



SAFETY DATA SHEET

Revision Date: August 31, 2023; Revision J

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

1.1 Product identifier

Product Name: KP Wet Chemical Agent

Product Code(s): CH544/547/559/656/664

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Class K Extinguishant; Use in Restaurant and Kitchen Fire Protection Systems, Used in Models: KP 250, KP 275, KP 325, KP 475, KP 600

1.3 Details of the supplier of the safety data sheet

Amerex Corporation
7595 Gadsden Highway, P.O. Box 81
Trussville, AL 35173-0081
United States

Customer Information Number:

(205) 655-3271
info@amerex-fire.com

1.4 Emergency Telephone Number

Chemtrec 1(800) 424-9300 or
(703) 527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Aerosols - Category 3 - H229

Acute Toxicity - Category 5 - H303

Skin Corrosion/Irritation - Category 3 - H316

Serious eye damage/eye irritation - Category 2B - H320

Specific Target Organ Toxicity, Respiratory - Category 3 – H335

2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008:
Hazard Pictograms**



Signal Word(s): Warning

Hazard Statements

- | | |
|------|---|
| H229 | Pressurized container; may burst if heated. |
| H303 | May be harmful if swallowed. |
| H316 | Causes mild skin irritation. |
| H320 | Causes eye irritation. |
| H335 | May cause respiratory irritation. |

Precautionary Statements

- | | |
|----------------|--|
| P210 | Keep container away from heat, hot surface, sparks, open flames and other ignition sources. No smoking. |
| P251 | Do not pierce or burn container, even after use. |
| P261 | Avoid breathing dust/fume/gas/mist/vapors/spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P319 | Get medical help if you feel unwell. |
| P405 | Store locked up. |
| P501 | Dispose of contents through a licensed disposal company. Contaminated container should be disposed of as unused products. |
| P264+P265 | Wash hands thoroughly after handling. Do not touch eyes. |
| P301+P317 | IF SWALLOWED: Get medical help. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P332+P317 | If skin irritation occurs: Get medical help. |
| P337+P317 | If eye irritation persists: Get medical help. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. |

2.3 Other Hazards

None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

This product is a mixture.

CASRN / EC-No. / Index-No.	REACH Registration Number	Concentration (by weight %)	Component	Classification: REGULATION (EC) No 1272/2008
CASRN 7732-18-5 EC-No/ 231-791-2 Index-No.	NA	40-60%	Water	NA
CASRN 127-08-2 EC-No/ 204-822-2 Index-No.	NA	40-60%	Potassium Acetate	See Section 11.1
CASRN 866-84-2 EC-No/ 212-755-5 Index-No.	NA	<8%	Potassium Citrate	See Section 11.1

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

- Eye Exposure:** May cause irritation. Irrigate eyes with water and repeat until pain free. Seek medical attention if irritation persists.
- Skin Exposure:** May cause skin irritation. In case of contact, wash with plenty of soap and water. Seek medical attention if irritation persists.
- Inhalation:** May cause irritation, along with coughing. May cause dizziness or drowsiness. If respiratory irritation or distress occurs, remove victim to fresh air. Seek medical attention if irritation persists.
- Ingestion:** Overdose symptoms may include gastrointestinal complaints or change in urine output. If victim is conscious and alert, rinse out mouth and give 1-2 glasses of water or milk to drink. Do not induce vomiting. Consult medical service if feeling unwell. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist.

4.2 Most important symptoms and effects, both acute and delayed

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.

4.3 Indication of any immediate medical attention and special treatment needed

Excessive eye exposure will require extended irrigation with water. Excessive skin exposure will require thorough washing with soap and water of the affected area. Excessive inhalation treatment will require removal of victim away from source and into fresh air, seek medical attention if respiratory irritation persists, seek medical attention. For ingestion, rinse out mouth and drink 1-2 glasses of water or milk to drink. Do not induce vomiting. If gastrointestinal distress persists, seek medical attention.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishable media

Non-combustible. Use extinguishing media suitable for surrounding conditions.

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products:

Carbon, acetic acid fumes, and sulfur oxides.

Unusual Fire and Explosion Hazards:

In a fire this material may decompose, releasing oxides of carbon and potassium. (See Section 10).

