

## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

**ECOBUFFER VT**

### SECTION 1: Identification of the substance/mixture and company/undertaking

#### 1.1 Product identifier

Trade product name	:	<b>ECOBUFFER VT</b>
--------------------	---	---------------------

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use	:	Acid Buffer
Uses advised against	:	Not known

#### 1.3 Details of the supplier of the safety data sheet

Company	:	<b>ECOCHEM (PVT) LTD</b> 501, Katukurunduwatta Road, Ratmalana, Sri Lanka.
Telephone	:	+94 114 211903
Fax	:	+94 114 547673
Email	:	<a href="mailto:ecochem@ecochemsl.lk">ecochem@ecochemsl.lk</a>

#### 1.4 Emergency telephone number

Emergency Information	:	+94 112 716313
-----------------------	---	----------------

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according CLP regulation (Regulation (EC) No. 1272/2008, as amended)

Hazard class	Hazard category	H-phrases
Skin Corrosion /Irritation	Category 1	Causes severe skin burns and eye damage

Classification according EC Directive (67/548/EEC or 1999/45/EC, as amended)

Hazard category	Hazard symbol	R-phrases
	Irritant	Irritating to eyes and skin.

#### 2.2 Label elements

Labelling according CLP regulation (Regulation (EC) No. 1272/2008, as amended)

Hazard Pictograms



Signal Word: **Danger**

## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

### ECOBUFFER VT

H-Code	:	Hazards Statements
H314	:	Causes severe skin burns and eye damage.

P-Code	:	Precautionary Statements
P260	:	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	:	Wash thoroughly after handling.
P280	:	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	:	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	:	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363	:	Wash contaminated clothing before reuse.
P304+P340	:	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P310	:	Immediately call a POISON CENTER or doctor/physician.
P321	:	Specific treatment (see label).
P305+P351+P338	:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	:	Store locked up.
P501	:	Dispose of contents/container to ...

### 2.3 Other hazards

Not applicable.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Combination of acids

### 3.2 Mixtures

#### 3.2.1 Chemical characterization (preparation)

Used as acid buffer in dyeing textile fabric

#### 3.2.2 Hazardous ingredients

CAS No.	Material	Content %	Classification (REGULATION (EC) No 1272/2008)
64-19-7	Acetic Acid	< 30	Skin Irrit. 1: H314 Flam. Liq. 3: H226
64-18-6	Formic Acid	< 20	Skin Irrit. 1: H314

## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

**ECOBUFFER VT**

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General Information	:	Handle with care.
In case of skin contact	:	Can be removed by water or water and soap.
In case of eyes contact	:	Rinse with plenty of water; seek medical attention, if necessary.
In case of swallow	:	Permit vomiting, seek medical advice in case of sickness. Rinse mouth with water.
In case of Inhalation	:	Assure fresh breathing.

#### 4.2 Most important symptoms and effects, both acute and delayed

Effects may be delayed. Causes chemical burns to the respiratory tract. Exposure may lead to bronchitis, pharyngitis, and dental erosion. May be absorbed through the lungs

#### 4.3 Indication of any immediate medical attention and special treatment needed

Person with pre-existing skin disorders or impaired respiratory or pulmonary function may be at increased risk to the effects of this substance. Treat symptomatically and supportively.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media:	:	All extinguishing media can be used
Extinguishing media which must not be used for safety reason	:	None known

#### 5.2 Special hazards arising from the substance or mixture

Use water spray to keep fire-exposed containers cool. Reacts with most metals to form highly flammable hydrogen gas which can form explosive mixtures with air. Flammable liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

#### 5.3 Advice for firefighters

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

**ECOBUFFER VT**

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use proper personal protective equipment as indicated in Section 8.
Remove all sources of ignition.
Use a spark-proof.
Provide ventilation. Use water spray to cool and disperse vapors, protect personnel, and dilute spills to form nonflammable mixtures.
Spill may be carefully neutralized with soda ash (sodium carbonate)

#### 6.2 Environmental precautions

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Control runoff and isolate discharges material for proper disposal.

#### 6.3 Methods and material for containment and cleaning up

Wash area with soap and water.

