SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Process2Clean® 3

Product code : SDS VEL-015

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Clean in place detergent

1.3. Supplier

Veltek Associates, Inc.
15 Lee Blvd
Malvern, PA 19355-1234 USA
Telephone: +1 610-644-8335 - Fax: +1 610-644-8336
E-mail: vai@sterile.com

In Canada distributed by:
Canada Clean Room (CCR)
200 Terence Matthews
Kanata, ONT K2M 2C6, Canada
Telephone: 888-595-8070

1.4. Emergency telephone number

Emergency number : CARECHEM 24: 1-215-207-0061
1-866-928-0789 (toll free)
Canada: 1-800-579-7421 (toll free)
Mexico: +52-55-5004-8763

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin corrosion/irritation Category 1B	H314 Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318 Causes serious eye damage
Hazardous to the aquatic environment - Acute Hazard Category 3	H402 Harmful to aquatic life

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H402 - Harmful to aquatic life

Precautionary statements (GHS US) : P260 - Do not breathe vapors.
P264 - Wash hands thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor

P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.
P501 - Dispose of contents/container to an authorized waste collection point

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Glycolic acid	(CAS-No.) 79-14-1	25 - 35	Acute Tox. 4 (Inhalation), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402
Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate)	(CAS-No.) 139-89-9	< 1	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
Alcohols, C8-10, ethoxylated, propoxylated	(CAS-No.) 68603-25-8	< 1	Eye Dam. 1, H318
Surfactants		< 0.1	Not classified

***Chemical name, CAS number and/or exact concentration have been withheld as a trade secret**

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep at rest in a position comfortable for breathing. If symptoms develop obtain medical attention.

First-aid measures after skin contact : Remove contaminated clothing immediately and wash affected skin with plenty of water or soap and water. Obtain immediate medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water (for at least 15 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. Obtain immediate medical attention.

First-aid measures after ingestion : Do NOT induce vomiting. Do not give an unconscious person anything to drink. Rinse mouth. Give 100 - 200 ml of water to drink. Obtain immediate medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms : Causes severe skin burns and eye damage. Inhalation of vapors may cause respiratory irritation. Severe irritation or burns to the mouth, throat, esophagus, and stomach.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. Symptoms may be delayed.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media : Carbon dioxide.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable. Fire may produce irritating, corrosive and/or toxic gases. Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Keep upwind. Exercise caution when fighting any chemical fire. On heating, there is a risk of bursting due to internal pressure build-up. Cool down the containers exposed to heat with a water spray. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus when in close proximity to fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate area. Do not breathe vapors. Do not get in eyes, on skin, or on clothing. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection. Wear suitable protective clothing and eye or face protection. Use chemically protective clothing.

Emergency procedures : Ventilate area. Do not breathe vapors. Do not get in eyes, on skin, or on clothing.

6.2. Environmental precautions

Notify authorities if large amounts of the product enters sewers or public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Dike far ahead of liquid spill for later disposal. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wash spill area with soapy water.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapor. Do not breathe vapors. Do not get in eyes, on skin, or on clothing. Wear suitable protective clothing, gloves and eye or face protection.

Hygiene measures : Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool well ventilated place. Store locked up. Protect from sunlight.

Incompatible materials : Alkalis. Oxidizing agents. Metals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available.

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide good ventilation in process area to prevent formation of vapor. Ensure exposure is below occupational exposure limits (where available). Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear chemically resistant protective gloves. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough.

Eye protection:

Chemical goggles or face shield

Skin and body protection:

Use chemically protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazard protection:

Not required for normal conditions of use.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Pale yellow liquid.
Color	:	Pale yellow
Odor	:	Slight odor
Odor threshold	:	No data available
pH	:	1.67 - 3.67 (1% Aqueous solution)
Melting point	:	No data available
Freezing point	:	0 °C (32 °F)
Boiling point	:	100 °C (212 °F)
Flash point	:	Not flammable
Relative evaporation rate (butyl acetate=1)	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapor pressure	:	No data available
Relative vapor density at 20 °C	:	No data available
Relative density	:	1.02 - 1.22 (Water = 1)
Solubility	:	Water: Miscible
Log Pow	:	No data available
Auto-ignition temperature	:	Not flammable
Decomposition temperature	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosion limits	:	No data available
Explosive properties	:	Not explosive.
Oxidizing properties	:	Not oxidizing.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended handling and storage conditions (see section 7).

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Freezing. High temperature.

10.5. Incompatible materials

Alkalis. Oxidizing agents. Metals.

10.6. Hazardous decomposition products

In case of fire product can release: Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Process2Clean® 3	
LD50 oral, rat	> 3 ml/kg

Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) (139-89-9)	
LD50 oral, rat	1780 - 2000 mg/kg (OECD 401 method)
LC50 inhalation, rat (mg/l)	3.95 mg/l (OECD 403 method)

Glycolic acid (79-14-1)	
LD50 oral, rat	2040 mg/kg (EPA OPP 81-1)
LC50 inhalation, rat (mg/l)	3.6 mg/l - 4 Hours (OECD 403 method)

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 1.67 - 3.67 (1% Aqueous solution)
Serious eye damage/irritation : Causes serious eye damage.
pH: 1.67 - 3.67 (1% Aqueous solution)
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Potential Adverse human health effects and symptoms : Causes severe skin burns and eye damage. Inhalation of vapors may cause respiratory irritation. Severe irritation or burns to the mouth, throat, esophagus, and stomach.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life.

Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) (139-89-9)	
LC50 fish	372 mg/l - 96 Hours (Pimephales promelas)
EC50 Daphnia	192 mg/l - 48 Hours (Daphnia magna)
NOEC (chronic)	>= 25.7 mg/l - 35 days (Danio rerio) (OECD 210 method)
NOEC chronic crustacea	25 mg/l - 21 days (Daphnia magna)

Glycolic acid (79-14-1)	
LC50 fish	114.8 mg/l - 96 Hours (Pimephales promelas)(EPA 72 -2)
EC50 Daphnia	99.6 mg/l - 48 Hours (Daphnia magna)(OECD 202 method)

12.2. Persistence and degradability

Process2Clean® 3	
Persistence and degradability	No data available.

Glycolic acid (79-14-1)	
Persistence and degradability	Readily biodegradable.
Biodegradation	78 % - 11 days (OECD 301B method)

12.3. Bioaccumulative potential

Process2Clean® 3	
Bioaccumulative potential	No data available.

Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) (139-89-9)	
Bioaccumulative potential	Not expected to bioaccumulate.

Glycolic acid (79-14-1)	
Log Pow	< 0.3 (25 °C)(OECD 117 method)
Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

Process2Clean® 3	
Ecology - soil	Miscible with water.

Glycolic acid (79-14-1)	
Mobility in soil	Not expected to adsorb to soil
Log Koc	< 1.4 (OECD 121 method)

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of this material and its container at hazardous or special waste collection point.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3265 Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid), 8, III

UN-No.(DOT) : UN3265

Proper Shipping Name (DOT) : Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid)

Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : III - Minor Danger

Hazard labels (DOT) : 8 - Corrosive

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

DOT Symbols : G

DOT Special Provisions (49 CFR 172.102) : IB3, T7, TP1, TP28

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L

DOT Vessel Stowage Location : A

DOT Vessel Stowage Other : 40

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport document description : UN3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Glycolic acid), 8, II

UN-No. (TDG) : UN3265

Proper Shipping Name (Transportation of Dangerous Goods) : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Glycolic acid)

TDG Primary Hazard Classes : 8 - Class 8 - Corrosives

Packing group : II - Medium Danger

TDG Special Provisions	:	16
Explosive Limit and Limited Quantity Index	:	1 L
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	:	1 L

Transport by sea

Transport document description (IMDG)	:	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Glycolic acid), 8, II
UN-No. (IMDG)	:	3265
Proper Shipping Name (IMDG)	:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Glycolic acid)
Class (IMDG)	:	8 - Corrosive substances
Packing group (IMDG)	:	II - substances presenting medium danger

Air transport

Transport document description (IATA)	:	UN 3265 Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid), 8, II
UN-No. (IATA)	:	3265
Proper Shipping Name (IATA)	:	Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid)
Class (IATA)	:	8 - Corrosives
Packing group (IATA)	:	II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Process2Clean® 3	
SARA Section 311/312 Hazard Classes	Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation

Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) (139-89-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Alcohols, C8-10, ethoxylated, propoxylated (68603-25-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).

Glycolic acid (79-14-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Surfactants
Not listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Trisodium 2-(carboxylatomethyl(2-hydroxyethyl)amino)ethyliminodi(acetate) (139-89-9)
Listed on the Canadian DSL (Domestic Substances List)

Alcohols, C8-10, ethoxylated, propoxylated (68603-25-8)
Listed on the Canadian DSL (Domestic Substances List)

Glycolic acid (79-14-1)
Listed on the Canadian DSL (Domestic Substances List)

Surfactants
Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations
No additional information available

National regulations
No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 11/04/2019

Data sources : US OSHA HazCom (GHS) 25 May 2012.

Other information : None.

Full text of H-phrases:

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H332	Harmful if inhaled
H402	Harmful to aquatic life

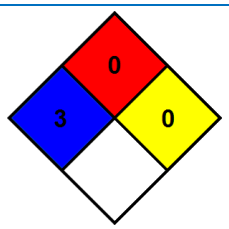
Abbreviations and acronyms:

	ACGIH (American Conference of Government Industrial Hygienists)
	ATE (Acute Toxicity Estimate)
	CAS (Chemical Abstracts Service) number
	DNEL (Derived No Effect Level)
	EC50 (Effective Concentration 50%)
	IARC (International Agency for Research on Cancer)
	IATA (International Air Transport Association)
	IMDG (International Maritime Dangerous Goods Code)
	IMO (International Maritime Organisation)
	LC50 (Lethal Concentration 50%)
	LD50 (Lethal Dose 50%)
	OECD (Organisation for Economic Co-operation and Development)
	OSHA (Occupational Safety and Health Administration) (US)
	PBT (Persistent, Bioaccumulative and Toxic)
	PNEC (Predicted No Effect Concentration)
	QSAR (Quantitative Structure-Activity Relationship)
	STEL (Short Term Exposure Limit)
	TSCA (Toxic Substances Control Act) (US)
	TWA (Time Weighted Average)
	UNxxxx (Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods)
	vPvB (very Persistent and very Bioaccumulative)

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health	:	3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given
Flammability	:	0 Minimal Hazard - Materials that will not burn
Physical	:	0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Indication of changes:

Section	Changed item	Change	Comments
2	Hazards identification	Modified	
3	Composition/Information on ingredients	Modified	
4	First aid measures	Modified	
5	Fire fighting measures	Modified	
6	Accidental release measures	Modified	
7	Handling and storage	Modified	
8	Exposure controls / Personal protection equipment	Modified	
10	Stability and reactivity	Modified	
11	Toxicological information	Modified	
12.	Ecological information	Modified	
13	Disposal considerations	Modified	
14	Transport information	Modified	
15	Regulatory information	Modified	
16	Other information	Modified	

SDS US (GHS HazCom 2012)