SECTION 1: Identification

1.1. Identification

Product form	:	Mixture
Product name	:	Process2Clean® 4
Product code	:	SDS VEL-016

1.2. Recommended use and restrictions on use

Use of the substance/mixture	:	General cleaning detergent concentrate
Restrictions on use	:	Anything other than the above

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)
20 Cope Dr.
Kanata, ON K2M 2V8, Canada
Telephone: 1-(888)-595-8070

Fisher Scientific
112 Colonnade Road
Ottawa, Ontario, Canada K2E 7L6
Telephone: 1-800-234-7437

VWR International
2360 Argentia Road
Mississauga, Ontario L5N 5Z7
Telephone: 1-800-932-5000

1.4. Emergency telephone number

Emergency number	:	CARECHEM 24: 1-215-207-0061 1-866-928-0789 (toll free USA) 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 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs (respiratory tract) through prolonged or repeated exposure

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) : H315 - Causes skin irritation
H318 - Causes serious eye damage
H373 - May cause damage to organs (respiratory tract) through prolonged or repeated exposure

Precautionary statements (GHS US) : P260 - Do not breathe vapors.
P264 - Wash hands thoroughly after handling.
P280 - Wear eye protection, protective gloves, protective clothing.
P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
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.
P314 - Get medical advice/attention if you feel unwell.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
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)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Tetrasodium ethylene diamine tetraacetate	CAS-No.: 64-02-8	7 - 13	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Dam. 1, H318 STOT RE 2, H373
(2-Methoxymethylethoxy)propanol	CAS-No.: 34590-94-8	5 - 10	Flam. Liq. 4, H227
Glycolic acid	CAS-No.: 79-14-1	1 - < 5	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402

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 affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If symptoms develop, obtain medical attention.

First-aid measures after eye contact : Rinse immediately with plenty of water (for at least 15 minutes). Obtain immediate medical attention.

First-aid measures after ingestion : Do NOT induce vomiting. Do not give an unconscious person anything to drink. Rinse mouth. If symptoms develop, obtain medical attention.

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

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye damage.

Chronic symptoms : May cause damage to organs (respiratory tract) through prolonged or repeated exposure (if inhaled, if swallowed).

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Dry chemical. Foam.

Unsuitable extinguishing media : None known.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Fire may produce irritating, corrosive and/or toxic gases. Carbon monoxide. Carbon dioxide. Nitrogen oxides. Sodium oxides.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. 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

General measures : Avoid contact with skin and eyes. Ensure adequate ventilation.

6.1.1. For non-emergency personnel

Emergency procedures : Avoid contact with skin and eyes. Ventilate area. 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.

Emergency procedures : Ventilate area. Avoid contact with skin and eyes.

6.2. Environmental precautions

Prevent entry to sewers and 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 : Large spills: Dike far ahead of liquid spill for later disposal. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for 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 : Avoid contact with skin and eyes. Use personal protective equipment as required. Provide good ventilation in process area to prevent formation of vapor.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Incompatible materials.

Incompatible materials : Strong oxidizing agents. Strong acids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

(2-Methoxymethylethoxy)propanol (34590-94-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Dipropylene glycol methyl ether (DPGME)
ACGIH TWA (ppm)	50 ppm
Remark (ACGIH)	TLV® Basis: Liver & CNS eff
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Dipropylene glycol methyl ether
OSHA PEL (TWA) (mg/m³)	600 mg/m³
OSHA PEL TWA	100 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash stations should be available in the immediate vicinity of any potential exposure. Provide adequate ventilation.

Environmental exposure controls : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

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 safety glasses

Skin and body protection:
Use chemically protective clothing

Respiratory protection:
Not required for normal conditions of use. 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	:	Yellow.
Color	:	Yellow
Odor	:	Slight Chemical
Odor threshold	:	No data available
pH	:	8 – 10
Melting point	:	32 °F (0 °C)
Freezing point	:	No data available
Boiling point	:	212 °F (100 °C)
Flash point	:	No data available
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	:	1.1 (Water = 1)
Solubility	:	Water: Miscible
Log Pow	:	No data available
Auto-ignition temperature	:	No data available
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

Product is stable.