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand. NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes, and clothing. During minor spill clean-up: Minimum – chemical goggles, nitrile gloves, and an air purifying respirator. Large spills (one container or more) should be addressed by hazardous materials technicians who follow a specific emergency response plan and who are trained in the appropriate use of PPE.

6.2 Environmental precautions

Prevent material from entering waterways.

6.3 Methods for materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Use sorbent socks for containment. Clean up released material using sorbent materials. Bag and drum for disposal; properly label containers; dispose as required by local, state, and federal regulations. Decontaminate with detergent and water.

6.4 Reference to other sections

See Sections 7, 8, 10, 11, 12, and 13.

SECTION 7: HANDLING AND SAFE STORAGE

7.1 Precaution for safe handling

Use appropriate PPE when handling or maintaining equipment and wash thoroughly after handling (see Section 8).

7.2 Conditions for safe storage, including any incompatibilities

Keep product in original container or extinguisher in a cool area. Use in well-ventilated area. Prevent falling. Do not allow near heat sources. Contents may be under pressure – inspect extinguisher consistent with product labeling to ensure container integrity. Do not mix with other extinguishing agents, strong acids, strong oxidants.

7.3 Specific end use(s)

The purpose of this chemical agent is to be used as a fire suppressant found in the KP systems. See Section 1.2. For safety precautions, refer to Sections 7.1 and 7.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Chemical Name	OSHA PEL	ACGIH TLV	DFG MAK *	EU BLV
Water	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Potassium acetate	Not Regulated	Not Regulated	Not Regulated	Not Regulated
Potassium citrate	Not Regulated	Not Regulated	Not Regulated	Not Regulated

8.2 Exposure Controls

Engineering controls

Showers, Eyewash stations, Ventilation systems.

Individual protection measures

The need for respiratory protection is not probable during short-term exposure. PPE use during production process must be independently evaluated.

Eye/Face Protection: Tightly fitting safety goggles

Skin and Body Protection: Wear nitrile or similar gloves, and coveralls or long sleeve shirt.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn. Use N100 respirators for limited exposure, use air-purifying respirator (APR) with high efficiency particulate air (HEPA) filters for prolonged exposure. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current safety and health requirements. The need for respiratory protection is not likely for short-term use in well ventilated areas.

Hygiene Measures: Good personal hygiene practice is essential, such as avoiding food, tobacco products, or other hand-to-mouth contact when handling. Wash thoroughly after handling.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Clear pink liquid solution, water based
Molecular Weight:	C2H3KO2: 98.14; C6H5O7K3: 306.39
Odor:	Odorless
Odor Threshold:	No information available
Decomposition Temperature OC:	100 - 120
Freezing Point OC:	No information available
Initial Boiling Point OC:	Approximately 149
Physical State:	Liquid
pH:	Approximately 8.5
Flash Point OC:	None
Auto-ignition Temperature OC:	None
Boiling Point/Range OC:	149/141-155
Melting Point/Range OC:	C2H3KO2: 292; K3C6H5O7: 180
Flammability:	Not flammable
Flammability/Explosive Limits in Air OC:	Upper – No; Lower - No
Evaporation Rate:	No information available
Vapor Density:	No information available
Vapor Pressure:	No information available
Specific gravity:	Approximately 1.2 at 25 C
Solubility:	Soluble in water
Partition Coefficient:	No Information Available
Viscosity:	Not Applicable

9.2 Other information

Explosive Properties:	None
Oxidizing Properties:	None
Volatile Component (%vol)	Not Applicable

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive

10.2 Chemical Stability

Stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and handling, hazardous reactions will not occur.

10.4 Conditions to avoid

Storage or handling near incompatibles.

10.5 Incompatible materials

Strong acids and oxidizers, lime, inorganic bases. Avoid contact with aluminum, lead, tin, zinc, or other alkali sensitive metals or alloys.

10.6 Hazardous decomposition products

Heat of fire may release carbon dioxide, phosphorous oxide, and acetic acid.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Likely Routes of Exposure

Inhalation, skin, and eye contact.

Symptoms

Immediate

Inhalation: Irritation, coughing.

Eyes: Mild irritation.

Skin: Mild irritation.

