

MATERIAL SAFETY DATA SHEET

Section 1. Chemical product and company identification

Product Name: CH 506 Anti-Freeze Charge
Synonym: Loaded Stream Charge

Manufacturer: AMEREX CORPORATION
Internet Address: <http://www.amerex-fire.com>
Address: 7595 Gadsden Highway
P.O. Box 81
Trussville, AL 35173-0081

Telephone: (205) 655-3271
Emergency Contacts: Chemtrec: (800) 424-9300 or
(703) 527-3887

Revised: April, 2010

Section 2. Hazard identification and emergency overview

Physical description: As shipped: Yellowish to white Dry Powder
As mixed and used: Yellow liquid, water-based, odorless

Adverse health effects and symptoms: As a dust, bulk liquid, mist, or spray this product is irritating and corrosive to the eyes, respiratory system, and skin. Symptoms may include principally eye pain, also sore throat, coughing and difficult breathing if inhaled, skin redness and burns after prolonged exposure. Ingestion, although unlikely, may cause severe irritation of the GI tract.

Exposure guidelines: The chemicals in this product are not listed in OSHA Subpart Z and do not have permissible exposure limits (PELs). The values below are general values for particulates not otherwise regulated – PNOR (OSHA), also termed particulates not otherwise classified – PNOC (NIOSH), and particulates not otherwise specified – PNOS (ACGIH). Note these levels are for insoluble (dry) forms of product ingredients.

Ingredients	PNOR	PNOC	PNOS	DFG MAK *
Water	None	None	None	None
Potassium Carbonate	15 mg/m ³ Total Dust 5 mg/m ³ Respirable Fraction	10 mg/m ³	10 mg/m ³ Inhalable Particulate 3 mg/m ³ Respirable Particulate	

Potassium Acetate	15 mg/m ³ Total Dust 5 mg/m ³ Respirable	10 mg/m ³	10 mg/m ³ Inhalable Particulate 3 mg/m ³ Respirable Particulate	4 mg/m ³ Inhalable Fraction 1.5 mg/m ³ Respirable Fraction
Yellow Dye S-319	Not established	Not Established		Not Established

*German regulatory limits

Hazard symbols:
WHMIS (hazardous materials identification system)

D2B - Product is an irritant

Section 3. Composition/information on ingredients (as mixed)

Chemical formula/Name	Weight %	CAS #
Water	60 – 61	7732-18-5
K ₂ CO ₃ Potassium Carbonate	24 – 25	000584087
CH ₃ COOK Potassium Acetate	14 – 15	127-08-2
Monoazo Yellow Dye	< 0.1	6359-82-9, 1934-21-0

Section 4. First aid measures

Eye Exposure: Irrigate eyes at eye wash station and repeat until pain free. Seek medical attention immediately.

Skin Exposure: In case of contact, wash with plenty of soap and water.

Inhalation: If respiratory irritation or distress occurs remove victim to fresh air. Provide oxygen if breathing is difficult. Seek medical attention if irritation develops or persists.

Ingestion: Do not induce vomiting. If victim is alert, give liquids such as milk or water. Seek immediate medical attention. 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 conditions.

Section 5. Fire fighting measure

Extinguishing media: noncombustible and non flammable – product is an extinguishing agent. In manufacture the Potassium Carbonate and Potassium Acetate are dry, organic dusts and as such present a potential explosion hazard.

Unusual fire/explosion hazards: in a fire this material may decompose, releasing oxides of carbon and potassium (see Section 10).

Insensitive to mechanical impact or static discharge.

HMIS (hazardous materials identification system) rankings (as liquid):
health = 3, flammability = 0, reactivity = 0, personal protective equipment: eye and skin protection (see Section 8).

Section 6. Accidental release measures

Large spills (one container or more) should be addressed by hazardous materials technicians following a site-specific emergency response plan and trained in the appropriate use of PPE. Clean up released material using sorbent socks for containment, followed by sorbent material inside containment. Wear appropriate personal protective equipment (PPE) for corrosives. (Section 8). Bag and drum for disposal. If product is used and/or contaminated, for example if mixed with water, use PPE and containment appropriate to the nature of the mixture. Prevent material from entering storm sewer. Handle and dispose of as a hazardous waste unless testing for pH indicates otherwise. Decontaminate with detergent and water.

