

Revision number: 3 Revision date: 08/18/2015

1. IDENTIFICATION

Product name: Product code: Acetylenedicarboxylic Acid Monopotassium Salt A0830

For laboratory research purposes.

Not for drug or household use.

TCI AMERICA

SAFETY DATA SHEET

Emergency telephone number:

TCI America (8:00am - 5:00pm) PST

Chemical Emergencies:

Transportation Emergencies:

+1-703-527-3887 (International) Responsible department:

Environmental Health Safety and Security

+1-503-286-7624

Chemtrec 24-Hour +1-800-424-9300 (U.S.A.)

+1-503-286-7624

TCI America

Product use: Restrictions on use:

Company:

TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:

Acute Toxicity - Oral [Category 3] Acute Toxicity - Dermal [Category 1] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A]

Signal word:

Danger!

Hazard Statement(s):

Causes serious eye irritation Causes skin irritation Fatal in contact with skin Toxic if swallowed

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Do not get in eyes, on skin, or on clothing. Wear protective gloves and protective clothing. Wear protective gloves. Wear eye and face protection.

If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. Immediately call a poison center or doctor. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Store locked up.

Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture:	Substance
Components:	Acetylenedicarboxylic Acid Monopotassium Salt
Percent:	>95.0%(T)
CAS Number:	928-04-1
Molecular Weight:	152.15
Chemical Formula:	C4HKO4
Synonyms:	Monopotassium Acetylenedicarboxylate, Potassium Hydrogen Acetylenedicarboxylate
4. FIRST-AID MEASURES	
Inhalation:	Immediately call a poison center or doctor. Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take
Skin contact:	precautions to protect themselves. Immediately call a poison center or doctor. Remove and wash contaminated clothing before re-use. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Eye contact:	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Contact with material may irritate or burn eyes. Call emergency medical service. Move victim to fresh air. Check for and remove any contact lenses. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s)
Ingestion:	involved and take precautions to protect themselves. Toxic if swallowed. Do not induce vomiting with out medical advice. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Symptoms/effects:	
Acute: Delayed:	Redness. No data available
Immediate medical attention:	WARNING: It might be dangerous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is toxic. If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Dry chemical, CO_2 or water spray. Consult with local fire authorities before attempting large scale fire fighting operations.
Specific hazards arising from the ch Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Metallic oxides Closed containers may explode from heat of a fire.
heated. Move containers from fire area Special protective equipment for fire	aight streams. Dike fire-control water for later disposal; do not scatter the material. Containers may explode when if you can do it without risk. e-fighters:
ONLY; it may not be effective in spill si provide little or no thermal protection.	breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations tuations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may
6. ACCIDENTAL RELEASE MEA	SURES
Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation.
	Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Personal protective equipment: Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures:	Prevent dust cloud. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the
	area, and excercise caution. Do not touch damaged containers or spilled material unless wearing
	appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or
	confined areas; dike if needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. **Environmental precautions:**

Keep away from living quarters. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

7. HANDLING AND STORAGE Precautions for safe handling: Avoid inhalation of vapor or mist. Manipulate under an adequate fume hood. Do not ingest. Avoid contact with skin and eyes. Avoid contact with skin. Good general ventilation should be sufficient to control airborne levels. Keep container dry. Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink, or smoke. Keep away from sources of ignition. Conditions for safe storage: Store locked up. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatibles. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid prolonged storage periods. Storage incompatibilities: Combustible substances, Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits: No data available

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment

Respiratory protection:	Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
Hand protection:	Nitrile gloves.
Eye protection:	Safety glasses.
Skin and body protection:	Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Powder White - Very pale yellow No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	No data available No data available No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log P _{ow})	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	No data available No data available	Autoignition temperature: Flammability or explosive limits: Lower: No data avail	No data available able
0-1-1-11/(-/)		Upper: No data avail	able

Solubility(ies):

Water: Soluble

10. STABILITY AND REACTIVITY

Reactivity:

Not Available.

10. STABILITY AND REACTIVITY Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products:	Stable under recommended storage conditions. (See Section 7) No hazardous reactivity has been reported. Avoid excessive heat and light. Oxidizing agents No data available
11. TOXICOLOGICAL INFORMATIO	N
RTECS Number: AP0700000	
Acute Toxicity: ipr-mus LD50:32 mg/kg	orl-mus LD50:63 mg/kg
Skin corrosion/irritation: No data available	

Serious eye damage/irritation: No data available

Respiratory or skin sensitization: No data available

Germ cell mutagenicity: No data available

Carcinogenicity:

No data available

IARC: No data available

Reproductive toxicity:

No data available

Routes of Exposure:

Inhalation, Eye contact, Ingestion, Skin contact.

