

Safety Data Sheet

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

Version: 5.0

VELTEK ASSOCIATES, INC. Date of issue: 05/11/2011 Revision date: 06/19/2018 Supersedes: 02/09/2017

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Process2Clean® 6
Product code : SDS VEL-022

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Process cleaner detergent Restrictions on use : For professional use only

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

Corrosive to metals H290 May be corrosive to metals

Category 1

Skin corrosion/irritation H314 Causes severe skin burns and eye damage

Category 1A

Serious eye damage/eye H318 Causes serious eye damage

irritation Category 1

Hazardous to the aquatic H402 Harmful to aquatic life

environment - Acute

Hazard Category 3

Hazardous to the aquatic environment - Chronic

Hazard Category 3

Full text of H statements : see section 16

H412

2.2. GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

Harmful to aquatic life with long lasting effects

H318 - Causes serious eye damage H402 - Harmful to aquatic life

06/19/2018 EN (English US) Page 1

Safety Data Sheet

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

H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P234 - Keep only in original container.

P260 - Do not breathe vapors.

P264 - Wash hands thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear eye protection, protective gloves, protective clothing. 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.

P390 - Absorb spillage to prevent material-damage.

P405 - Store locked up.

P406 - Store in corrosive resistant container with a resistant inner liner.

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
Potassium hydroxide	(CAS-No.) 1310-58-3	5 - 10	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318
Sodium hypochlorite	(CAS-No.) 7681-52-9	1 - 5	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411

^{*}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

First-aid measures after eye contact

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. Obtain immediate medical attention.

Rinse immediately with plenty of water (for at least 15 minutes). Ensure that folded skin of

eyelids is thoroughly washed with water. 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 : Cause irritation

: 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.

06/19/2018 EN (English US) 2/9

Safety Data Sheet

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

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 : None known.

5.2. Specific hazards arising from the chemical

Fire hazard : Not flammable. Fire may produce irritating, corrosive and/or toxic gases. chlorine. Sodium

oxides. Potassium oxides.

Explosion hazard : 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.

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

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

6.1.1. For non-emergency personnel

Emergency procedures : Keep upwind. 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. Use chemically protective clothing. Wear suitable

protective clothing and eye or face protection.

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

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 : Absorb spillage to prevent material-damage. 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 : 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.

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 : Store in original container or corrosive resistant and/or lined container. Keep in a cool, well-

ventilated place. Keep container closed when not in use. Store locked up.

Incompatible materials : Acids. Strong alkalis. Organic materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium hydroxide (1310-58-3)		
ACGIH	Local name	Potassium hydroxide
ACGIH	ACGIH Ceiling (mg/m³)	2 mg/m³
ACGIH	Remark (ACGIH)	URT, eye, & skin irr

06/19/2018 EN (English US) 3/9

Safety Data Sheet

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

Potassium hydroxide (1310-	58-3)	
ACGIH	Regulatory reference	ACGIH 2018

8.2. Appropriate engineering controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. 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:

Viscosity, dynamic

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 : Clear.
Color : Straw yellow
Odor : Chlorine

Odor threshold : No data available

pH : 11 - 13 (1% Aqueous solution)

Melting point 32 °F (0 °C) Freezing point : No data available : 212 °F (100 °C) Boiling point Flash point Non 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 : 1.1 - 1.3 (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

06/19/2018 EN (English US) 4/9

: No data available

Safety Data Sheet

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

Explosion limits : No data available Explosive properties : Not explosive. Oxidizing properties Oxidizer.

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).

Possibility of hazardous reactions

Contact with acids liberates toxic gas (chlorine).

10.4. **Conditions to avoid**

Freezing.

Incompatible materials 10.5.

Acids. Strong alkalis. Organic compounds.

Hazardous decomposition products

Chlorine. Sodium oxides. Potassium oxides.

SECTION 11: Toxicological information

Information on toxicological effects

: Not classified Acute toxicity

Potassium hydroxide (1310-58-3)	
LD50 oral rat	333 mg/kg
Sodium hypochlorite (7681-52-9)	
LD50 oral rat	8830 mg/kg (12.5% Aqueous solution)
LD50 dermal rabbit	> 20000 mg/kg (12.5% Aqueous solution)
Skin corrosion/irritation	: Causes severe skin burns and eye damage.
	pH: 11 - 13 (1% Aqueous solution)
Serious eye damage/irritation	: Causes serious eye damage.
	pH: 11 - 13 (1% Aqueous solution)
Respiratory or skin sensitization	: Not classified

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity - single exposure : Not classified Specific target organ toxicity - repeated : Not classified

exposure

Aspiration hazard : Not classified

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**

: Harmful to aquatic life with long lasting effects. Ecology - general

Potassium hydroxide (1310-58-3)		
LC50 fish	56 mg/l - 24 Hours - (Gambusia affinis)	
Sodium hypochlorite (7681-52-9)		
LC50 fish	0.023 - 0.052 mg/l - 96 Hours (Oncorhynchus gorbuscha)	
00/10/00/10	EV (E. 11.1.10)	

