



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material Name B-9
Revision Date 6/25/2012
Version # 03
Product Use pH Adjusting Agent
Manufacturer / Supplier FTS International
2500 HWY 62 West
Chickasha, OK 73018
US
General information: 1-405-222-2300
Emergency 24 Hour Emergency: INFOTRAC: 1-800-535-5053

2. Hazards Identification

Physical State Liquid
Appearance Colorless, viscous liquid.
Emergency Overview Corrosive material.
OSHA regulatory status Not available.
Routes of exposure
Eyes Will cause severe to permanent injury.
Skin Contact with concentrated solutions may cause serious burns to human tissue.
Inhalation Mist may cause injury to entire respiratory tract.
Ingestion Damages throat areas and gastro-respiratory tract.
Potential environmental effects Not available.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Potassium Hydroxide	1310-58-3	15 – 30

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First Aid Measures

First aid procedures
Eye Contact Flush with water for at least 15 minutes with tempered water.
Skin Contact Remove contaminated clothing and thoroughly water flush with tempered water on the affected areas.
Inhalation Remove from exposure. Get medical help.
Ingestion Drink plenty of water or fruit juice. Do not induce vomiting. Get prompt medical help.
Notes to physician Not available.

5. Fire Fighting Measures

Flammable Properties Not available.
Extinguishing media
Suitable extinguishing media Any means suitable for extinguishing surrounding fire.

Unsuitable extinguishing media Do not use water as extinguishing media when product reacts with zinc, aluminum, tin, and other active metals. During this reaction flammable hydrogen gas is liberated when water is applied.

Specific Hazards arising from the Chemical This material is corrosive to all human tissue. It will react violently with many organic chemicals, especially nitrocarbons and chlorocarbons. Potassium hydroxide reacts with zinc, aluminum, tin, and other active metals liberating flammable hydrogen gas. Dilution with water evolved large amounts of heat.

Firefighting equipment / instructions Wear clothing and equipment to avoid body contact.

Specific Methods Not available.

Hazardous combustion products Not available.

6. Accidental Release Measures

Personal precautions Protective clothing and equipment must be worn by clean-up personnel.

Methods for cleaning up Contain spillage or leakage in suitable container or contain in holding area. Do not allow drainage to sewers, streams, or storm conduits. Recover with vacuum equipment such as a septic tank truck or neutralize with weak acid solutions and flush with water. Avoid splashing or misting which could increase health hazards.

Reportable spillage quantity is 1,000 lb or 454 kg. Planning ahead is essential for handling spills. Proper equipment and trained employees should be readily available to correct a spill situation.

7. Handling and Storage

Handling Avoid body contact. Immediately flush contact area with water.

Storage Storage tanks should be contained in a diked area that has sufficient capacity to hold the contents of the tank. This area should be free of potential contact with acids, organics, and reactive metals.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	TWA		STEL	
	ppm	mg/m3	ppm	mg/m3
Potassium Hydroxide	Not available.	2	Not available.	Not available.

US. OSHA Table Z-1 Limits for Air Contaminates (29 CFR 1910.1000)

Components	PEL	
	ppm	mg/m3
Potassium Hydroxide	Not available.	Not available.

Canada. Alberta OELs (Occupational Health Safety Code, Schedule 1, Table 2)

Components	TWA		STEL	
	ppm	mg/m3	ppm	mg/m3
Potassium Hydroxide	Not available.	Not available.	Not available.	Not available.

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	TWA		STEL	
	ppm	mg/m3	ppm	mg/m3
Potassium Hydroxide	Not available.	Not available.	Not available.	Not available.

Canada. Ontario OELs. (Ministry of Labor - Control of Exposure to Biological or Chemical Agents) Components

Components	TWA		STEL	
	ppm	mg/m3	ppm	mg/m3
Potassium Hydroxide	Not available.	Not available.	Not available.	Not available.

Canada. Quebec OELS. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) Components

Components	TWA		STEL	
	ppm	mg/m3	ppm	mg/m3
Potassium Hydroxide	Not available.	Not available.	Not available.	Not available.

Mexico. Occupational Exposure Limit Values

Components	TWA		STEL	
	ppm	mg/m3	ppm	mg/m3
Potassium Hydroxide	Not available.	Not available.	Not available.	Not available.

