



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	KEMTEC F132 FROTHER
CHEMICAL FAMILY:	Mixture
SYNONYMS:	
MOLECULAR FORMULA:	Mixture
MOLECULAR WEIGHT:	Mixture
MANUFACTURER:	Kemtec Mineral Processing • 131/15 Hall St • Port Melbourne • VIC
PRODUCT INFORMATION:	Tel: +61 3 9646 3833 • Fax: +61 3 9646 3933
EMERGENCY PHONE:	CHEMTREC • North America: +1.800.424.9300 • International +1.703.527.3887
ISSUE DATE:	May 1, 2012

2. COMPOSITION/INFORMATION ON INGREDIENTS

OSHA REGULATED COMPONENTS

COMPONENT	CAS No.	% (w/w)	OSHA (PEL)	ACGIH (TLV)	Carcinogen
2-methylbutan-1-ol	137-32-6	50 - 90%	100 ppm	100ppm	
Isobutanol	78-83-1	0 - 5%	100 ppm	50 ppm	
2-2-dimethylpropanol	75-78-3	0 - 5%		1000 ppm	
Other Mixed alcohols		0 - 20%			
n-Butanol	71-36-3	0 - 5%	100 ppm	20 ppm	

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE AND ODOR

Color: Clear, colorless
Appearance: Liquid
Odor: Alcohol like odor

STATEMENT OF HAZARD

WARNING! Danger: Flammable liquid, harmful if swallowed. Ingestion may cause gastric disturbances. Causes eye, skin and respiratory tract irritation. Risk of serious damage to eyes. Prolonged or repeated contact may result in dermatitis.

POTENTIAL HEALTH EFFECTS

EFFECTS / ROUTES OF EXPOSURE

Routes of entry for liquids include eye and skin contact, ingestion and inhalation.

4. FIRST AID MEASURES

INGESTION:	If swallowed, call a physician immediately. ONLY induce vomiting at the instructions of a physician. Never give anything to an unconscious person
SKIN CONTACT:	In case of skin contact, remove contaminated clothing without delay. Wear impervious gloves. Cleanse skin thoroughly with soap and water. Do not omit cleaning hair or under fingernails if contaminated. Do not reuse clothing without laundering.
EYES CONTACT:	In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention.
INHALATION:	If inhaled, remove to fresh air. If not breathing, give artificial respiration and seek medical attention immediately. Oxygen should only be administered by trained personnel.

5. FIREFIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 23 ° C (DIN 51755)

FLAMMABLE LIMITS IN AIR Lower: ~0.9%
% BY VOLUME: Upper: ~ 10.4%

AUTOIGNITION TEMP: 390° C

DECOMPOSITION TEMP:

EXTINGUISHING MEDIA AND FIRE FIGHTING INSTRUCTIONS

Extinguishing Media

Use water, carbon dioxide or dry chemical to extinguish fires.. Cool exposed equipment with water spray until well after fire is out.

Protective Equipment

Wear self-contained, positive-pressure breathing apparatus and full firefighting protective clothing. See Section 8 (Exposure Controls/Personal Protection) for special protective clothing

Special Hazards

Do not allow to enter drains or water ways. Approach with extreme caution.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Contain the spill if possible. Where exposure level is not known, wear NIOSH approved, positive pressure, self-contained respirator. Where exposure level is known, wear NIOSH approved respirator suitable for level of exposure. In addition to the protective clothing/equipment in Exposure Control (Exposure Controls/Personal Protection), wear rain suit. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush area with water.

METHODS FOR CLEAN UP

Remove source of ignition. Cover spills with some inert absorbent material; sweep up and place in a waste disposal container. Flush spill area with water.

ENVIRONMENTAL PRECAUTIONS

Dispose of in accordance with EPA rules and regulations.

7. HANDLING AND STORAGE

HANDLING

Precautionary Measures

Precautions should be taken to prevent electrostatic discharge. Keep away from sources of ignition.

Special Handling Statements

Vapors may form ignitable mixture with air. Product is flammable. Empty containers may contain flammable residue.

STORAGE

It is recommended to store product in carbon steel with effective moisture control, carbon steel coated with baked phenolic, fiberglass reinforced plastic with epoxy or polyester resin, or metallic zinc in an inorganic binder.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

ENGINEERING CONTROLS

Mechanical ventilation may be necessary if working with the product in enclosed areas or at elevated temperatures. Utilize a closed system process when available. If not available, provide adequate ventilation.

PERSONAL PROTECTIVE EQUIPMENT

EYES: When contact with product is possible, use face shield. Otherwise use safety glasses with side shields or goggles

SKIN: Use full protective clothing, chemical boots, and chemical gloves to prevent contact with skin

RESPIRATORY PROTECTION: Wear a NIOSH-certified (or equivalent) organic vapour respirator and observe OSHA regulations for respirator use.

ADDITIONAL ADVICE

Food, beverage and tobacco products should not be carried, stored or consumed where this material is used. Before eating, drinking, or smoking, wash face and hands with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR:	Colorless liquid
BOILING POINT:	87.4-131°C
MELTING POINT:	-1.3° C
VAPOR PRESSURE:	1.54 PSI@ 37.7°C
SPECIFIC GRAVITY:	0.82 @ 15°C
VAPOR DENSITY:	4.5 (air = 1)
% VOLATILE (BY WT.):	Not available
pH:	N/A
SATURATION IN AIR (% by Vol):	Not available
EVAPORATION RATE:	Not available
SOLUBILITY IN WATER:	Not available
VOLATILE ORGANIC CONTENT:	Not available
FLASH POINT:	23°C
FLAMMABLE LIMITS IN AIR % BY VOLUME:	Lower: ~ 0.9% / Upper: ~ 10.4%
AUTOIGNITION TEMPERATURE:	390° C
DECOMPOSITION TEMPERATURE:	Not available
PARTIAL COEFFICIENT (n-octanol/water):	Not available
ODOR TRESHOLD:	See Section 2 for exposure limits

