK:	RIRTK:	ILRTK:	CTRTK:
Potassium hydroxide	1310-58-3	Listed	Listed	Listed	Listed	Listed	Listed
Sodium hydroxide	1310-73-2	Listed	Listed	Listed	Listed	Listed	Listed
Water	7732-18-5	-	-	-	-	-	-

Not for sale in Canada.

CERCLA/SARA

Ingredient	CAS#	Weight %	CERCLA/SARA RQ	Section 302 TPQ (lbs)	Section 313
			(lbs)	300,0941 334	
Potassium hydroxide	1310-58-3	10 - 30%	1000		
Sodium hydroxide	1310-73-2	10 - 30%	1000		

			16. OTHER INFOR	MATION		
HMIS	Health	3	Fire Hazard	0	Reactivity	0
NFPA	Health:	3	Flammability:	0	Instability:	0
Reason for revis	ion:	Not a	oplicable			
Prepared by:		NAPF	RAC			
Additional advice	e:	None				
Notice to Reader	This document h	as been pre	enared using data from sour	ces considered te	echnically reliable. It does	not constitute a

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