

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	PINNACLE INTENSIVE TILE CLEANER
Other means of identification	:	not applicable
Recommended use	:	Floor Cleaner
Restrictions on use	:	Reserved for industrial and professional use.
Product dilution information	•	0.0 % - 50.0 %
Company	:	Ecolab Inc. 370 N. Wabasha Street St. Paul, Minnesota USA 55102 1-800-352-5326
Emergency telephone	:	1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)
Issuing date	:	07/11/2014

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Product AS SOLD Skin corrosion Serious eye damage Specific target organ systemic toxicity - single exposure	Category 1A Category 1 Category 3 (Respiratory system)	
Product AT USE DILUTION Skin corrosion Serious eye damage	Category 1A Category 1	
GHS Label element		
Product AS SOLD Hazard pictograms		
Signal Word	Danger	
Hazard Statements	Causes severe skin burns and eye damage. May cause respiratory irritation.	
Precautionary Statements	Prevention: Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wa horoughly after handling. Use only outdoors or in a well- area. Wear protective gloves/ protective clothing/ eye pro protection. Response: IF SWALLOWED: rinse mouth. Do NOT induce vomiting (or hair): Remove/ Take off immediately all contaminated Rinse skin with water/ shower. IF INHALED: Remove vic	ventilated otection/ face . IF ON SKIN I clothing.

	air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. Wash contaminated clothing before reuse. Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up. Disposal: Dispose of contents/ container to an approved waste disposal plant.
Product AT USE DILUTION Hazard pictograms	
Signal Word	: Danger
Hazard Statements	: Causes severe skin burns and eye damage.
Precautionary Statements	 Prevention: Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Response: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. Wash contaminated clothing before reuse. Store locked up. Disposal: Dispose of contents/ container to an approved waste disposal plant.
Other hazards	: None known.
SECTION 3. COMPOSITION/II	IFORMATION ON INGREDIENTS

Product AS SOLD Pure substance/mixture : Mixture		
Chemical Name 1-methoxy-2-propanol ethanolamine potassium hydroxide Benzyl alcohol Aromatic hydrocarbons 2-propenoic acid, ethyl ester, polymer with ethenyl acetate and 2,5-furandione, hydrolyzed	CAS-No. 107-98-2 141-43-5 1310-58-3 100-51-6 119345-04-9 113221-69-5	Concentration (%) 5 - 10 1 - 5 1 - 5 1 - 5 1 - 5 1 - 5
Product AT USE DILUTION Chemical Name 1-methoxy-2-propanol ethanolamine	CAS-No. 107-98-2 141-43-5	Concentration (%) 1 - 5 1 - 5

1310-58-31 - 5100-51-61 - 5
IRES
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Treat symptomatically.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

See toxicological information (Section 11)

SECTION 5. FIRE-FIGHTING MEASURES

Product AS SOLD Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	None known.
Specific hazards during fire fighting	:	Not flammable or combustible.
Hazardous combustion products	:	Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx)

		Sulfur oxides Oxides of phosphorus
Special protective equipment for fire-fighters	:	Use personal protective equipment.
Specific extinguishing methods	:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Product AS SOLD

Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	:	Do not allow contact with soil, surface or ground water.
Methods and materials for containment and cleaning up	:	Stop leak if safe to do so. Contain spillage, and then collect with non- combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.
Product AT USE DILUTION Personal precautions, protective equipment and emergency procedures	:	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.
Environmental precautions	:	Do not allow contact with soil, surface or ground water.
Methods and materials for containment and cleaning up	:	Stop leak if safe to do so. Contain spillage, and then collect with non- combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE

Product AS SOLD Advice on safe handling	:	Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling.
Conditions for safe storage	:	Do not store near acids. Keep out of reach of children. Store in suitable labeled containers.
Storage temperature	:	-10 °C to 50 °C

Product AT USE DILUTION Advice on safe handling	:	Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling.
Conditions for safe storage	:	Do not store near acids. Keep out of reach of children. Store in suitable labeled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product AS SOLD Ingredients with workplace control parameters

Ingredients	CAS-No.	Form of exposure	Permissible concentration	Basis
1-methoxy-2-propanol	107-98-2	TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
		STEL	150 ppm 540 mg/m3	NIOSH REL
		TWA	100 ppm 360 mg/m3	NIOSH REL
ethanolamine	141-43-5	TWA	3 ppm	ACGIH
		STEL	6 ppm	ACGIH
		TWA	3 ppm 8 mg/m3	NIOSH REL
		STEL	6 ppm 15 mg/m3	NIOSH REL
		TWA	3 ppm 6 mg/m3	OSHA Z1
potassium hydroxide	1310-58-3	Ceiling	2 mg/m3	ACGIH
· · ·		Ceiling	2 mg/m3	NIOSH REL
Benzyl alcohol	100-51-6	TWA	10 ppm	WEEL

Engineering measures

: Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

Personal protective equipment

Eye protection	:	Safety goggles Face-shield
Hand protection	:	Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	:	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Respiratory protection	:	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Product AT USE DILUTION Engineering measures	Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.
Personal protective equipmen	t
Eye protection	Safety goggles Face-shield
Hand protection	 Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Skin protection	Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing
Respiratory protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

	Product AS SOLD	Product AT USE DILUTION
Appearance	: liquid	liquid
Color	: colorless	light yellow
Odor	: alcoholic	alcoholic
рН	: 13.5, 100 %	12.5 - 13.5
Flash point	: not applicable	
Odor Threshold	: no data available	
Melting point/freezing point	: no data available	
Initial boiling point and boiling range	: no data available	
Evaporation rate	: no data available	
Flammability (solid, gas)	: no data available	
Upper explosion limit	: no data available	
Lower explosion limit	: no data available	
Vapor pressure	: no data available	
Relative vapor density	: no data available	
Relative density	: 1.05	
Water solubility	: soluble	
Solubility in other solvents	: no data available	
Partition coefficient: n- octanol/water	: no data available	
Autoignition temperature	: no data available	
Thermal decomposition	: no data available	
Viscosity, kinematic	: no data available	
Explosive properties	: no data available	