10.4. Conditions to avoid

High temperature. Freezing.

10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

10.6. Hazardous decomposition products

Fire may produce irritating, corrosive and/or toxic gases. Carbon dioxide. Carbon monoxide. Nitrogen oxides. Sodium oxides.

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® 4	
LD50 oral, rat	> 4 ml/kg

Tetrasodium ethylene diamine tetraacetate (64-02-8)	
LD50 oral, rat	1780 – 2000 mg/kg
ATE US (oral)	1780 mg/kg body weight
ATE US (gases)	4500 ppmV/4h
ATE US (vapors)	11 mg/l/4h
ATE US (dust, mist)	1.5 mg/l/4h
LOAEC, Inhalation, rat	ca. 30 mg/m³ (6h)

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)
ATE US (oral)	2040 mg/kg body weight
ATE US (gases)	4500 ppmV/4h

Glycolic acid (79-14-1)	
ATE US (vapors)	3.6 mg/l/4h
ATE US (dust, mist)	3.6 mg/l/4h

(2-Methoxymethylethoxy)propanol (34590-94-8)	
LD50 oral, rat	> 5000 mg/kg body weight (OECD 401 method)
LD50 dermal, rabbit	9510 mg/kg body weight (OECD 402 method)
ATE US (dermal)	9510 mg/kg body weight
LC0, rat, Inhalation	> 275 ppm (7 Hours, vapors, (OECD 403 method))

Skin corrosion/irritation : Causes skin irritation.
pH: 8 – 10

Serious eye damage/irritation : Causes serious eye damage.
pH: 8 – 10

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 : May cause damage to organs (respiratory tract) through prolonged or repeated exposure.

Tetrasodium ethylene diamine tetraacetate (64-02-8)	
STOT-repeated exposure	May cause damage to organs (respiratory tract) through prolonged or repeated exposure (Inhalation).

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after skin contact : Causes skin irritation.

Symptoms/effects after eye contact : Causes serious eye damage.

Chronic symptoms : May cause damage to organs (respiratory tract) through prolonged or repeated exposure (if inhaled, if swallowed).

SECTION 12: Ecological information

12.1. Toxicity

Tetrasodium ethylene diamine tetraacetate (64-02-8)	
LC50 fish	> 100 mg/l 96h - Oncorhynchus mykiss (OECD 203 method)
EC50 Daphnia	> 114 mg/l 48h - Daphnia Magna (OECD 202 method)
EC50 72h - Algae [1]	> 100 72h - Raphidocelis subcapitata (OECD 201 method)
NOEC chronic fish	≥ 35.1 mg/l 35d - Danio rerio (OECD 210 method)
NOEC chronic crustacea	25 mg/l 21d - Daphnia Magna (OECD 211 method)
NOEC chronic algae	79.4 mg/l 72h - Raphidocelis subcapitata (OECD 201 method)

Glycolic acid (79-14-1)	
LC50 fish	114.8 mg/l - 96 Hours (Pimephales promelas) (EPA 72 -2)
EC50 Daphnia	> 100 mg/l - 48 Hours (Daphnia magna) (OECD 202 method)
EC50 72h - Algae [1]	> 100 mg/l - 72 Hours (Growth rate, Pseudokirchneriella subcapitata) (OECD 201 method)
NOEC chronic crustacea	≥ 89.6 mg/l - 21 days Daphnia Magna (OECD 211 method)

(2-Methoxymethylethoxy)propanol (34590-94-8)	
LC50 fish	> 1000 mg/l - 96 Hours (Poecilia reticulata), (OECD 203 method)
EC50 Daphnia	1919 mg/l - 48 Hours (Daphnia magna), (OECD 202 method)
LC50 fish 2	> 10000 mg/l - 96 Hours (Pimephales promelas)
EC50 - Crustacea [2]	> 1000 mg/l - 48 Hours (Crangon crangon)
EC50 72h - Algae [1]	> 969 mg/l - 72 Hours (Pseudokirchneriella subcapitata, Growth rate), (OECD 201 method)
EC50 72h - Algae [2]	> 969 mg/l - 72 Hours (Pseudokirchneriella subcapitata, Biomass), (OECD 211 method)
NOEC chronic crustacea	≥ 0.5 mg/l - 22 days (Daphnia magna, reproduction), (OECD 211 method)

12.2. Persistence and degradability

Process2Clean® 4	
Persistence and degradability	No data available.