#### 6.4 Reference to other sections

Use personal protection recommended in Section 8.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

General Information	:	Do not get in eyes, on skin, or on clothing. Do not breathe vapor or mist. Use corrosion-resistant transfer equipment when dispensing.
Precaution for safe handling	:	Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Discard contaminated shoes. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Use corrosion-resistant transfer equipment when dispensing.
Precaution against fire and explosion	:	Keep away from heat, sparks and flame.

#### 7.2 Conditions for safe storage, including any incompatibilities

Conditions for storage rooms and vessels:	:	Keep away from heat, sparks, and flame. Keep from contact with oxidizing materials
---	---	--



## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

### ECOBUFFER VT

Advice for storage of incompatible materials	:	Store in a cool, dry, well-ventilated areaway from incompatible substances.
Further information for storage	:	Do not store near alkaline substances.
Minimum temperature allowed during storage and transportation:	:	Acid Buffer should be kept above its freezing point of 6°C to allow it to be handled as a liquid. It will contract slightly on freezing. Freezing and thawing does not affect product quality.

### 7.3 Specific end use(s)

No data are available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Maximum airborne concentrations at the workplace:

Chemical Name	ACGIH	NIOSH	OSHA – Final PELs
Acid Buffer	10 ppm TWA; 15 ppm STEL	10 ppm TWA; 25 mg/m <sup>3</sup> TWA 50 ppm IDLH	10 ppm TWA; 25 mg/m <sup>3</sup> TWA

**OSHA Vacated PELs:** Acid Buffer: 10 ppm TWA; 25/m<sup>3</sup> TWA

### 8.2 Exposure controls

#### 8.2.1 Exposure in the work place limited and controlled

General Protection and hygiene measures	:	No assigned exposure limits known
---	---	-----------------------------------

Personal protection equipment:

Respiratory protection	:	General respiratory protection required
Hand protection	:	Protective gloves recommended
Eye protection	:	Goggles giving full protection required
Skin protection	:	Wear appropriate gloves to prevent skin exposure

#### 8.2.2 Exposure to the environment limited and controlled

Prevent entry to sewers and public waters

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### General information

Appearance	:	Clear Liquid
------------	---	--------------

## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

### ECOBUFFER VT

Colour	:	Colourless
Odour	:	Pungent odor – vinegar odor
pH	:	2.0 ± 0.5
Freezing point	:	4°C
Boiling point	:	105-110 °C
Flash point	:	93 °C
ignition temperature	:	Not applicable
Lower explosion limit (LEL)	:	4.0 vol %
Upper explosion limit (UEL)	:	19.9 vol %
Vapour pressure	:	11.4 mmHg @ 20°C
Density at 25°C	:	0.98 ± 0.02
Solubility in water	:	Soluble in water; release heat/vapor
Viscosity at 25°C	:	No data available

### 9.2 Other information

No data are available.

## SECTION 10: Stability and reactivity

### 10.1 – 10.3 Reactivity; Chemical stability; Possibility of hazardous reactions

Stable at room temperature in closed containers under normal storage and handling conditions.

### 10.4 Conditions to avoid

Ignition sources, excess heat, freezing temperatures, confined spaces, Note: use great caution in mixing with water due to heat evolution that causes explosive spattering.

### 10.5 Incompatible materials

Always add the acid to water, never the reverse. Incompatibilities with other materials: Metals, strong oxidizing agents, bases, chlorine trifluoride, nitric acid, acetaldehyde, chlorosulfonic acid, oleum, bromine pentafluoride, perchloric acid, potassium tert-butoxide, ethyleneimine, 2-aminoethanol, ethylene diamine, phosphorus trichloride, phosphorus isocyanate, chromic acid.

### 10.6 Hazardous decomposition products

Carbon monoxide, Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### 11.1.1 Acute toxicity

Oral, rat: LD50 = 3310 mg/kg

## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

**ECOBUFFER VT**

### 11.1.2 Skin corrosion / irritation

Skin, rabbit: LD50 = 1060 uL/kg

### 11.1.3 Serious eye damage/eye irritation

Not Known.

### 11.1.4 Respiratory or skin sensitization

Not Known.

### 11.1.5 Germ cell mutagenicity

Sister Chromatid Exchange: Human, Lymphocyte=5 mmol/L.; Unscheduled DNA Synthesis: Administration onto the skin, mouse=79279 ug/kg.; Cytogenetic Analysis: Hamster, Ovary = 10 mmol/L.