NTP:

No data available

Symptoms related to exposure:

Overexposure may result in serious illness or death. Skin contact may result in inflammation; characterized by itching, scaling, reddening, or occasionally blistering. Skin contact may result in redness, pain or dry skin. Eye contact may result in redness or pain. **Potential Health Effects:**

No data available

OSHA:

No data available

Skin and eye contact may result in irritation. Target organ(s):

12. ECOLOGICAL INFORMATION

Ecotoxicity Fish: Crustacea: Algae:	No data available No data available No data available
Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient:	No data available No data available No data available No data available
n-octanol/water (log P _{ow}) Soil adsorption (Koc): Henry's Law: constant (PaM ³ /mol)	No data available No data available

IN. DISPUSAL	CONSIDERATIONS			
Disposal of produ		Recycle to proce rules and regula chemical inciner assistance but d regulatory comp	tions. You may be able to diss ator equipped with an afterbur oes not replace these laws, no liance according to the law. U in 40 CFR Parts 261. The pro	tor's responsibility to comply with Federal, State and Local olve or mix material with a combustible solvent and burn in ner and scrubber system. This section is intended to provi or does compliance in accordance with this section ensure S EPA guidelines for Identification and Listing of Hazardou duct should not be allowed to enter the environment, drair
Disposal of conta Other considerati		Dispose of as ur	nused product. Do not re-use	empty containers. when disposing of the substance.
DOT (US) UN number: UN2811	Proper Shipping Toxic solids, organ		Class or Division: 6.1 Toxic material.	Packing Group:
IATA UN number: UN2811	Proper Shipping Toxic solid, oxidizi		Class or Division: 6.1 Toxic material.	Packing Group:
IMDG UN number: UN2811	Proper Shipping Toxic solid, organi		Class or Division: 6.1 Toxic material.	Packing Group:
EmS number:		F-A, S-A		
15. REGULATO	RY INFORMATION			
Toxic Substance	Control Act (TSCA 8b	.):		
This product is ON	ous substance and Re :	ances Control Act (TS	SCA) inventory.	
This product is ON US Federal Regul CERCLA Hazardo SARA 313	I the EPA Toxic Substa lations bus substance and Re : :	ances Control Act (TS portable Quantity: Not Listed	SCA) inventory.	
This product is ON US Federal Regul CERCLA Hazardo SARA 313 SARA 302	I the EPA Toxic Substa lations ous substance and Re : : s ow setts ey unia	ances Control Act (TS portable Quantity: Not Listed	SCA) inventory.	
This product is ON US Federal Regul CERCLA Hazardo SARA 313 SARA 302 State Regulations State Right-to-Kn Massachu New Jerse Pennsylva	I the EPA Toxic Substa lations bus substance and Re : : : : : : : : : : : : : : : : : : :	nces Control Act (TS portable Quantity: Not Listed Not Listed Listed Not Listed Not Listed	SCA) inventory.	
This product is ON US Federal Regul CERCLA Hazardo SARA 313: SARA 302: State Regulations State Right-to-Kn Massachu New Jerse Pennsylva California Propos Other Information NFPA Rating:	I the EPA Toxic Substa lations bus substance and Re : : : : : : : : : : : : : : : : : : :	nces Control Act (TS portable Quantity: Not Listed Not Listed Listed Not Listed Not Listed	HMIS Classification:	
This product is ON US Federal Regul CERCLA Hazardo SARA 313: SARA 302: State Regulations State Right-to-Kn Massachu New Jerse Pennsylva California Propos	I the EPA Toxic Substa lations bus substance and Re : : : : : : : : : : : : : : : : : : :	nces Control Act (TS portable Quantity: Not Listed Not Listed Listed Not Listed Not Listed		3 0 0
This product is ON US Federal Regul CERCLA Hazardo SARA 313: SARA 302: State Regulations State Right-to-Kn Massachu New Jerse Pennsylva California Propos Other Information NFPA Rating: Health: Flammability:	I the EPA Toxic Substa lations pus substance and Re : s s ow setts ey inia sition 65: 1 4 0 0	nces Control Act (TS portable Quantity: Not Listed Not Listed Listed Not Listed Not Listed	HMIS Classification: Health: Flammability:	0
This product is ON US Federal Regul CERCLA Hazardo SARA 313: SARA 302: State Regulations State Right-to-Kn Massachu New Jerse Pennsylva California Propos Other Information NFPA Rating: Health: Flammability: Instability:	I the EPA Toxic Substa lations pus substance and Re : s s ow setts sy mia sition 65: 1 4 0 0 0	portable Quantity: Not Listed Not Listed Not Listed Listed Not Listed Not Listed Not Listed Not Listed Not Listed D1A: Materials c	HMIS Classification: Health: Flammability:	0 0 s toxic effects. (Very Toxic) s toxic effects. (Toxic)
This product is ON US Federal Regul CERCLA Hazardo SARA 313: SARA 302: State Regulations State Right-to-Kn Massachu New Jerse Pennsylva California Propos Other Information NFPA Rating: Health: Flammability: Instability: International Inve	I the EPA Toxic Substa lations pus substance and Re : s s ow setts sy mia sition 65: 1 4 0 0 0	portable Quantity: Not Listed Not Listed Not Listed Listed Not Listed Not Listed Not Listed Not Listed Not Listed D1A: Materials c	HMIS Classification: Health: Flammability: Physical:	0 0 s toxic effects. (Very Toxic) s toxic effects. (Toxic)

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16. OTHER INFORMATION

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective gogles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.