



SAFETY DATA SHEET

Section 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Chem 50/50 Antifreeze Bulk
Other Identifiers: Loaded stream charge
Product Code(s): 506B
Model Code(s) for Fire Extinguishers:
Recommended Uses: Anti-freeze charge for water fire extinguisher, not for human or animal drug use
Manufacturer: AMEREX CORPORATION
Internet Address: www.amerex-fire.com
Address: 7595 Gadsden Highway, P.O. Box 81
Trussville, AL 35173-0081
Company Telephone: (205) 655-3271
E-mail Address: info@amerex-fire.com
Emergency Contacts: Chemtrec 1(800) 424-9300 or (703) 527-3887
Revised: May, 2016

Section 2. HAZARDS IDENTIFICATION

GHS – Classification

Health	Environmental	Physical
Acute Toxicity: Category 5	None	None
Skin Corrosion/Irritation: NA	None	None
Skin Sensitization: NO	None	None
Eye: NA	None	None
STOT - NO	None	None
Carcinogen: Category None	None	None

GHS – Label Symbol(s): None

GHS – Signal Word(s): None

Other Hazards Not Resulting in Classification: None

GHS – Hazard Phrases

GHS Hazard	GHS Codes(s)	Code Phrase(s)
Physical	None	
Health	None	
Environmental	None	
Precautionary:		
General	P101	If medical advice is needed, have product container or label at hand
Prevention	None	
Response	None	
Storage	None	

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	EC No.	REACH Reg. No.	CAS-No.	Weight %
Water	NA	NA	7732-18-5	<50
Potassium acetate	204-822-2	NA	127-08-2	<50
Phosphoric Acid	231-633-2	01-2119485924-24-0037	7664-38-2	<1
Purple Pigment	228-767-9	NA	6358-30-1	<1

Emergency overview:

Adverse health effects and symptoms:

Light purple liquid solution.

This product may be a mild 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.

Cut-off Levels

Chemical Name	Reproductive Toxicity	Carcinogenicity	Mutagenicity	Other Hazard Classes
Water	NA	NA	NA	NA
Potassium acetate	NA	NA	NA	NA
Phosphoric acid	NA	NA	NA	NA
Purple Pigment	NA	NA	NA	NA

Section 4. 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. 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 feel unwell. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist.
Medical conditions possibly aggravated by exposure:	Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema, or bronchitis. Skin contact may aggravate existing skin disease.

Section 5. FIRE-FIGHTING MEASURES

Flammable Properties:	Not flammable
Flash Point:	Not determined
Suitable Extinguishing Media:	Non-combustible. Use extinguishing media suitable for surrounding conditions.
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide, and metal oxides.
<u>Explosion Data:</u>	
Sensitivity to Mechanical Impact:	Not sensitive.
Sensitivity to Static Discharge:	Not sensitive.
Unusual fire/explosion hazards:	NA
Protective Equipment and Precautions 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

Personal Precautions:	Avoid contact with skin, eyes, and clothing.
Personal Protective Equipment:	During minor spill clean-up: Minimum – chemical goggles, nitrile gloves, and an air purifying respirator.
Emergency Procedures:	Large spills (one container or more) should be addressed by hazardous materials technicians who

Methods for Containment:

follow a specific emergency response plan and who are trained in the appropriate use of PPE.

Prevent further leakage or spillage if safe to do so.

Use sorbent socks for containment.

Methods for Clean Up:

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.

Environmental Precautions:

Prevent material from entering waterways.

Other:

If product is contaminated, use PPE and containment appropriate to the nature of the most toxic chemical/material in the mixture.

Section 7. HANDLING AND STORAGE

Personal Precautions:

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

Conditions for Safe Storage/Handling:

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 container consistent with product labeling to ensure container integrity.

Incompatible Products:

This material is incompatible with strong acids and strong oxidizing agents. In contact with strong acids, potassium acetate may react vigorously and decompose to produce acetic acid fumes. Potassium acetate may be mildly corrosive to many metals.

Hazardous Decomposition Products:

Carbon dioxide, carbon monoxide, metal oxides.

Hazardous Polymerization:

Will not occur

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Chemical Name	OSHA PEL	ACGIH TLV	DFG MAK *	EU BLV
Water	NR	NR	NR	NR
Potassium acetate	NR	NR	NR	NR
Phosphoric acid	NA	NA	NA	NA
Purple Pigment	NA	NA	NA	NA

*German regulatory limits **PNOC = Particulates not otherwise classified (ACGIH) also known as Particulates not otherwise regulated (OSHA) *** NR = Not Regulated. NA= Not applicable because concentration is less than one percent of the mixture and is expected to not be relevant. All values are 8 hour time weighted average concentrations.

Engineering Controls:

Showers
Eyewash stations
Ventilation systems

Personal Protective Equipment – PPE Code E:

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



Eye/Face Protection:

Chemical goggles when avoidance of splashes, mist, and gases is necessary.

Skin and Body Protection:

Wear nitrile or similar gloves/coveralls, if necessary.