Tetrasodium ethylene diamine tetraacetate (64-02-8)	
Persistence and degradability	Not readily biodegradable.

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

(2-Methoxymethylethoxy)propanol (34590-94-8)	
Persistence and degradability	Readily biodegradable.
Biodegradation	75 % - 10 days, (OECD 301F method)

12.3. Bioaccumulative potential

Process2Clean® 4	
Bioaccumulative potential	No data available.

Tetrasodium ethylene diamine tetraacetate (64-02-8)	
BCF - Fish [1]	1.8 l/kg
Log Pow	-13.17 (calculated value)
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.

(2-Methoxymethylethoxy)propanol (34590-94-8)	
Log Pow	0.004 (25 °C), (OECD 107 method)
Bioaccumulative potential	Based on the n-octanol/water partition coefficient accumulation in organisms is not expected.

12.4. Mobility in soil

Process2Clean® 4	
Ecology - soil	Miscible with water.

Tetrasodium ethylene diamine tetraacetate (64-02-8)	
Ecology - soil	Mobile in soils.

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

(2-Methoxymethylethoxy)propanol (34590-94-8)	
Ecology - soil	Miscible with water.

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.
Additional information : Handle empty containers with care.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Not regulated
Proper Shipping Name (TDG) : Not regulated
Proper Shipping Name (IMDG) : Not regulated
Proper Shipping Name (IATA) : Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

IMDG
Transport hazard class(es) (IMDG) : Not regulated

IATA
Transport hazard class(es) (IATA) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (TDG) : Not regulated
Packing group (IMDG) : Not regulated
Packing group (IATA) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

DOT
Not regulated

TDG
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Process2Clean® 4	
SARA Section 311/312 Hazard Classes	Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation Health hazard - Specific target organ toxicity (single or repeated exposure)

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Tetrasodium ethylene diamine tetraacetate	64-02-8	Present	Active	
Glycolic acid	79-14-1	Present	Active	
(2-Methoxymethylethoxy)propanol	34590-94-8	Present	Active	

15.2. International regulations

CANADA

Tetrasodium ethylene diamine tetraacetate (64-02-8)
Listed on the Canadian DSL (Domestic Substances List)

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

(2-Methoxymethylethoxy)propanol (34590-94-8)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Tetrasodium ethylene diamine tetraacetate (64-02-8)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

Glycolic acid (79-14-1)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

(2-Methoxymethylethoxy)propanol (34590-94-8)
Listed on INSQ (Mexican National Inventory of Chemical Substances)

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

Component	State or local regulations
(2-Methoxymethylethoxy)propanol(34590-94-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 3/5/2024

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

Other information : Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]. Physical hazards: On basis of test data. Environmental hazards: Calculation method.

Full text of H-phrases	
H227	Combustible liquid
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H332	Harmful if inhaled
H373	May cause damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life

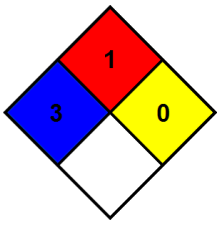
Abbreviations and acronyms	
	ATE (Acute Toxicity Estimate)
	CAS (Chemical Abstracts Service) number
	DNEL (Derived No Effect Level)
	EC50 (Effective Concentration 50%)

Abbreviations and acronyms	
	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)
	PBT (Persistent, Bioaccumulative and Toxic)
	PNEC (Predicted No Effect Concentration)
	STEL (Short Term Exposure Limit)
	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 : 1 - Materials that must be preheated before ignition can occur.

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

: * - Chronic (long-term) health effects may result from repeated overexposure

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.

Personal protection : B - Safety glasses, Gloves

Indication of changes:			
Section	**Changed item**	**Change**	**Comments**
1	Identification	Modified	No additional information available
7	Handling and storage	Modified	No additional information available
10	Stability and reactivity	Modified	No additional information available
15	Regulatory information	Modified	No additional information available

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