SAFETY DATA SHEET



CW-50

Section 1. Identification

Product name : CW-50
Product code : CW50-V

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

Identified uses

Cleaner for high pressure machine

Uses advised against

Not applicable.

Supplier : 830 RUE ST-PIERRE SUD 851 PROGRESSCOURT

JOLIETTE,QC OAKVILLE, ON

J6E 8R7 L6L 6K1

TEL:450-759-7711; T(289)813-3232 TF: 1-800-363-2776 TF 1-800-921-5527 EMAIL: info@sanyinc.com info@greenlabscs.com

Manufacturer : 830 RUE ST-PIERRE SUD 851 PROGRESS COURT

JOLIETTE,QC OAKVILLE, ON

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Emergency telephone number (with hours of

operation)

: 1-888-CAN-UTEC (226-8832), (613) 996-6666 or *666 on a cellular phone

Section 2. Hazard identification

Classification of the : SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1

TOXIC TO REPRODUCTION (Fertility) - Category 1
TOXIC TO REPRODUCTION (Unborn child) - Category 1

GHS label elements

Hazard pictograms





Signal word : Danger

Hazard statements : H314 - Causes severe skin burns and eye damage.

H360 - May damage fertility or the unborn child.

Precautionary statements

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Section 2. Hazard identification

Prevention

- : P201 Obtain special instructions before use.
 - P202 Do not handle until all safety precautions have been read and understood.
 - P280 Wear protective gloves. Wear eye or face protection. Wear protective clothing.

P264 - Wash hands thoroughly after handling.

Response

: P308 + P313 - IF exposed or concerned: Get medical attention.
P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician.

P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 + P363 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician.

P305 + P351 + P338 + P310 - 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 physician.

: P405 - Store locked up.

Storage Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Ingredient name	% (w/w)	CAS number
1-(2-butoxy-1-methylethoxy)propan-2-ol	3 - 5	29911-28-2
potassium hydroxide	2 - 5	1310-58-3
Dodecan-1-ol, ethoxylated	1 - 3	9002-92-0
disodium metasilicate	1 - 3	6834-92-0

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First-aid measures

Skin contact

: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes severe burns.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain watering redness

Inhalation : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: No specific treatment.

Section 4. First-aid measures

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide carbon monoxide phosphorus oxides metal oxide/oxides

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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Section 6. Accidental release measures

Large spill

: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
potassium hydroxide	CA Alberta Provincial (Canada, 4/2009). C: 2 mg/m³ CA British Columbia Provincial (Canada, 5/2015). C: 2 mg/m³ CA Ontario Provincial (Canada, 7/2015). C: 2 mg/m³ CA Quebec Provincial (Canada, 1/2014). STEV: 2 mg/m³ 15 minutes. CA Saskatchewan Provincial (Canada, 7/2013). CEIL: 2 mg/m³

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Section 8. Exposure controls/personal protection

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Liquid.

Color : Brownish-red.

Odor : Odorless.

Odor threshold : Not available.

pH : 13 to 13.5

Melting point : Not available.

Boiling point : Not available.

Flash point : Closed cup: >93°C (>199.4°F) [Pensky-Martens.]

Evaporation rate : Not available.

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Section 9. Physical and chemical properties

Flammability (solid, gas)

Lower and upper explosive

(flammable) limits

: Not available. : Not available.

Vapor pressure : Not available. Vapor density : Not available. **Relative density** : 1.05 to 1.1 : Not available. Solubility Solubility in water : Not available. Partition coefficient: n-: Not available.

octanol/water

: Not available. **Auto-ignition temperature Decomposition temperature** : Not available. : Not available. **Viscosity** : Not available. Flow time (ISO 2431)

