



Issuing Date 07/07/09

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name TAE Buffer, 50X

Product Code(s) K915

Distributor
AMRESKO INC.
6681 Cochran Road
SOLON, OHIO 44139

Company Phone Number 1-800-829-2805
Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance Colorless **Physical State** Liquid **Odor** No information available
Irritant
Sensitizer

Potential Health Effects

Acute Toxicity

Eyes Irritating to eyes.
Skin Irritating to skin. May cause sensitization by skin contact.
Inhalation Irritating to respiratory system. May cause sensitization by inhalation.
Ingestion Causes irritation by ingestion.

Chronic Effects No known effect based on information supplied.

Aggravated Medical Conditions None known.

Environmental Hazard See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Tris hydroxymethyl aminomethane	77-86-1	20-30
Ethylenediaminetetraacetate, tetrasodium	13235-36-4	0-2
Acetic acid	64-19-7	3-7

4. FIRST AID MEASURES

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact Wash skin with soap and water.

Inhalation Move to fresh air. If breathing becomes difficult, give oxygen.

Ingestion Clean mouth with water and afterwards drink plenty of water.

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties Not flammable.

Flash Point Not determined

Suitable Extinguishing Media Dry chemical, CO2, water spray or regular foam.

Hazardous Combustion Products Carbon oxides, Nitrogen oxides (NOx)

Explosion Data
Sensitivity to Mechanical Impact Not sensitive.
Sensitivity to Static Discharge Not sensitive.

Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA **Health Hazard -** **Flammability -** **Stability -** **Physical and Chemical Hazards -**

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Cleaning Up Cover with dry lime or soda ash. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling Handle in accordance with good industrial hygiene and safety practice.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Tris hydroxymethyl aminomethane 77-86-1			
Ethylenediaminetetraacetate, tetrasodium 13235-36-4			
Acetic acid 64-19-7	= 15 ppm STEL TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m ³	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Personal Protective Equipment**Eye/Face Protection**

Safety glasses with side-shields. Avoid contact with eyes.

Skin and Body Protection

Wear protective gloves/clothing.

Respiratory Protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless	Odor	No information available
Physical State	Liquid		
Flash Point	No information available	Autoignition Temperature	No information available
Boiling Point/Range	No information available	Flammability Limits in Air	No information available
Explosion Limits	No information available		
Solubility	No information available	Evaporation Rate	No information available
Vapor Density	No information available.		

10. STABILITY AND REACTIVITY

Stability Stable under recommended storage conditions.

Incompatible Products Strong oxidizing agents. Bases.

Conditions to Avoid None known based on information supplied.

Hazardous Decomposition Products Carbon oxides. Nitrogen oxides (NOx).

Hazardous Polymerization Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Sensitizer. Causes skin, eye and respiratory tract irritation.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tris hydroxymethyl aminomethane	5900 mg/kg (Rat)		
Acetic acid	3310 mg/kg (Rat)	1060 mg/kg (Rabbit)	11.4 mg/L (Rat) 1 h

Chronic Toxicity

Target Organ Effects None known.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic organisms.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Acetic acid		LC50= 75 mg/L Lepomis macrochirus 96 h LC50= 88 mg/L Pimephales promelas 96 h	EC50 = 8.8 mg/L 15 min EC50 = 8.8 mg/L 25 min EC50 = 8.8 mg/L 5 min	EC50 = 95 mg/L 24 h

Chemical Name	Log Pow
Acetic acid	= -0.31 20 °C

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of material in accordance with all federal, state, and local regulations.

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

Chemical Name
Tris hydroxymethyl aminomethane - 77-86-1
Ethylenediaminetetraacetate, tetrasodium - 13235-36-4
Acetic acid - 64-19-7

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Tris hydroxymethyl aminomethane - 77-86-1				
Ethylenediaminetetraacetate, tetrasodium - 13235-36-4				
Acetic acid - 64-19-7				

Chemical Name	California Hazardous Waste Status
Acetic acid	Toxic; Corrosive; Ignitable

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Does not Comply
DSL	Does not Comply
EINECS/ELINCS	Does not Comply
ENCS	Does not Comply
IECSC	Complies
KECL	Does not Comply

PICCS	Complies
AICS	Complies

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Acetic acid 64-19-7 (3-7)	5000 lb			X

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

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act..

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Acetic acid	64-19-7	3-7		Group II		

CERCLA

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Acetic acid	5000 lb	

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acetic acid	X	X	X		X

International Regulations**Mexico - Grade**

No information available.

Chemical Name	Carcinogen Status	Exposure Limits
Acetic acid		Mexico: TWA= 10 ppm Mexico: TWA= 25 mg/m ³ Mexico: STEL= 15 ppm Mexico: STEL= 37 mg/m ³

Canada

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

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

Issuing Date 07/07/09

Revision Date

Revision Note No information available.

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS