STRIKE FIRST CORPORATION

SAFETY DATA SHEET

Prepared to US OSHA Hazard Communication Standard and Globally Harmonized System of Classification and Labeling of Chemicals

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME (AS LABELED): WET CHEMICAL SOLUTION (SF-6LK/6LKR). Fire Extinguishing Agent, Pressurized and Non-pressurized
PRODUCT USE: Fire Extinguishing Agent
RESTRICTION OF USE: Do not use on electrically energized equipment. Consult applicable fire protection codes
MANUFACTURER'S NAME: STRIKE FIRST CORPORATION
ADDRESS: 777 Tapscott Road
Scarborough, ON
M1X 1A2
BUSINESS PHONE: 416.299.7767
EMERGENCY CONTACT NO: CHEMTREC 1-800-424-9300 or
(703) 527-3887
DATE OF PREPARATION: May 5, 2012
DATE OF REVISION: April 18, 2024

2. HAZARDS IDENTIFICATION

GHS – Classification

Health	Environmental	Physical
Acute Toxicity: Category 5	None	None
Skin Corrosion/Irritation: YES	None	None
Skin Sensitization: NO	None	None
Eye: Category 2B	None	Warning
STOT – Category 3	None	Warning
Carcinogen: Category None	None	None

GHS – Label Symbol(s):



GHS – Signal Word(s): None

Other Hazards Not Resulting In Classification: None

GHS – Hazard Phrases

GHS Hazard	GHS Code(s)	Code Phrase(s)
Physical	None	
Health	H303 320 335	Maybe Harmful if Swallowed Causes eye irritation May cause respiratory irritation
Environmental	None	

Precautionary:		
General	P101	If medical advice is needed, have product container or label at hand
Prevention	261 264	Avoid breathing mist Wash hands and face thoroughly after handling
Response	P304+340 305+351+313 337+38 312	If inhaled, remove person to fresh air and keep comfortable for breathing. If in eyes, rinse cautiously with water for several minutes. Get immediate medical advice/attention (as appropriate). If eye irritation persists: remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell (as appropriate).
Storage	None	

3. COMPOSITION, INFORMATION ON INGREDIENTS

This product is a mixture.

Components:

Chemical Name	Concentration	EC Number	CAS Number
Potassium Citrate	**1 – 10%**	**212-755-5**	**866-84-2**
Potassium Acetate	**20 – 30%**	**204-822-2**	**127-08-2**
Water	**50 – 60%**	**N/A**	**7732-18-5**

Emergency Overview: Clear to opaque liquid solution

Adverse health effects and symptoms: This product is an irritant to the respiratory system, eyes and skin. Symptoms may include coughing, sore throat, difficulty breathing, eye pain, and skin redness and irritation. Ingestion, although unlikely, may cause cramps, nausea and diarrhea.

Components:

Chemical Name	Reproductive Toxicity	Carcinogenicity	Mutagenicity	Other Hazard Classes
Potassium Citrate	N/A	N/A	N/A	N/A
Potassium Acetate	N/A	N/A	N/A	N/A
Water	N/A	N/A	N/A	N/A

Note: Pressurized product uses nitrogen or compressed air as expellant.

4. FIRST AID MEASURES

Prompt medical attention is mandatory in all cases of overexposure to this solution.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists after washing.

Skin Contact: Wash off with warm water and soap. Get medical attention if irritation develops and persists.

Inhalation: Move to fresh air. For breathing difficulties, oxygen may be necessary. Get medical attention, if needed.

Ingestion: Rinse mouth. Do not induce vomiting without advice from poison control center. IF SWALLOWED:
Immediately call a POISON CENTER or doctor/physician. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Notes to physician: Treat symptomatically. Symptoms may be delayed.

5. FIRE FIGHTING MEASURES

Flammability of the product: Non-flammable.

Extinguishing media:

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire. This preparation is used as an extinguishing agent and therefore is not a problem when trying to control a blaze. Use extinguishing agent appropriate to other materials involved. Keep pressurized extinguishers and surroundings cool with water spray as they may rupture or burst in the heat of a fire.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with full face-piece operated in positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: EVACUATE ALL PERSONNEL FROM AFFECTED AREA
Local authorities should be advised if significant spillages cannot be contained. Surfaces may become slippery after spillage. Keep upwind.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Methods and materials for containment and cleaning up: Should not be released into the environment.
Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.
Small Spills: Wipe up with absorbent material (e.g. cloth, fleece).

Never return spills in original containers for re-use. Following product recovery, flush the area with water. Clean surface thoroughly to remove residual contamination.

7. HANDLING AND STORAGE

Pressurized extinguishers should be properly stored and secured to prevent from falling or being knocked over. Do not drag, slide or roll extinguishers. Do not drop extinguishers or permit them to strike against each other. Never apply flame or localized heat directly to any part of the extinguisher or plastic container. Store pressurized extinguishers and plastic containers away from high heat sources. Storage area should be: - cool - dry - well ventilated - under cover - out of direct sunlight.

Handling: Do not get this material in contact with eyes. Avoid contact with skin. Avoid prolonged exposure. Handle and open container with care.

Storage: Store in cool place. Store in a well-ventilated place. Keep container tightly closed. Keep out of the reach of children. Use care in handling/storage.

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

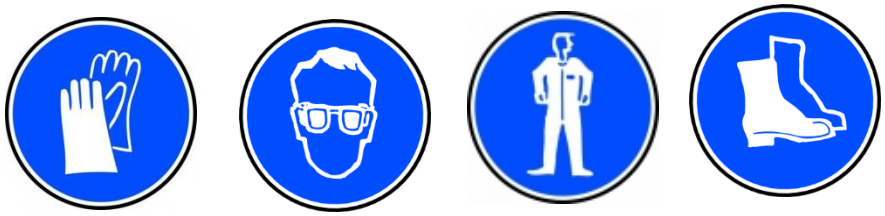
Chemical Name	OSHA PEL	ACGIH TLV	DFG MAK*	EU BLV
Potassium Citrate	N/R	N/R	N/R	N/R
Potassium Acetate	N/R	N/R	N/R	N/R
Water	N/R	N/R	N/R	N/R

*German regulatory limits ** PNOC = Particulates not otherwise classified (ACGIH) also known as particulates not otherwise regulated (OSHA) *** NR = Not Regulated. All values are 8 hour time weighted average concentrations

Engineering controls: Showers
Eyewash station
Ventilation system

Personal protection

Respiratory: Use supplied air respiratory protection if required. If respiratory protection is required, follow the requirements of the Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), or equivalent State standard.
Hands: Wear glove protection appropriate to the specific operation for which this gas is used.
Eyes: Safety glasses with side shields.
Skin/Body: Use body protection appropriate for task.
Metal cap safety shoes, are recommended when handling cylinders.



Some applications of this product may require additional or other specific protective clothing. Please consult your supervisor.

Personal protection: Safety glasses with side shields, goggles or face shield. Impervious gloves. Protective clothing. Metal cap safety shoes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Clear to opaque liquid, water based
Molecular Weight:	C2H3KO2: 98.14
Odor:	Mild Odor
Odor Threshold:	No information available
Decomposition Temperature ^{O}C:	100 - 120
Freezing Point ^{O}C:	No information available
Initial Boiling Point ^{O}C:	Approximately 149
Physical State:	Liquid
pH:	8 - 9
Flash Point ^{O}C:	None
Auto-ignition Temperature ^{O}C:	None
Boiling Point/Range ^{O}C:	145/140-155
Melting Point/Range ^{O}C:	Not Applicable
Flammability:	Not flammable
Flammability Limits in Air ^{O}C:	Upper – Not Flammable; Lower-Not Flammable
Explosive Properties:	None
Oxidizing Properties:	None
Volatile Component (%vol)	Not Applicable
Evaporation Rate:	Not Applicable
Vapor Density:	Not Applicable (Air = 1)
Vapor Pressure:	Not Applicable
Specific gravity:	1.1 – 1.2 at 25 ºC
Solubility (@20^{O}C):	Soluble in the following material: water
Partition Coefficient:	No Information Available
Viscosity:	Not Applicable

