



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: 240
Recommended Uses: Anti-freeze charge for water fire extinguisher; not for human or animal drug use
Manufacturer: SAVA FIRE EQUIPMENT INC.
Internet Address: www.amerex-fire.com
Address: 1085 Stacey Court
Mississauga, ON L4W 2X7
Company Telephone: (905) 238-6400
E-mail Address: info@savafire.ca
Emergency Contacts: Chemtrec 1(800) 424-9300 or (703) 527-3887
Revised: March 7, 2019

Section 2. HAZARDS IDENTIFICATION

GHS – Classification

| Health | Environmental | Physical |
|---------------------------------------|---------------|----------|
| Acute Toxicity: Category 4 | None | Warning |
| Skin Corrosion/Irritation: Category 2 | None | Warning |
| Skin Sensitization: NO | None | None |
| Eye: Category 2A | None | Warning |
| STOT - Category 3 | None | Warning |
| Carcinogen: Category None | None | None |



GHS – Label Symbol(s):

GHS – Signal Word(s):

Warning

Other Hazards Not Resulting in Classification: None

GHS – Hazard Phrases

| GHS Hazard | GHS Codes(s) | Code Phrase(s) |
|-----------------------|--|--|
| Physical | None | |
| Health | H302 315 319 335 | Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. |
| Environmental | None | |
| Precautionary: | | |
| General | P101 | If medical advice is needed, have product container or label at hand |
| Prevention | P261 264 270 280 | Avoid breathing dust/fumes/gas/mist/vapours/spray. Wash exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. |
| Response | P312 321 330 362 301+312 302+352 304+340 305+351+338 332+313 337+313 342+311 | Call a POISON CENTER or doctor if you feel unwell. Specific treatment (see Section 4. First Aid Measures) Rinse mouth Take off contaminated clothing. IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. IF ON SKIN: Wash with plenty of water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists get medical advice/attention. If experiencing respiratory symptoms: Call a doctor. |
| Storage | P403+233 | Store in a well ventilated place. Keep container tightly closed. |
| Disposal | P501 | Dispose of contents through a licensed disposal company. Contaminated container should be disposed of as unused product. |

Section 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | EC No. | REACH Reg. No. | CAS-No. | Weight % |
|-------------------|-----------|-----------------------|-----------|----------|
| Water | NA | NA | 7732-18-5 | 40-60 |
| Potassium acetate | 204-822-2 | NA | 127-08-2 | 40-60 |
| 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, and an irritant to the 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.

Section 4. FIRST AID MEASURES

| | |
|---|---|
| Eye Exposure: | Causes eye irritation. Irrigate eyes with water and repeat until pain free. Seek medical attention if irritation persists. |
| Skin Exposure: | Causes 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. Decomposes with heat to create acetic acid fumes. |
| <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 follow a specific emergency response plan and who are trained in the appropriate use of PPE. |
| Methods for Containment: | 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 for extinguisher rust periodically 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. During production, the manufacturer should use judgement concerning the need for PPE.



Eye/Face Protection:

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

Skin and Body Protection:

Wear nitrile or similar gloves, and coveralls or a long sleeve shirt, 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 local regulations. The need for respiratory protection is not likely for short-term use in well ventilated areas.

Hygiene Measures:

Good personal hygiene practices 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

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|--|--|
| Appearance: | Light purple liquid |
| Molecular Weight: | C ₂ H ₃ KO ₂ - 98.14 |
| Odor: | No information available |
| Odor threshold: | 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: | C ₂ H ₃ KO ₂ - >250 |
| Auto-ignition Temperature °C: | None |
| Boiling Point/Range °C: | No information available |
| Melting Point/Range °C: | C ₂ H ₃ KO ₂ - 292 |
| Flammability: | Not flammable |
| Flammability/Explosive Limits in Air °C: | Upper – None; Lower-None |
| Explosive Properties: | None |
| Oxidizing Properties: | None |
| Volatile Component (%vol) | No information available |
| Evaporation Rate: | No information available |
| Vapor Density: | No information available |
| Vapor Pressure: | C ₂ H ₃ KO ₂ - <0.0000001 hPa at 25°C |
| Specific gravity: | Approximately 1.27 at 20 °C |
| Solubility: | Soluble in water |
| Partition Coefficient: | No information available |
| Viscosity: | No information available |

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 |

Conditions to Avoid:
 Hazardous Decomposition Products:
 Possibility of Hazardous Reactions:
 Hazardous Polymerization

decompose to produce acetic acid fumes. Potassium acetate may be mildly corrosive to many metals. Storage or handling near incompatibles. Heat of fire may release carbon monoxide, carbon dioxide, and oxides of potassium. None Does not occur.

Section 11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, skin, and eye contact.
 Symptoms:
 Immediate
 Inhalation: Irritation, coughing.
 Eyes: Irritation.
 Skin: 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 | 0.117 mg/m ³ -90 day continuous (lowest published) |
| 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 | Cat 3 (Resp irr) | 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: | C ₂ H ₃ KO ₂ Est: 0.792 (Rapid) |
| Anaerobic biodegradation probability: | C ₂ H ₃ KO ₂ Est: 0.943 (Rapid) |
| Bioaccumulation potential: | Low. |
| Bioconcentration factor: | C ₂ H ₃ KO ₂ Est: 3.16 L/kg (wet weight) (Low BCF) |
| Bioaccumulation factor: | C ₂ H ₃ KO ₂ Est: 0.929 L/kg (wet weight) |
| Mobility in soil: | Slow evaporation rate; water soluble, may leach to groundwater |
| Log Koc: | C ₂ H ₃ KO ₂ Est: -1.902 (Kow Method) |
| Log Koa: | Not Available |

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 | 6800 mg/l Oncorhynchus mykiss 96 hr >992 mg/l Danio rerio 96 hr | 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 7170 mg/l Daphnia 24 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, provincial, and local regulations. |
| Contaminated Packaging | Dispose in accordance with federal, state, provincial, 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. This transportation information covers the Chem CH 506 Antifreeze fire extinguisher agent as shipped in bulk containers and not when contained in fire extinguishers or fire extinguisher systems.

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/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. Packing Group – N/A

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 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 |
| 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:

- | | | |
|------------|----------|--|
| R Phrases: | 21 | Harmful in contact with skin. |
| | 25 | Toxic if swallowed. |
| | 23/24/25 | Toxic by inhalation, in contact with skin and if swallowed. |
| | 36/37/38 | Irritating to eyes, respiratory system and 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. |
| | 45 | In case of accident or if you feel unwell seek medical advice immediately (show the label where possible |
| | 36/37/39 | Wear suitable protective clothing, gloves and eye/face protection. |

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 |
| Reactive Hazard | No |

Clean Water 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)

Clean Air Act:

Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPs) under 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. No modifications of this SDS are authorized by AMEREX Corporation. Questions or comments should be directed to AMEREX Corporation (See Section 1).

| | |
|----------------|--------------------------|
| Issuing Date | 17-June-2012 |
| Revision Date | 7-March-2019; Revision D |
| 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.