Oxidizing properties	:	no data available
Molecular weight	:	no data available
VOC	:	no data available

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	None known.
Incompatible materials	Acids Metals
Hazardous decomposition products	Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulfur oxides Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of	:	Inhalation, Eye contact, Skin contact
exposure		

Potential Health Effects

Product AS SOLD Eyes	:	Causes serious eye damage.
Skin	:	Causes severe skin burns.
Ingestion	:	Causes digestive tract burns.
Inhalation	:	May cause respiratory tract irritation. May cause nose, throat, and lung irritation.
Chronic Exposure	:	Health injuries are not known or expected under normal use.
Product AT USE DILUTION Eyes	:	Causes serious eye damage.
Skin	:	Causes severe skin burns.
Ingestion	:	Causes digestive tract burns.
Inhalation	:	May cause nose, throat, and lung irritation.
Chronic Exposure	:	Health injuries are not known or expected under normal use.
Experience with human expo	รเ	ire
Desident AC COLD		

Product AS SOLDEye contact: Redness, Pain, Corrosion

Skin contact	:	Redness, Pain, Corrosion
Ingestion	: (Corrosion, Abdominal pain
Inhalation	:	Respiratory irritation, Cough
Product AT USE DILUTION		
Eye contact	:	Redness, Pain, Corrosion
Skin contact	:	Redness, Pain, Corrosion
Ingestion	:	Corrosion, Abdominal pain
Inhalation	:	Respiratory irritation, Cough
Toxicity		
Product AS SOLD		
Acute oral toxicity	: /	Acute toxicity estimate : > 5,000 mg/kg
Acute inhalation toxicity	: 4	4 h Acute toxicity estimate : > 40 mg/l
Acute dermal toxicity	: /	Acute toxicity estimate : > 5,000 mg/kg
Skin corrosion/irritation	: 1	no data available
Serious eye damage/eye irritation	: 1	no data available
Respiratory or skin sensitization	: 1	no data available
Carcinogenicity	: 1	no data available
Reproductive effects	: 1	no data available
Germ cell mutagenicity	: 1	no data available
Teratogenicity	: 1	no data available
STOT-single exposure	: 1	no data available
STOT-repeated exposure	: 1	no data available
Aspiration toxicity	: 1	no data available

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD Ecotoxicity		
Environmental Effects	:	This product has no known ecotoxicological effects.
Product		
Toxicity to fish	:	no data available
Toxicity to daphnia and other aquatic invertebrates	:	no data available
Toxicity to algae	:	no data available
Ingredients		
Toxicity to fish	:	1-methoxy-2-propanol 96 h LC50 Fish: > 1,000 mg/l
		potassium hydroxide

96 h LC50: 80 mg/l

Benzyl alcohol 96 h LC50 Fish: > 100 mg/l

Aromatic hydrocarbons 96 h LC50 Fish: 6.2 mg/l

2-propenoic acid, ethyl ester, polymer with ethenyl acetate and 2,5furandione, hydrolyzed 96 h LC50 Fish: > 1,000 mg/l

Ingredients

Toxicity to daphnia and other	:	ethanolamine
aquatic invertebrates		48 h EC50 Daphnia : 65 mg/l

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Other adverse effects

no data available

SECTION 13. DISPOSAL CONSIDERATIONS					
Product AS SOLD Disposal methods	: Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.				
Disposal considerations	: Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re- use empty containers.				
RCRA - Resource Conservation and Recovery Authorization Act Hazardous waste	: D002 (Corrosive)				
Product AT USE DILUTION Disposal methods	: Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.				
Disposal considerations	: Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re- use empty containers.				
SECTION 14 TRANSPORT INFORMATION					

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)

UN number	:	1814
Description of the goods	:	Potassium hydroxide, solution
Class	:	8
Packing group	:	111
Environmentally hazardous	:	no
Sea transport (IMDG/IMO)		
UN number	:	1814
Description of the goods	:	POTASSIUM HYDROXIDE SOLUTION
Class	:	8
Packing group	:	III
Marine pollutant	:	no

Product AT USE DILUTION

Not intended for transport.

SECTION 15. REGULATORY INFORMATION

Product AS SOLD

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
potassium hydroxide	1310-58-3	1000	26162

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	: Acute Health Hazard
SARA 302	: SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

1907/2006 (EU) : not determined

Switzerland. New notified substances and declared preparations :

The mixture contains substances listed on the Swiss Inventory not determined

United States TSCA Inventory :

Listed on TSCA

Canadian Domestic Substances List (DSL) :

All components of this product are on the Canadian DSL.

Australia Inventory of Chemical Substances (AICS) : not determined

New Zealand. Inventory of Chemical Substances : not determined

Japan. ENCS - Existing and New Chemical Substances Inventory : not determined

Japan. ISHL - Inventory of Chemical Substances (METI) : not determined

Korea. Korean Existing Chemicals Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines Inventory of Chemicals and Chemical Substances (PICCS) : not determined

China. Inventory of Existing Chemical Substances in China (IECSC) : not determined

SECTION 16. OTHER INFORMATION





HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0
0 = not significant, 1 =Slight, 2 = Moderate, 3 = High	

4 = Extreme, * = Chronic

Issuing date	:	07/11/2014
Version	:	1.3
Prepared by	:	Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.