06/19/2018 EN (English US) 5/9

Safety Data Sheet

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

Sodium hypochlorite (7681-52-9)	
EC50 Daphnia	0.141 mg/l - 48 Hours (Daphnia magna)
NOEC (chronic)	0.04 mg/l - 28 days (Menidia peninsulae)
NOEC chronic crustacea	0.007 mg/l - 15 days (estimated)

12.2. Persistence and degradability

Process2Clean® 6	
Persistence and degradability	No data available.

12.3. Bioaccumulative potential

Process2Clean® 6	
Bioaccumulative potential	No data available.

12.4. Mobility in soil

Process2Clean® 6	
Ecology - soil	Miscible with water.

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

GWPmix comment : No known effects from this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste disposal recommendations : Do not discharge into drains or the environment. Dispose in a safe manner in accordance with

local/national regulations. Dispose of this material and its container at hazardous or special

waste collection point.

Additional information : Handle empty containers with care.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3266 Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide), 8, II

UN-No.(DOT) : UN3266

Proper Shipping Name (DOT) : Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)

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

Packing group (DOT) : II - Medium Danger

Hazard labels (DOT) : 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Symbols : G

DOT Special Provisions (49 CFR 172.102) : B2, IB2, T11, TP2, TP27

DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Quantity Limitations Passenger aircraft/rail : 1 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 30 L

CFR 175.75)

DOT Vessel Stowage Location : B

06/19/2018 EN (English US) 6/9

Safety Data Sheet

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

DOT Vessel Stowage Other : 40, 52 Emergency Response Guide (ERG) Number : 154

Other information : No supplementary information available.

Special transport precautions : No special precautions required.

Transportation of Dangerous Goods

Transport document description : UN3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide), 8, II

UN-No. (TDG) : UN3266

Proper Shipping Name (Transportation of

Dangerous Goods)

: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide)

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 : 1 L

Carrying Railway Vehicle Index

Transport by sea

Transport document description (IMDG) : UN 3266 CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide), 8, II

UN-No. (IMDG) : 3266

Proper Shipping Name (IMDG) : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide)

Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : II - substances presenting medium danger

Air transport

Transport document description (IATA) : UN 3266 Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide), 8, II

UN-No. (IATA) : 3266

Proper Shipping Name (IATA) : Corrosive liquid, basic, inorganic, n.o.s. (Potassium hydroxide)

Class (IATA) : 8 - Corrosives
Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Process2Clean® 6	
SARA Section 311/312 Hazard Classes	Physical hazard - Corrosive to metals Health hazard - Skin corrosion or Irritation Health hazard - Serious eye damage or eye irritation

Potassium nydroxide (1310-58-3)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313		
CERCLA RQ 1000 lb		
Sodium hypochlorite (7681-52-9)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not subject to reporting requirements of the United States SARA Section 313		
CERCLA RQ	100 lb	

15.2. International regulations

CANADA

Potassium	hydroxido	(1210-59-2)
r viassiuiii	nvuroxide	(1310-30-31

Listed on the Canadian DSL (Domestic Substances List)

Sodium hypochlorite (7681-52-9)

Listed on the Canadian DSL (Domestic Substances List)

06/19/2018 EN (English US) 7/9

Safety Data Sheet

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

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

Potassium hydroxide (1310-58-3)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

Sodium hypochlorite (7681-52-9)

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date : 06/19/2018

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

Other information : None.

Full text of H-phrases:

rtext of the prinases.			
H290	May be corrosive to metals		
H302	Harmful if swallowed		
H314	Causes severe skin burns and eye damage		
H318	Causes serious eye damage		
H335	May cause respiratory irritation		
H400	Very toxic to aquatic life		
H402	Harmful to aquatic life		
H411	Toxic to aquatic life with long lasting effects		
H412	Harmful to aquatic life with long lasting effects		

Abbreviations and acronyms:

06/19/2018 EN (English US) 8/9

Safety Data Sheet

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

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)	
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

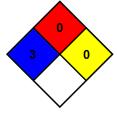
: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

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
1	Identification	Modified	
2	Hazards identification	Modified	
3	Composition/Information on ingredients	Modified	
6	Accidental release measures	Modified	
7	Handling and storage	Modified	
8	Exposure controls / Personal protection equipment	Modified	
12.	Ecological information	Modified	
14	Transport information	Modified	
15	Regulatory information	Modified	

SDS US (GHS HazCom 2012)

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Veltek Associates, Inc. gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Veltek Associates, Inc. accepts no liability for loss or damage resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

06/19/2018 EN (English US) 9/9