

Safety data sheet

Printing date: 13.11.2014

According to 1907/2006/EC (REACH), 1272/2008/EC (CLP),
and US GHS

Revision: 27.06.2018

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product Identifier	Potassium Fluoroborate, KBF₄
	GHS Product Identifier	Potassium Fluoroborate, KBF₄
	Chemical Name	Potassium Fluoroborate, KBF₄
	Trade Name	See Product Identifier
	CAS No.	Mixture
	EINECS No.	Mixture
	REACH Registration No.	Not available
1.2	Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against	
	Application of the substance / the mixture	Product Component
1.3	Details Of The Supplier Of The Safety Data Sheet	
	Company Identification	Washington Mills Electro Minerals Corp.
	Address	1801 Buffalo Avenue Niagara Falls, NY 14302
	Telephone	(716) 278-6600
	E-Mail (Competent Person)	info@washingtonmills.com
1.4	Emergency Telephone Number – ChemTel	
	(800)255-3924 (USA/Canada), 813-248-0585 (International)	

SECTION 2: HAZARDS IDENTIFICATION

2.1	Classification Of The Substance Or Mixture							
2.1.1	Classification according to Regulation (EC) No. 1272/2008 (CLP)							
	The product is not classified as hazardous according to OSHA GHS regulations within the United States. The substance is not classified as hazardous according to the CLP regulation.							
2.2	Label Elements							
2.2.1	Label Elements According to Regulation (EC) No. 1272/2008 (CLP)							
	This product does not have a classification according to the CLP regulation. The product is not classified as hazardous according to OSHA GHS regulations within the United States.							
	Hazard-determining components of labelling:	None						
	Hazard	Not Regulated						
	Statement(s)							
	Additional information	None						
	Hazard description:							
	WHMIS-symbols:	Not hazardous under WHMIS.						
	NFPA ratings (scale 0 - 4)	<table style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center; color: white; background-color: red; width: 20px; height: 20px;">0</td> <td style="padding: 0 5px;">Health = 0</td> </tr> <tr> <td style="text-align: center; color: white; background-color: yellow; width: 20px; height: 20px;">0</td> <td style="padding: 0 5px;">Fire = 0</td> </tr> <tr> <td style="text-align: center; color: white; background-color: blue; width: 20px; height: 20px;">0</td> <td style="padding: 0 5px;">Reactivity = 0</td> </tr> </table>	0	Health = 0	0	Fire = 0	0	Reactivity = 0
0	Health = 0							
0	Fire = 0							
0	Reactivity = 0							
	HMIS-ratings (scale 0 - 4)	<table style="display: inline-table; vertical-align: middle;"> <tr> <td style="text-align: center; color: white; background-color: blue; width: 20px; height: 15px;">HEALTH 0</td> <td style="padding: 0 5px;">Health = 0</td> </tr> <tr> <td style="text-align: center; color: white; background-color: red; width: 20px; height: 15px;">FIRE 0</td> <td style="padding: 0 5px;">Fire = 0</td> </tr> <tr> <td style="text-align: center; color: white; background-color: yellow; width: 20px; height: 15px;">REACTIVITY 0</td> <td style="padding: 0 5px;">Reactivity = 0</td> </tr> </table>	HEALTH 0	Health = 0	FIRE 0	Fire = 0	REACTIVITY 0	Reactivity = 0
HEALTH 0	Health = 0							
FIRE 0	Fire = 0							
REACTIVITY 0	Reactivity = 0							
	HMIS Long Term Health Hazard Substances	Substance is not listed.						
2.3	Other Hazards							
	Results of PBT and vPvB assessment	PBT: Not applicable. vPvB: Not applicable.						

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

CAS No. Description

14075-53-7 potassium tetrafluoroborate

Identification number(s)

EC number: 237-928-2

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General Information: No special measures required
After Inhalation: Supply fresh air; consult doctor in case of complaints.
After Skin Contact: Brush off loose particles from skin. Wash with soap and water. If skin irritation is experienced, consult a doctor.
After Eye Contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
After Swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

4.2 Most Important Symptoms And Effects, Both Acute And Delayed

Slight irritant effect on eyes.