10. STABILITY AND REACTIVITY

STABILITY:	Stable
CONDITIONS TO AVOID:	Keep away from heat, spark, flame
POLYMERIZATION:	Will not occur
CONDITIONS TO AVOID:	None known
INCOMPATIBLE MATERIALS:	Avoid contact with strong acids and bases
HAZARDOUS DECOMPOSITION PRODUCTS:	None expected

11. TOXICOLOGICAL INFORMATION

Toxicological information for the product is found under SECTION 3: HAZARDS IDENTIFICATION

Toxicological information on the regulated components of this product is as follows:

The acute oral (rat) and acute dermal (rabbit) LD50 values for this product are 790 mg/kg and 2.4 – 5.3 g/kg, respectively. Direct contact with this product can cause skin irritation. Direct contact with this product can cause eye burns. Irreversible corneal damage may occur.

12. ECOLOGICAL INFORMATION

Physical-chemical degradability: Biodegradable

Behavior in sewage treatment plant: Obtain approval of relevant authorities prior to discharge.

General: Do not discharge product unmonitored into the environment.

LC50: FATHEAD MINNOWS 96 HOUR: 1430 mg/L

13. DISPOSAL CONSIDERATIONS

RECOMMENDATIONS FOR THE PRODUCT: Dispose of product in accordance with local, state, and federal laws and regulations. Do not contaminate any lakes, streams, ponds, ground water or soil.

RECOMMENDATIONS FOR PACKAGING: DO NOT PRESSURIZE, CUT, WELD, BRAZE, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner, or properly disposed of.

RECOMMENDED CLEANSING AGENT: Water

14. Transportation Information

	D.O.T. Shipping Information			IMO Shipping Information
SHIPPING NAME:	ALCOHOLS, N.O.S. (Contains butanol, pentanol, 2 ethyl hexanol)			ALCOHOLS, N.O.S (Contains butanol, pentanol, 2 ethyl hexanol)
HAZARD CLASS	3			3
PACKING GROUP:	III			III
UN/ID NUMBER:	UN 1987			UN 1987
IMDG PAGE:	Not applicable			Not applicable
DOT HAZARDOUS SUBSTANCE:	Not applicable			Not applicable
TRANSPORT LABEL REQUIRED:	Flammable Liquid			Flammable Liquid
	ICAO/IATA			Transport Canada
SHIPPING NAME:	ALCOHOLS, N.O.S			ALCOHOLS, N.O.S
HAZARD CLASS:	3			3
SUBSIDIARY CLASS:	Not applicable			Not applicable
UN/ID NUMBER:	UN 1987			UN 1987
PACKING GROUP:	III			III
TRANSPORT LABEL REQUIRED:	Flammable Liquid			Flammable Liquid
PACKING INSTRUCTIONS/ MAXIMUM NET QUANTITY:	PASSENGER	309	60 L	Not applicable
	CARGO	310	220L	

ADDITIONAL TRANSPORTATION INFORMATION

Technical Name (N.O.S.) (Contains butanol, pentanol, 2 ethyl hexanol)

Flash Point: >23 Degrees C

15. REGULATORY INFORMATION

INVENTORY INFORMATION

United States (USA):	This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C. 2601 et. seq.
Canada:	Components of this product have been reported to Environment Canada in accordance with subsection 25 of the Canadian Environmental Protection Act and are included on the Domestic Substances List.
European Union (EU):	All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) in compliance with Council Directive 67/548/EEC and its amendments.

OTHER ENVIRONMENTAL INFORMATION

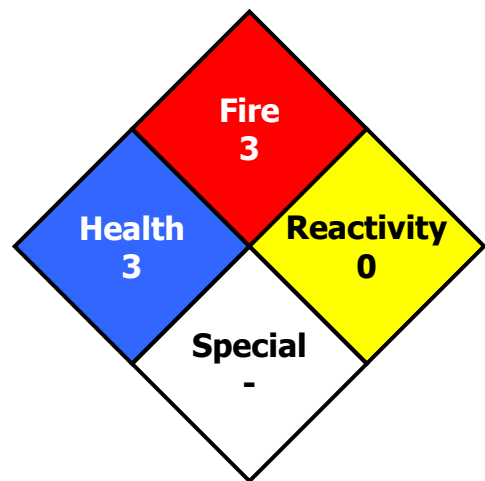
The following components may be subject to reporting requirements pursuant to Section 313 of CERCLA (40 CFR 372) Section 12(b) of TSCA, or may be subject to release reporting requirements (40 CFR 307, 40 CFR 311, etc). See Section 13 for more information on waste classification and waste disposal of this product.

Component	CAS NO.	% (w/w)	TPQ (lbs)	RQ (lbs)	S313	TSCA 12B
Butanol	71-36-3;78-83-1			5000		

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA

ACUTE (Y)	CHRONIC (Y)	FIRE (Y)	REACTIVE (N)	PRESSURE (N)
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16. OTHER INFORMATION



NFPA HAZARD RATING (National Fire Protection Association)

FIRE: Liquids and solids that can be ignited under almost all ambient temperature conditions.

HEALTH: Materials that, under emergency conditions, can cause serious or permanent injury.

REACTIVITY: Materials that in themselves are normally stable, even under fire exposure conditions.

REASON FOR REVISION:

Prepared By: F. Cappuccitti **Revised By:**

IMPORTANT: The above information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warrant, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular uses.