

I. Product and Supplier Information

Product Name: Conductivity Calibration Standards 4066, 4067, 4068, 4069
 4173, 4174, 4176, 4177, 4178, 4179, 4566, 4567, 4568, 4569, 4573
 Product Purpose: Conductivity standard
 Product Synonyms: Electrolyte solution
 Chemical Family or Formula: Not applicable

MSDS Number: CC 4066 Rev 2
 Publication Date: Oct. 09, 2006
 Replaces: Jun. 14, 2006

Supplier: Control Company
 Drawer 58307
 Houston, TX 77258
 Phone: 281-482-1714
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Product Information: 281-482-1714

Transportation Emergency: NA

CPR STATEMENT: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

II. Composition and Information on Ingredients

CAS #	SARA 313 On? Dm*	Material or Component	%	RQ#	Exposure Limits		
					TWA*	STEL*	WEEL*
7447-40-7	No NA	Potassium Chloride	<8	None	Not established		NA
71-23-8	No No	n-Propanol	<2	None	200 ppm	400 ppm	NA
7732-18-5	No No	Water	>90	None	Not established		NA

Note: The purpose of this MSDS is to provide safe handling, shipping and disposal information for users of the product. It is not intended to, nor does it, provide complete or extensive toxicological data on the product or its components. Users who require this information are referred to primary suppliers of the ingredients of interest. No component is listed in "Threshold and Biological Exposure Indices for 2005" from ACGIH except as noted above.

Components listed in Title III Sec. 313 (EPCRA) are indicated by "Yes" above.

*TWA= Time Weighted Average; STEL= Short Term Exposure Limit; WEEL= Workplace Employee Exposure Level

NE= Not Established A4= Not Classifiable as a Human Carcinogen BEI+ Biological Exposure Index exists for this material
 Dm= De minimus A3 = Confirmed Animal carcinogen with Unknown Relevance to Humans.

III. Hazards Identification**OSHA Hazard Classification:**

Not a hazard.

Routes of Entry: Skin, eyes, Inhalation, ingestion

Chemical Interactions: Electrolytic nature of these solutions may cause slight transient eye irritation.
 Electrolytic nature of these solutions may enhance corrosion of various metals.

Medical Conditions Aggravated:

No information.

Human Threshold Response Data

Odor Threshold: Not established

Irritation Threshold: Not established

Hazard Category Classifications and Ratings

Hazard Categories:	Health	Fire	Pressure	Reactivity	Reference
Immediate	Yes	No	No	No	49 CFR 171.8,
Delayed	No	No	No	No	OSHA 29 CFR 1910.1200 and SARA 302/311/312/313.
HMIS Hazard Ratings: Health 1 Fire 0 Instability 0 Other NA					
NFPA 704 Hazard Ratings: Health 1 Flammability 0 Reactivity 0 Special NA					
Hazard Ratings: Least: 0 Slight: 1 Moderate: 2 High: 3 Extreme: 4					

Notice: HMIS and NFPA ratings involve the subjective evaluation of the hazardous aspects of individual components, and can differ between preparers. They are intended and useful only as a rapid, general identification of the approximate magnitude of the specific hazards rated.

Immediate (Acute) Health Effects

Inhalation Toxicity:

Not a significant hazard.

Inhalation Irritation:

Not a significant hazard.

Skin Contact:

Not a significant hazard.

Skin Absorption:

Not a significant hazard.

Eye Contact

Liquid may cause transient eye irritation, tearing and a burning sensation.

Ingestion Irritation:

Not a significant hazard. See Sec. XI.

Ingestion Toxicity:

Not a significant hazard. See Sec. XI.

Acute Target Organ Toxicity:

Not a significant hazard.

Prolonged (Chronic) Health Effects

Carcinogenicity:

None.

Reproductive and Developmental Toxicity:

No known effects on humans. Mutagenic effects observed on bacteria and laboratory animals.

Sensitization:

None known.

Inhalation:

Not a significant hazard.