### 11.1.6 Carcinogenicity

CAS# 64-19-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

### 11.1.7 Reproductive toxicity

Intratesticular, rat: TDLo=400 mg/kg (male 1day(s) pre-mating)  
Fertility – male fertility index ( e.g. # males impregnating females per # males exposed to fertile nonpregnant females).

### 11.1.8 Specific target organ toxicity (single exposure)

No data available.

### 11.1.9 Specific target organ toxicity (repeated exposure)

No data available.

### 11.1.10 Aspiration hazard

Evaporation from dry surface is likely to happen.

## SECTION 12: Ecological information

### 12.1 Toxicity

Fish: Fathead Minnow: LC50 = 88 mg/l

### 12.2 Persistence and degradability

## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

### ECOBUFFER VT

If released to the atmosphere, it is degraded in the vapor-phase by reaction with photochemically produced hydroxyl radicals (estimated typical half-life of 26.7 days.) It occurs in atmospheric particulate matter in acetate form and physical removal from air can occur via wet and dry deposition.

#### 12.3 Other adverse effects

No information available.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### 13.1.1 Material

##### Recommendation:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

##### 13.1.2 Uncleaned packaging

##### Recommendation:

Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

### SECTION 14: Transport information

#### 14.1 – 14.4 UN number; UN proper shipping name; Transport hazard class(es); Packing group

ITEM	US DOT	Canada TDG
Shipping Name:	Acid Buffer	Acid Buffer
Hazard Class:	8	8(3)
UN Number:	UN2789	UN2789
Packing Group:	11	11

#### 14.5 Environmental hazards

OSHA: None of the chemicals in this product are considered highly hazardous by OSHA.

#### 14.6 Special precautions for user

Use product with safety wear in open space with adequate ventilation.

#### 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not regulated



## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

**ECOBUFFER VT**

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture

US FEDERAL TSCA CAS# 64-19-7 is listed on the TSCA inventory.		
Health & Safety Reporting List	:	None of the chemicals are on the health and safety reporting list.
Chemical Test Rules	:	None of the chemicals in this product are under a chemical test rule.
Section 12b	:	None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule	:	None of the chemicals in this material have a SNUR under TSCA.
CERCLA Hazardous Substances and corresponding RQs	:	CAS# 64-19-7 : 5000 lb final RQ; 2270 kg final RQ.
SARA Section 302 Extremely Hazardous Substances	:	None of the chemicals in this product have a TPQ.
SARA Codes CAS# 64-19-7	:	Immediate, delayed, fire. Section 313 No chemicals are reportable under section 313.
Clean Air Act	:	This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 ozone depleters.
Clean Water Act	:	CAS# 64-19-7 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA	:	None of the chemicals in this product are considered highly hazardous by OSHA.

#### 15.2 Other international regulations

STATE	:	CAS# 64-19-7 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.
California Prop 65	:	California No Significant Risk Level: None of the chemicals in this product are listed.
<b>European/International Regulations</b>		
European Labeling in Accordance with EC Directives	:	Hazard Symbols: C
Risk Phrases	:	Nil
Safety Phrases	:	S 23 Do not inhale gas/fumes/vapour/spray. S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

## SAFETY DATA SHEET

According to the Regulation (EC) No. 1907/2006

Version 2

Date of print : 30.06.2018

Date of last alteration: 30.06.2018

### ECOBUFFER VT

		S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
WGK (Water Danger/Protection)	:	CAS# 64-19-7: 1
Canada – DSL/NDSL	:	CAS# 64-19-7 is listed on Canada's DSL list.
Canada – WHMIS	:	This product has a WHMIS classification of E, B3. This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all of the information required by those regulations.
Canadian Ingredient Disclosure List	:	CAS# 64-19-7 is listed on the Canadian Ingredient Disclosure List.

### SECTION 16: Other information

#### 16.1 Material

The information contained in this Safety Data Sheet is according to our present knowledge and believed to be true and correct. The manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

#### 16.2 Further information

NFPA Rating: (estimated) Health: 3; Flammability: 2; Instability: 0		
H314	:	Causes severe skin burns and eye damage.

- END OF SAFETY DATA SHEET -