Section 7. Handling and storage

Avoid eye, respiratory, and skin exposure. Use appropriate PPE (personal protective equipment) when handling, and wash thoroughly after handling (Section 8). Keep product in original container until packaging for use as extinguisher. Clean used equipment before storage. Use this product only in well ventilated areas. Do not mix with other extinguishing agents.

Section 8. Exposure controls/ personal protection

During the application of this product against fires, exhaust gases and the products of incomplete combustion (PICs) are the principal respiratory hazards. In the manufacture of extinguishers, automated systems and point source ventilation controls sufficiently minimize respiratory exposure. Employers and employees must use their collective judgment in determining occupational settings where the use of a respirator is prudent. The need for respiratory protection is not likely for the intended short-term use of the product in well ventilated areas.

Respiratory protection: In high concentrations or poor ventilation areas use air-purifying respirator (APR) or powered air-purifying respirator (PAPR) with HEPA cartridges when handling dry ingredients for low or short-term exposure. Use positive pressure supplied air respirators (SAR) or self contained breathing apparatus (SCBA) for high volume liquid applications.

Eye protection: wear chemical goggles.

Skin protection: use nitrile, latex, or similar gloves and coveralls. Good personal hygiene practices essential, such as avoiding food, tobacco products, or other hand-to-mouth contact when handling. Wash thoroughly after handling product.

Section 9. Physical and chemical properties

Appearance: As Shipped: Yellowish to white dry powder
As mixed/used: Yellow liquid; odorless

Specific gravity: ~ 1.32

Solubility: soluble in water

Non -flammable

Flash point: not applicable

Vapor pressure: <10 mm Hg @ room temperature

pH: approximately 12.44 in solution (as mixed/used)

Boiling point: ~ 220° F

No explosive or oxidizing properties

Section 10. Stability and reactivity

Stability: stable

Incompatibles: strong acids, strong oxidizers, and inorganic bases

Decomposition products: heat of fire may release carbon monoxide, carbon dioxide, and oxides of potassium.

Possibility of hazardous reactions: none

Section 11: Toxicological Information

Acute toxicity: Potassium Carbonate: oral mouse LD₅₀: 2570 mg/kg body weight; oral rat LD₅₀ : 1870 mg/kg body weight. Target organs in man: eyes, respiratory system, skin.

This product is an extreme eye and gastrointestinal tract irritant.

Potassium Acetate: oral rat LD₅₀: 3250 mg/kg body weight.

Chronic toxicity: This product's ingredients are not considered as "probable" or "suspected" carcinogens by OSHA, ACGIH or IARC.

Reproductive toxicity: This product's ingredients are not known to have reproductive or teratogenic effects at DFG MAK exposure levels.

Section 12. Ecological information

Ecotoxicity: no information available; localized damage as a strong base

Persistence/ Degradability: water soluble, degrades readily in moist soil

Bioaccumulation: extent unknown

Section 13. Disposal considerations

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. Transportation information

This product is not a hazardous material under U.S. Department of Transportation (DOT) 49 CFR 172, and is not regulated by the DOT, IMO, IATA, RID/ADR, or Canada's TDG.

Section 15. Regulatory information

International Inventory Status

Contains ingredients on the following inventories

Country(ies)	Agency	status
United States of America	TSCA	Yes
Canada	DSI	Yes
Europe	EINECS/ELINCS	Yes
Australia	AICS	Yes
Japan	MITI	Yes
South Korea	KECL	Yes

European Risk and Safety phrases:

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

U.S. federal regulatory information:

None of the chemicals in this product are under SARA reporting requirements or

have SARA threshold planning quantities (TPQs) or CERCLA reportable quantities (RQs). None of the chemicals in this product are listed as Hazardous Substances under the Clean Water Act or as hazardous air pollutants under the Clean Air Act.

State regulatory information:

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

California - Permissible Exposure Limits for Chemical Contaminants: None Florida - Substance List: None

Florida - Substance List: None

Massachusetts - Substance List: None

Minnesota - List of Hazardous Substances: None

New Jersey - Right to Know Hazardous Substance List: None

Pennsylvania: Hazardous Substance List: None

California Proposition 65: No component is listed on the California Proposition 65 list or the No Significant Risk Level List.

Section 16. Other information

This MSDS conforms to requirements under U.S., U.K., Canadian, Australian, and EU regulations or standards, and conforms to the 2003 ANSI Z400.1 format.

The information herein is given in good faith but no warranty, expressed or implied, is made. Updated by Lindsay R. Hill, CIH.