Section 10. Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. Reactivity

Chemical stability : The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : Reactive or incompatible with the following materials:

acids

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
potassium hydroxide	LD50 Oral	Rat	273 mg/kg	-
disodium metasilicate	LD50 Oral	Rat	1153 mg/kg	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
potassium hydroxide	Eyes - Moderate irritant	Rabbit	-	24 hours 1	-
!				milligrams	
	Skin - Severe irritant	Guinea pig	-	24 hours 50	-
				milligrams	
!	Skin - Severe irritant	Human	-	24 hours 50	-
				milligrams	
	Skin - Severe irritant	Rabbit	-	24 hours 50	-
				milligrams	
Dodecan-1-ol, ethoxylated	Eyes - Severe irritant	Rabbit	-	24 hours 750	-
				_	
	Skin - Moderate irritant	Human	-		-
!					
	Claim Mild innite mt	Dabbit			
	Skin - Mila irntant	Rabbit	_		-
!	Skin Moderate irritant	Dobbit		•	
!	Skiii - Moderate ii italit	Nabbit	-		-
disodium metasilicate	Skin - Moderate irritant	Guinea nig			_
disodidiri metasilicate	OKIII - Moderate iintant	Our lea pig			
	Skin - Severe irritant	Human	_		_
		T I GITTIGHT			
	Skin - Severe irritant	Rabbit	_		_
disodium metasilicate	Skin - Moderate irritant Skin - Mild irritant Skin - Moderate irritant Skin - Moderate irritant Skin - Moderate irritant Skin - Severe irritant Skin - Severe irritant	Human Rabbit Rabbit Guinea pig Human Rabbit	- - -	Micrograms 72 hours 6 milligrams Intermittent 24 hours 500 milligrams 24 hours 500 milligrams 24 hours 250 milligrams 24 hours 250 milligrams 24 hours 250 milligrams 24 hours 250 milligrams	- - -

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	3 3 3	Route of exposure	Target organs
disodium metasilicate	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

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Section 11. Toxicological information

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes severe burns.

: No known significant effects or critical hazards. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

> pain watering redness

Inhalation : Adverse symptoms may include the following:

> reduced fetal weight increase in fetal deaths skeletal malformations

: Adverse symptoms may include the following: Skin contact

pain or irritation

redness

blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion Adverse symptoms may include the following:

> stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

effects

effects

: Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards. Carcinogenicity : No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : May damage the unborn child.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : May damage fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	3405.2 mg/kg

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
potassium hydroxide Dodecan-1-ol, ethoxylated	Acute LC50 80 ppm Fresh water Acute LC50 6460 μg/l Fresh water Acute LC50 1500 μg/l Fresh water	Fish - Gambusia affinis - Adult Daphnia - Daphnia magna Fish - Salmo salar - Parr	96 hours 48 hours 96 hours
disodium metasilicate	Acute EC50 33.53 mg/l Fresh water Acute LC50 2320 ppm Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate Fish - Gambusia affinis - Adult	48 hours 96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
1-(2-butoxy-1-methylethoxy) propan-2-ol	1.523	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Section 14. Transport information

	TDG Classification	DOT Classification	IATA
UN number	3267	3267	3267
UN proper shipping name	Corrosive liquide, basic,organic N.O.S (potassium hydroxide)	Corrosive liquide, basic,organic N.O.S (potassium hydroxide)	Corrosive liquide, basic,organic N.O.S (potassium hydroxide)
Transport hazard class(es)	8	8 ORNOUPF	8
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Additional information	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8). Explosive Limit and Limited Quantity Index 5	Reportable quantity 30769.2 lbs / 13969.2 kg [3432. 8 gal / 12994.6 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in

the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL and

the IBC Code

Section 15. Regulatory information

Canadian lists

Canadian NPRI : The following components are listed: Phosphorus (total)

CEPA Toxic substances : None of the components are listed.

Canada inventory : Not determined.

International lists

United States : Not determined.

Section 16. Other information

History

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Section 16. Other information

Key to abbreviations

: ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

HPR = Hazardous Products Regulations

Procedure used to derive the classification

Classification	Justification
SKIN CORROSION - Category 1	On basis of test data
SERIOUS EYE DAMAGE - Category 1	On basis of test data
TOXIC TO REPRODUCTION (Fertility) - Category 1	Calculation method
TOXIC TO REPRODUCTION (Unborn child) - Category 1	Calculation method

[▼] Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.