Engineering controls Safety eyewash/shower stations must be available in the work area. Provide adequate ventilation to meet TLV requirements.

Personal protective equipment

Eye / face protection Chemical splash goggles and face shield.

Skin protection Rubber or plastic- impervious and or waterproof gloves. Rubber boots. Rubbers over leather shoes are not recommended. Rubber apron, rainwear or disposable tyvek suit with hard hat should be worn.

Respiratory protection None is normally required, however, if misting or heavy vapor formation should occur, a NIOSH approved respirator should be worn.

General hygiene consideration Not available.

9. Physical and Chemical Properties

Appearance: Clear colorless liquid.

Color Colorless

Odor None

Odor threshold Not available.

Physical State Liquid

Form Liquid

pH 13

Melting point Not available.

Freezing point <0 °F (< -17° C)

Boiling point 271°F (132°C)

Flash point Not available.

Evaporation rate Not available.

Flammability limits in air, upper, % by volume Not available.

Flammability limits in air, lower, % by volume Not available.

Vapor pressure Not available.

Vapor density Not available.

Specific Gravity 1.22

Solubility (water)	Complete
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Bulk Density	10.17 lb/gal
VOC	Not available.
Viscosity	Not available.
Percent volatile	Not available.

10. Chemical Stability Reactivity Information

Chemical Stability	Stable under normal conditions.
Conditions to avoid	Do not allow contact with acids and metals such as aluminum, zinc, and tin. Exposure to air can form potassium carbonate.
Incompatible material	Organic chemicals, nitrocarbons, halocarbons, and metals or alloys mentioned above.
Hazardous decomposition products	Flammable hydrogen gas may be generated when potassium hydroxide and certain metals react.
Possibility of hazardous reaction	Not available.

11. Toxicology Information

Toxicological Data

Components	Test Results
Potassium Hydroxide	Not available.
Sensitization	Not available.
Carcinogenicity	
Potassium Hydroxide	Not available.
Epidemiology	Not available.
Mutagenicity	Not available.
Reproductive effects	Not available.
Teratogenicity	Not available.
Further Information	Not available.

12. Ecological Information

Ecotoxicological data

Components	Test Results
Potassium Hydroxide	Not available.
Ecotoxicity	Not available.
Persistence and degradability	Not available.
Bioaccumulation / Accumulation	Not available.
Mobility in environmental media	Not available.
Partition coefficient (n-octanol/water)	Not available.

13. Disposal Considerations

Waste codes	Not available.
Disposal instructions	Dispose of spillage waster per company contingency plan and in accordance with federal, state,

and local regulations. Neutralized waste is composed of salt and water.

Contaminated packaging

Not available.

14. Transport Information

DOT

UN number UN1814
Proper shipping name Potassium Hydroxide Solution (Contains 30% Potassium Hydroxide)
Hazard class 8
Packing Group II
Labels required
DOT reportable quantity 1000
Additional information
Special provisions
Packaging exceptions
Packaging non bulk
Packaging bulk
ERG number

IATA

UN number
Proper shipping name Not available.
Hazard class
Packing group
Additional information
ERG code

IMDG

UN number
Proper shipping name Not available.
Hazard class
Packing group
EmS No
IMDG Additional information:

15. Regulatory Information

US federal regulation

CERCLA (Superfund) Reportable Quantity: Potassium Hydroxide: 1000 lb (454kg)

Superfund amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories	Immediate Hazard:	Yes
	Delayed Hazard:	No
	Fire Hazard:	No
	Pressure Hazard:	No
	Reactivity Hazard:	No

Section 302 extremely hazardous substance: Potassium Hydroxide

Section 311 hazardous chemical: Potassium Hydroxide

Inventory Status

Country	Inventory Name	On Inventory *
Australia	AICS	No
Canada	DSL	No
Canada	NDSL	No
China	IECSC	No
Europe	EINECS	No
Europe	ELINCS	No
Japan	ENCS	No
Korea	ECL	No
New Zealand	NZI	No
United States / Puerto Rico	TSCA	Yes
Phillipines	PICCS	No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

WHMIS Information Not available.

State Regulation Not available.

16. Other Information

Further Information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings Health: 2
Flammability: 0
Physical Hazard: 1
A HMIS® rating including an * indicates a chronic hazard.

NFPA ratings Health: 2
Flammability: 0
Instability: 1

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Issue Date 6/25/2012