Hazards

No further relevant information available.

4.3 Indication Of The Immediate Medical Attention And Special Treatment Needed

No further relevant information available.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media Use fire extinguishing methods suitable to surrounding conditions.
Unsuitable Extinguishing Media None.

5.2 Special Hazards Arising From The Substance Or Mixture

No further relevant information available.

5.3 Advice for Fire-Fighters

Wear self-contained respiratory protective device. Wear fully protective suit.

Additional Information

No further relevant information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment And Emergency Procedures

Avoid formation of dust. For large spills, use respiratory protective device against the effects of fumes/dust/aerosol. For large spills, wear protective clothing. Ensure adequate ventilation

6.2 Environmental Precautions

Do not allow to enter sewers/ surface or ground water.

6.3 Methods And Material For Containment And Cleaning Up

Pick up mechanically. Send for recovery or disposal in suitable receptacles. Ensure adequate ventilation.

6.4 Reference To Other Sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: HANDLING AND STORAGE

7.1	Precautions For Safe Handling	Use only in well ventilated areas. Prevent formation of dust. Any unavoidable deposit of dust must be regularly removed. Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.
	Information About Fire – and explosion protection	No special measures required.
7.2	Conditions For Safe Storage, Including Any Incompatibilities: Requirements to be Met by Storerooms and Receptacles:	Store in a cool location. Protect from humidity and water.
	Information About Storage in One Common Storage Facility:	Store away from oxidizing agents. Store away from foodstuffs. Do not store together with acids.
	Further information about storage conditions:	Store in cool, dry conditions in well sealed receptacles.
7.3	Specific End Use(s)	No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control Parameters

Ingredients with limit values that require monitoring at the workplace:

potassium tetrafluoroborate	14075-53-7	PEL (USA)	Long-term value: 2,5 mg/m ³ as F
		REL (USA)	Long-term value: 2,5 mg/m ³ as F
		TLV (USA)	Long-term value: 2,5 mg/m ³ as F, BEI
		EL (Canada)	Long-term value: 2,5 mg/m ³ as F
		IOELV (EU)	Long-term value: 2,5 mg/m ³ as F

DNELs No further relevant information available.

PNECs No further relevant information available.

Ingredients with biological limit values:

potassium tetrafluoroborate	14075-53-7	BEI (USA)	2 mg/L Medium: urine Time: prior to shift Parameter: Fluoride (background, nonspecific)
			3 mg/L Medium: urine Time: end of shift Parameter: Fluoride (background, nonspecific)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure Controls

8.2.2 Personal Protective Equipment:

General protective and hygienic measures:	The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Do not inhale dust / smoke / mist. Avoid contact with the eyes and skin.
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	Respiratory Protection	Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. For spills, respiratory protection may be advisable.
	Eye Protection	Wear safety glasses.
	Protection of Hands	Wear protective gloves.
	Body Protection	Not required under normal conditions of use. Protection may be required for spills.
	Limitation and supervision of exposure into the environment	No further relevant information available.
	Risk Management Measures	No special requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information On Basic Physical And Chemical Properties

Appearance	Powder	Color	White
Odor	Odourless	Odor Threshold (ppm)	Not available
Melting Point (°C) / Freezing Point (°C)	Not available	Boiling Point/Boiling Range (°C)	Not available
Flash Point (°C)	No Data	Explosive Limit Ranges	Not available
Auto Ignition Temperature (°C)	Not available	Decomposition Temperature (°C)	Not available
Explosive Properties	None	Oxidizing Properties	Not available
Flammability (Solid, Gas)	Not available	Ph (Value)	Not available
Evaporation Rate	N/A	Vapor Pressure (mm Hg)	Not available
Vapor Density (Air=1)	N/A	Density (g/ml)	2,5 g/cm ³
Solubility (Water)	Not miscible or difficult to mix.	Solubility (Other)	Not available
Partition Coefficient (N-Octanol/Water)	Not available	Viscosity (mPa.s)	Not available

9.2 Other Information Volatile Organic Chemical (VOC) Content – Not Available.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical Stability

Thermal Decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of Hazardous Reactions Reacts with strong acids and alkali. Reacts with strong oxidising agents. Reacts with humid air.