10. STABILITY AND REACTIVITY

Stability and reactivity: This product is stable.
Incompatibility: Strong oxidizing agents.
Hazardous decomposition products: Not known.
Hazardous polymerization: Carbon oxides, potassium oxides

11. TOXICOLOGICAL INFORMATION

Acute Effects
Inhalation: None expected.
Skin: Prolonged contact may cause dryness to skin.
Eyes: May cause temporary eye irritation.
Ingestion: No harmful effects expected in amounts likely to be ingested by accident.
Potential chronic health effects: Carcinogenic effects: Not classified or listed by IARC, NTP, OSHA, EU, ACGIH.
Mutagenic effects: Not available
Teratogenic effects: Not available

Chemical Name	LD50		LC50 (Inhalation)
	Oral	Dermal	
Potassium Citrate	N/A	N/A	N/A
Potassium Acetate	3,250mg/kg (rat)	N/A	N/A
Water	N/A	N/A	N/A

Reproductive Toxicity: This product's ingredients are not know to have reproductive or teratogenic effects.

Target organs and effects (TOST): This product is a mild irritant to epithelial tissue, (eyes, mucous membranes , skin) and may aggravate injury. No information was found indicating the product causes sensitization.

Other Toxicity Categories

Chemical Name	Germ Cell Mutagenicity	Carcinogenicity	Reproductive	TOST Single Experiment	Aspiration
Potassium Citrate	None	None	None	None	None
Potassium Acetate	None	None	None	None	None
Water	None	None	None	None	None

12. ECOLOGICAL INFORMATION

Ecotoxicity: A weak environmental toxin. Specific negative impacts are unknown
Persistence/Degradability: Soluble in water; moderate degradation in soil. Rapid photolytic degradation in air
Probability of rapid biodegradation: C2H3KO2 Est: 0.792 (Rapid)
Anaerobic biodegradation probability: C2H3KO2 Est: - 0.943 (Rapid)
Bioaccummulation potential: Low
Bioconcentration factor: C2H3KO2 Est: 3.16 L/kg (wet weight)
Bioaccummulation: Extent unknown but unlikely

Mobility in soil: Slow evaporation rate; water soluble, may leach to groundwater

NOTE: C2H3KO2 – Potassium Acetate

Other adverse effects: No other known effects

Aquatic Toxicity Values – Environment - Research

Chemical Name	Acute (LC50)	Chronic (LC50)
Potassium Citrate	Not Acutely Toxic	Not Acutely Toxic
Potassium Acetate	298mg/L Fish 96 hr (Phimepales Promelas; 313mg/L Crustaceans 48 hr	N/A
Water	N/A	N/A

Aquatic Toxicity Values – Environment – Calculated Estimates

Chemical Name	Acute (LC50)	EC50
Potassium Citrate	3.14e+06 mg/L Fish 96 hr; 1.27e+05 mg/L Daphnid 43 hr	2.33e+05 mg/L Gr. Algae 96 hr
Potassium Acetate	N/A	4403 mg/L Gr. Algae 96 hr
Water	N/A	N/A

13. DISPOSAL CONSIDERATION

Disposal: This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Waste from residues: Dispose of in accordance with local regulations.