Respiratory Protection:

If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn. Use N100 mask 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. Good personal hygiene practice is essential, such as avoiding food, tobacco products, or other hand-to-mouth contact when handling. Wash thoroughly after handling.

Hygiene Measures:

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Light purple liquid

Molecular Weight:

No information available

Odor:

No information available

Decomposition Temperature °C:

No information available

Freezing Point °C:

No information available

Initial Boiling Point °C:	No information available
Physical State:	Liquid
pH:	Approximately 8.65 in solution at 20 C
Flash Point °C:	None
Auto-ignition Temperature °C:	None
Boiling Point/Range °C:	No information available
Melting Point/Range °C:	No information available
Flammability:	Not flammable
Flammability Limits in Air °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
Vapor Pressure:	Not Applicable
Specific gravity:	Approximately 1.27 at 20 C
Solubility:	Soluble in water
Partition Coefficient:	No Information Available
Viscosity:	Not Applicable

Section 10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage and handling conditions.
Reactivity:	Not reactive.
Possibility of Hazardous Reactions:	Under normal conditions of storage and handling, hazardous reactions will not occur.
Incompatibles:	This material is incompatible with strong acids and strong oxidizing agents. In contact with strong acids, potassium acetate may react vigorously and decompose to produce acetic acid fumes. Potassium acetate may be mildly corrosive to many metals.
Conditions to Avoid:	Storage or handling near incompatibles.
Hazardous Decomposition Products:	Heat of fire may release carbon monoxide, carbon dioxide, and oxides of potassium.
Possibility of Hazardous Reactions:	None
Hazardous Polymerization	Does not occur.

Section 11. TOXICOLOGICAL INFORMATION

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 - Health

Chemical Name	LD50		LC50 (Inhalation)
	Oral	Dermal	
Water	NA	NA	NA
Potassium acetate	3250 mg/kg (rat)	NA	NA
Phosphoric acid	NA	NA	NA
Purple Pigment	NA	NA	NA

Reproductive Toxicity:	This product's ingredients are not known to have reproductive or teratogenic effects.
Target Organs and Effects (TOST):	No information indicating that this product has any known single exposure or repeated exposure effects.

Other Toxicity Categories

Chemical Name	Germ Cell Mutagenicity	Carcinogenicity	Reproductive	TOST Single Exp	TOST Repeated Exp	Aspiration
Water	None	None	None	None	None	None
Potassium acetate	None	None	None	None	None	None
Phosphoric acid	NA	NA	NA	NA	NA	NA
Purple Pigment	NA	NA	NA	NA	NA	NA

Section 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)

Bioaccumulation potential: Low.
 Bioconcentration factor: C₂H₃KO₂ Est: 3.16 L/kg (wet weight)
 Bioaccumulation: Extent unknown but unlikely.
 Mobility in soil: Slow evaporation rate; water soluble, may leach to groundwater

NOTE: C₂H₃KO₂ – Potassium Acetate

Other Adverse Ecological Effects: No other known effects at this time

Aquatic Toxicity Values – Environment – Research

Chemical Name	Acute (LC50)	Chronic (LC50)
Water	N/A	N/A
Potassium acetate		N/A
Chem phosphoric acid	NA	NA
Purple Pigment	NA	NA

Aquatic Toxicity Values – Environment – Calculated Estimates

Chemical Name	Acute (LC50)	EC50
Water	N/A	N/A
Potassium acetate	N/A	4403 mg/L Gr. Algae 96 hr
Chem Phosphoric acid	NA	NA
Purple Pigment	NA	NA

N/A – Not available. NA – Not applicable

Section 13. DISPOSAL CONSIDERATIONS

Safe Handling Use appropriate PPE when handling, and wash thoroughly after handling (see Section 8).
 Waste Disposal Considerations Dispose in accordance with federal, state, and local regulations.
 Contaminated Packaging Dispose in accordance with federal, state, and local regulations.

NOTES:

This product is not a RCRA characteristically hazardous or listed hazardous waste. Dispose of according to state or local laws, which may be more restrictive than federal laws or regulations. Used product may be altered or contaminated, creating different disposal considerations.

Section 14. TRANSPORT INFORMATION

UN Number: NA
 UN Proper Shipping Name: NA
 Transport Hazard Class: NA
 Packing Group: NA
 Marine Pollutant?: NO

IATA Not regulated
 DOT Not regulated

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 2.2 (Non-Flammable gas) when shipped.

Section 15. REGULATORY INFORMATION

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/ELINCS	Yes
Australia	AICS	Yes
Japan	MITI	Yes
South Korea	KECL	Yes

REACH Title VII 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	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

	Applicable					
Chem phosphoric acid	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Purple Pigment	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
Phosphoric acid	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Purple Pigment	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

European Risk and Safety phrases:

EU Classification: No known national or regional regulations applicable to this product.

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 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 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 Acts:

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

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.

Issuing Date	17-June-2012
Revision Date	4 May-2016
Revision Notes	None

The information herein is given in good faith but no warranty, expressed or implied, is made. Updated by William F. Garvin, CIH.