Skin Contact:

Prolonged or repeated skin exposure may cause chapping or dermatitis, similar to water.

Skin Absorption:

Not a significant hazard.

Ingestion:

Not a significant hazard.

General :

Not a significant hazard.

Chronic Target Organ Toxicity:

None.

Supplemental Health Hazard Information:

No additional health information available.

IV. First Aid

Inhalation:

Remove individual to fresh air. If not breathing, give artificial respiration or oxygen as appropriate. Seek medical attention at once.

Skin Contact:

Flush skin with water for 15 minutes and remove contaminated clothing. Wash shoes and clothing before reuse.

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids apart.

Ingestion:

Immediately drink water to dilute. Induce vomiting. Consult a physician immediately.

Never give anything by mouth to an unconscious person.

V. Fire Fighting Measures

Flammability Summary (OSHA):

Not flammable.

Flammable Properties:

Flash Point: None

Autoignition Temperature: ND

Upper Flammable/Explosive Limit, % in a NA

Lower Flammable/Explosive Limit, % in a NA

Fire/Explosion Hazards:

Not a hazard.

Extinguishing Media:

Does not support combustion. Use equipment appropriate to the main cause of the fire.

Do not allow contaminated water to enter sewers or waterways.

Fire Fighting Instructions:

Use water to cool containers.

Hazardous Combustion Products:

Hydrochloric acid vapors may be formed in a fire.

VI. Accidental Release Measures**Personal Protection for Emergency Situations:**

Contain the release and eliminate its source if this can be done safely.

Spill Mitigation Procedures

Air Release:

Not a hazardous event.

Water Release:

This material is soluble in water. Contain all liquid for treatment and/or disposal as a (potential) hazardous waste. Notify all downstream users of possible contamination.

Land Release:

Create a dike or trench to contain materials. Absorb spill with inert material (e.g., dry sand, clay, earth or commercial absorbent), then place in a chemical waste container.

Contain all contaminated water for disposal and/or treatment.

Additional Spill Information:

Stop source of spill as soon as possible and notify appropriate personnel. Utilize emergency response personal protection equipment prior to the start of any response. Evacuate all non-essential personnel.

Dispose of spill residues per guidelines under Section XIII, Disposal Considerations.

VII. Handling and Storage

Handling:

Do not take internally. Avoid contact with skin, eyes and clothing. Upon contact with skin or eyes, wash with water. Avoid breathing vapor, mist or gas.

Storage

Keep container closed when not in use.

Shelf Life Limitations:

See label or certificate of analysis for shelf life if applicable.

Incompatible Materials for Storage:

Refer to Section X, "Incompatible Materials."

VIII. Exposure Controls and Personal Protection

Ventilation:

Normal workplace ventilation is satisfactory.

Protective Equipment for Routine Use of Product

Respiratory Protection:

Not required.

Respirator Type(s):

Not required.

Skin: Wear impervious gloves (butyl rubber, Viton, e.g.) to avoid skin contact. Follow good industrial hygiene practices.

Eyes: Use chemical safety glasses with side shields, safety goggles and/or a full face shield where splashing is possible.

Protective Clothing Type: Impervious

Other: None

Exposure Limit Data : See Section II

Chemical Name: NIOSH Level Immediately Dangerous to Life or Health:

No data on product.

IX. Physical Data

Physical State: Liquid

Color: Colorless

Odor: Nil

Molecular Weight: Not applicable

pH (@ 25 Deg. C): Not determined

Octanol/Water Coeff: No data

Solubility in Water: 100%

Bulk Density: Not applicable

Specific Gravity: Variable

Vapor Density (Air = 1): Not determined

Vapor Pressure: (@ 20 Deg. C): Not determined

Evaporation Rate (Butyl acetate =1 NA

Volatiles % by vol.: Not applicable

Boiling Point: Not determined

Freezing Point: Not determined

X. Stability and Reactivity

Stability and Reactivity Summary:

Stable under normal conditions.