Delayed

Symptoms appear to be relatively immediate.

Acute Toxicity

Relatively non-toxic.

Chronic Toxicity

Short-term Exposure: None known.

Long-term Exposure: None known

Acute Toxicity Values

Water: None

Potassium acetate: 3250 mg/kg (rat)

Potassium citrate: 176 mg/kg (dog)

Reproductive Toxicity

This product's ingredients are not known to have reproductive or teratogenic effects.

Target Organs and Effects (TOST)

Respiratory system (mild irritant). This product is a mild irritant to epithelial tissue, (eyes, mucous membranes, skin) and may aggravate dermatitis. Ingestion may cause gastrointestinal injury. No information was found indicating the product causes sensitization.

Germ Cell Mutagenicity

None

Carcinogenicity

None

Aspiration

None

11.2 Information on other hazards

This mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU)

2018/605 at levels of 0.1% or higher.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

A weak environmental toxin. Specific negative impacts are unknown.

12.2 Persistence and degradability

Soluble in water; moderate degradation in soil. Rapid photolytic degradation in air.

12.3 Bioaccumulative potential

Low

Potassium Acetate

Bioaccumulation factor: Est: 0.929

Bioconcentration factor: Est :3.16 L/kg (wet weight) (Low BCF)

Potassium Citrate

Bioaccumulation factor: Est: 0.893

Bioconcentration factor: Est: 3.16 L/kg (wet weight) (Low BCF)

12.4 Mobility in soil

Slow evaporation rate; water soluble, may leach to groundwater.

12.5 Results of PBT and vPvB assessment

This mixture has not been assessed for persistence, bioaccumulation and toxicity (PBT).

12.6 Endocrine disrupting properties

This mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

No other known effects at this time.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose in accordance with federal and local regulations.

SECTION 14: TRANSPORT INFORMATION

Transport Classifications

GROUND (Road or Rail): DOT

MARITIME: IMDG

AIR: IATA

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. This transportation information covers the KP Wet Agent fire extinguisher agent as shipped in bulk containers and not when contained in fire extinguishers or fire extinguisher systems.

14.1 UN number or ID number

1044

14.2 UN proper shipping name

FIRE EXTINGUISHER

14.3 Transport hazard class(es)

2.2 Non-Flammable Gas (shipping via air)

14.4 Packing group

N/A

14.5 Environmental hazards

The mixture is found to not be a marine pollutant.

14.6 Special precautions for user

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/division is LIMITED QUANTITY when pressurized to less than 241 psig and when shipped via highway or rail. UN Class 2.2. Non-Flammable Gas, when shipping via air.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventory Status: All ingredients are on the following inventories:

Country(ies)	Agency	Status
United States of America	TSCA	Yes
Canada	DSL	Yes
Europe	EINECS/ELINC	Yes
Australia	AICS	Yes
Japan	MITI	Yes
South Korea	KECL	Yes

REACH Title XVII Restrictions: No information available.

Chemical Name	Dangerous Substances	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
Water	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
Potassium Citrate	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 Chemical Classification Listing (TCCL) - Toxic Chemicals	Toxic Release Inventory (TRI) - Group I	Toxic Release Inventory (TRI) - Group II
Water	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Potassium Acetate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Potassium Citrate	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

European Risk and Safety phrases:

EU Classification:	XN	Irritant
R Phrases:	36/37/38	Irritating to eyes, respiratory system, and skin.
S Phrases:	22	Do not breathe dust.
	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	28	After contact with skin, wash immediately with plenty of water.
	S36/37/39:	Wear suitable protective clothing, gloves and eye /face protection.
	S45:	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

U.S. 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 any 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 Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
*Sudden Release of Pressure Hazard	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.

15.2 Chemical Safety Assessment

NA

SECTION 16: OTHER INFORMATION

This SDS conforms to requirements under U.S., U.K., Canadian, Australian, and EU regulations or standards, and conforms to the proposed 2003 ANSI Z400.1 format. No modifications of this SDS are authorized by AMEREX Corporation. Questions or comments should be directed to AMEREX Corporation (See Section 1).

Issuing Date	13-February-2019
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Revision Notes	None

The information herein is given in good faith but no warranty, expressed or implied, is made.