10.4 Conditions To Avoid Moisture.

10.5 Incompatible Materials No further relevant information available.

10.6 Hazardous Decomposition Product(s) Hydrogen fluoride

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute toxicity:

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Primary Irritant Effect:

On the skin:

Slight irritant effect on skin and mucous membranes.

On the eye:

Slight irritant effect on eyes.

Sensitisation:

No sensitizing effects known.

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us. The substance is not subject to classification according to the latest version of the EU lists.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity:

No further relevant information available.

12.2 Persistence and Degradability

No further relevant information available.

12.3 Bioaccumulative Potential

Does not accumulate in organisms.

12.4 Mobility in Soil

No further relevant information available.

Additional ecological information:

General notes:

Due to the consistence and the low water solubility of the product a bioavailability is not probable.

12.5 Results of PBT and vPvB

Assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other Adverse Effects

No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Recommendation

Contact waste processors for recycling information. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

Uncleaned Packaging:

Recommendation:

Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

Land Transport (ADR/RID) (c)(d)

UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None
Packing Group	None
Hazard Label(s)	None
Environmental Hazards	None
Special Precautions For User	None

Sea Transport (IMDG) (c)

UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None
Packing Group	None
Marine Pollutant	None
Special Precautions For User	None

Land Transport (Within USA) (b)(d)

UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None
Packing Group	None
Hazard Label(s)	None
Environmental Hazards	None
Special Precautions For User	None

Air Transport (ICAO/IATA) (c) (d)

UN Number	None
Proper Shipping Name	Not classified as dangerous for transport.
Transport Hazard Class(es)	None
Packing Group	None
Marine Pollutant	None
Special Precautions For User	None

(b)- ORM-D may be applicable within the USA for package sizes less than 30kg.

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(c)– Consult with transport provider.

(d)– Check relevant regulations for Special Provisions.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health And Environmental Regulations/Legislation Specific For The Substance Or Mixture

USA

SARA

Section 355 (extremely hazardous substances) Substance is not listed.

SARA 313 (Specific toxic chemical listings) Substance is not listed.

TSCA (Toxic Substance Control Act) Substance is listed.

Proposition 65 (California):

Chemicals known to cause cancer: Substance is not listed.

Chemicals known to cause reproductive toxicity for females: Substance is not listed.

Chemicals known to cause reproductive toxicity for males: Substance is not listed.

Chemicals known to cause developmental toxicity: Substance is not listed.

Carcinogenic Categories

EPA (Environmental Protection Agency) 14075-53-7 potassium tetrafluoroborate I (oral)

IARC (International Agency for Research on Cancer) 14075-53-7 potassium tetrafluoroborate 3

TLV (Threshold Limit Value established by ACGIH) 14075-53-7 potassium tetrafluoroborate A4

MAK (German Maximum Workplace Concentration) Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.

Canada

Canadian Domestic Substances List (DSL) Substance is listed.

Canadian Ingredient Disclosure list (limit 0.1%) Substance is not listed.

Canada Ingredient Disclosure list (limit 1%) Substance is not listed.

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57 Substance is not listed.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Additional information:

- The accumulation of airborne dust particles may lead to health and safety risks in some cases. The use of good industrial practices will mitigate this risk.

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- The health risks from inhalation of dust particles vary; this is due to particle concentration, exposure length, number of exposures and type of particles inhaled. Please read Section 2,4,6,7 and 8 of the SDS to understand these potential risks. Wear personal protective equipment and follow storage and handling procedures to maintain a safe workplace.
- In rare instances, combustible dusts may represent a potential explosion hazard when airborne. This hazard is often associated with organic dust such as foodstuffs and coal, but may also occur with mineral products. While the majority of our products would be considered non-combustible, the overall airborne environment should be considered when determining the need for mitigation from the potential hazard. Consult recognized experts when necessary in order to determine any possible hazard.
Please read the SDS for specific information concerning these hazards, and contact us with any further questions. We appreciate your continued business.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

Sources

SDS Prepared by:

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