Reactive Properties:

Sensitivity to mechanical shock: None

Hazardous Polymerization: Will not occur

Conditions to Avoid: High temperatures, exposure to heat.

Chemical Incompatibility: See Sec. III.

Incompatible materials: May speed corrosion of some metals and alloys.

Hazardous Decomposition Products: Hydrochloric acid may be formed if the product burns.

Decomposition Temperature: No data

Product May Be Unstable At Temperatures Above: No data

XI. Toxicological Information

Component Animal Toxicology: Potassium Chloride

Oral LD50 mg/kg value: 383 (mus); 2600 (rat); 2500 (gpg)

Dermal LD50 mg/kg value: No data.

Inhalation LC50 ppm value: No data.

Skin Irritation:

Isopropanol

3600 (mus), 5045 (rat) 6410 (rbt) 4797 (dog)

12800 (rbt)

16000/8hr (rat)

This material is expected to be non to slightly irritating.

Eye Irritation:

This material is expected to be moderately irritating.

Reproductive and Developmental Toxicity:

Has been found in animal studies.

Component Data:

All data refer to potassium chloride.

Mutagenicity: Has been found in animal studies.

Carcinogenicity: No rating.

XII. Ecological Information

Ecological Toxicity Values:

No relevant data found.

Environmental fate: No potential for food chain concentration.

Environmental Toxicity: No data.

XIII. Disposal Considerations

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THIS MATERIAL
THE USER OF THIS MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES
AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT LOCAL, STATE AND FEDERAL LAWS

Waste Disposal Summary:

Product as supplied does not qualify as a hazardous waste.

Potential US EPA Waste Codes:

None

Disposal Methods:

Dispose of in accordance with local, state and federal regulations.

Components subject to land ban restrictions:

No components subject to land ban restrictions.

XIV. Transportation Information

Proper Shipping Name, Hazard Class, UN/NA Number Packing Group, Emergency Response Guide Number

US Domestic DOT: Not regulated

Labels required per 49 CFR 172.101: Not applicable

Size for "Limited quantity" per 49 CFR 173.150-.155: Not applicable

Reportable Quantity ("RQ") per 49 CFR 172.101: Not applicable

Passenger aircraft/ rail: Not applicable

Cargo aircraft only: Not applicable

Vessel stowage: Not applicable

Other (%176.84): Not applicable

XV. Regulatory Information

UNITED STATES:

TOSCA: Toxic Substances Control Act:

All ingredients listed

SARA: Superfund Amendments and Reauthorization Act, Title III, Sec. 313:

NA

Hazard Categories Sections 311/312 (40 CFR 370.2):

Health:

Acute None

Chronic: None

Emergency Planning & Community Right to Know (40 CFR 355, App. A):

Sec. 302: Extremely Hazardous Substance - Threshold Planning Quantity (TPQ): Not listed

Sec. 304: EHS RQ: Not listed

CERCLA (40 CFR 355, App. A) Reportable Quantity: Not listed

RCRA Waste (P and U Lists): Not listed

OSHA 40 CFR 1910.1000:

Table Z-1: PEL: Not listed

Skin: Not listed

Table Z-1-A: TWA: Not listed

STEL: Not listed

Ceiling: Not listed

Skin: Not listed

State Right-to-Know Regulations Status of Ingredients

California Prop. 65: Not listed

Pennsylvania: Not listed

New Jersey: Not listed

Massachusetts: Not listed

XVI. Additional Information

MSDS REVISION STATUS:

THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED IN COMPLIANCE WITH THE FEDERAL OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. THE INFORMATION IN THIS MSDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. WE BELIEVE THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF ITS PUBLICATION DATE, BUT MAKE NO WARRANTY THAT IT IS. IF THIS MSDS IS MORE THAN THREE YEARS OLD YOU SHOULD CONTACT THE SUPPLIER TO MAKE CERTAIN THAT THE INFORMATION IS CURRENT.

MSDS data source: Alfa-Aesar 4/16/203