14. TRANSPORTATION INFORMATION

DOT/TC: Not regulated
IATA: Not Regulated
UN Proper Shipping Name: Not regulated
UN Class: None
UN Number: None
UN Packaging Group: None
Marine Pollutant: No

NOTES:

This product is not defined as a hazardous material under U.S. Department of Transportation (DOT) 49 CFR 172, or by Transport Canada “Transportation of Dangerous Goods” regulations.
Special Precautions for Shipping:
If shipped in a stored pressure-type fire extinguisher, and pressurized with a non-flammable, non-toxic inert expellant gas, the fire extinguisher is considered a hazardous material by the US Department of Transportation and Transport Canada. The proper shipping name shall be FIRE EXTINGUISHER and the UN designation is UN 1044. The DOT hazard class is Limited Quantity when shipped via highway or rail. Use a non- flammable gas label (class 2.2) when shipping by air.

15. REGULATORY INFORMATION

International Inventory Status: All ingredients are on the following inventories

Countries	Agency	Status
United States of America	TSCA	Yes
Canada	DSL	Yes
Europe	EINECS/ELINCS	Yes
Australia	AICS	Yes
Japan	MITI	Yes
South Korea	KECL	Yes

REACH Title VII Restrictions: No information available

Chemical Name	Dangerous Substance	Organic Solvents	Harmful Substances Whose Names Are to be Indicated on Label	Pollution Release and Transfer Registry (Class II)	Pollution Release and Transfer Registry (Class I)	Poison and Deleterious Substances Control Law
Potassium Citrate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Potassium Acetate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Water	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Component	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA – Harmful Substances Requiring Permission	Toxic Classification Listing (TCCL) – Toxic Chemicals	Toxic Release Inventory (TRI) – Group I	Toxic Release Inventory (TRI) – Group II
Potassium Citrate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Potassium Acetate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Water	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

European Risk and Safety Phrases:

EU Classification:	XN	Irritant
R Phrases:	20	Harmful by inhalation
	36/37/38	Irritating to eyes, respiratory system, skin
S Phrases:	24/25	Avoid contact with skin and eyes
	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	36	Wear suitable protective clothing
	38	Eye/face protection

US Federal Regulatory Information:

SARA 313:

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) - This product does not contain and chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372. None of the chemicals in this product are under SARA reporting requirements or have SARA threshold planning quantities (TPQs) or CERCLA reportable quantities (RQs), or are regulated under TSCA 8(d).

SARA 311/312 Hazard Categories

Acute Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure-*	Yes
Reactive Hazard	No

-* Only applicable if material is in a pressurized extinguisher.

Clean Water/ Clean Air Act:

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42) or Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61) and Section 112 of the Clean Air Act Amendments of 1990.

U.S. State Regulatory Information:

Chemicals in this product are covered under specific State regulations, as denoted below:

Alaska - Designated Toxic and Hazardous Substances: None
California – Permissible Exposure Limits for Chemical Contaminants: None
Florida – Substance List: None
Illinois – Toxic Substance List: None
Kansas – Section 302/303 List: None
Massachusetts – Substance List: None
Minnesota – List of Hazardous Substances: None
Missouri – Employer Information/Toxic Substance List: None
New Jersey – Right to Know Hazardous Substance List: None
North Dakota – List of Hazardous Chemicals, Reportable Quantities: None
Pennsylvania – Hazardous Substance List: None
Rhode Island – Hazardous Substance List: None
Texas – Hazardous Substance List: None
West Virginia – Hazardous Substance List: None
Wisconsin – Toxic and Hazardous Substances: None

California Proposition 65: No component is listed on the California Proposition 65 list.

Other:
Mexico – Grade No component listed
Canada – WHMIS Hazard Class No component listed

16. OTHER INFORMATION

Revision Date: April 18, 2024
Replaces: December 22, 2022
Changes made: Remove corrosive symbol.

Notice to reader

This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200, and Globally Harmonized System of Classification and Labeling of Chemicals. Other government regulations must be reviewed for applicability to this mixture. To the best of Strike First Corporation's knowledge,

the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this mixture is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.