ProKure SOLUTIONS
Revolutionizing Clean

SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

PRODUCT NAME:	**ProKure™ V Unreacted Pouch**
FORMULA:	Preparation/Mixture
PRODUCT USE:	Disinfectant/ Sanitizer/ Tuberculocide/ Virucide*/ Fungicide/ Algaecide/Slimicide/ Deodorizer *See product label for detail.
MANUFACTURER'S NAME:	ProKure Solutions
ADDRESS:	225 West Deer Valley Road Phoenix, AZ 85027
Safety Data Sheet Competent Person:	safety@pantheonchemical.com
SUPPLIER'S NAME:	ProKure Solutions
ADDRESS:	225 West Deer Valley Road Phoenix, AZ 85027
TELEPHONE NUMBER:	623-780-2296
TOLL FREE:	1-888-608-7888
FAX:	623-516-0414
EMERGENCY TELEPHONE NUMBER:	Chemtrec 24 hrs: 1-800-424-9300
DATE PREPARED:	January 25, 2014
DATE REVIEWED:	April 21, 2016

Section 2: Hazards Identification

GHS Hazard Class:

Combustible dust
Acute toxicity, oral (Category 4), H302
Acute toxicity, dermal (Category3), H311
Acute toxicity, inhalation (Category 3), H331
Skin corrosive (Category 1B), H314
Serious eye damage/eye irritation (Category 1), H318
Specific Target Organ Toxicity (repeated exposure), (Category 2), H373
Aquatic acute toxicity (Category 1), H400
Aquatic chronic toxicity (Category 3), H412

GHS Label elements, including precautionary statements:

Pictograms:

Signal word: Danger

Hazard Statement(s):

May form combustible dust concentrations in air.

H302	Harmful if swallowed.
H311+H331	Toxic in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statement(s):

P260	Do not breathe dust, mist.
P264	Wash hands, forearms, and exposed areas thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear eye protection, face protection, protective clothing, protective gloves.
P301+P312	If swallowed: Call a poison center or doctor if you feel unwell.
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 at rest in a position 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 poison center or doctor.
P311	Call a poison center or doctor.
P314	Get medical advice if you feel unwell.
P321	Specific treatment (see Section 4 on this SDS).
P330	Rinse mouth.
P361	Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.
Note:	This product, in contact with air or moisture, evolves chlorine dioxide gas. The product is designed to generate chlorine dioxide solution when the pouch is placed is specified amount of water. The product design limits both the amount of gas generated and the rate of release. High amount of chlorine dioxide gas is fatal if inhaled and causes severe skin burns and eye damage.

Unknown Acute Toxicity (GHS-US): Not available

Section 3: Composition / Information on Ingredients

Product Composition	CAS NO.	Approx. W%	Classification (GHS)
Citric Acid	77-92-9	60-80	Combustible Dust Serious eye damage/eye irritation, Cat. 2A, H319
Sodium chlorite	7758-19-2	15-35	Oxidizing solids, Cat. 1, H271 Acute toxicity (oral), Cat. 3, H301 Acute toxicity (dermal), Cat. 2,H310 Acute toxicity (Inhalation: dust, mist), Cat. 2, H330 Skin corrosion/irritation, Cat. 1B, H314 Serious eye damage/eye irritation, Cat. 1, H318 Single target organ toxicity (repeated exposure), Cat. 2, H373 Hazardous to the aquatic environment – acute hazard, Cat. 1, H400 Hazardous to the aquatic environment – chronic hazard, Cat. 3, H412

Note: *This product, in contact with air or moisture, evolves chlorine dioxide gas. The product is designed to generate chlorine dioxide solution when the pouch is placed in specified amount of water. The product design limits both the amount of gas generated and the rate of release. In the event of an emergency or if the pouch is accidently wetted, the composition for the reacted chlorine dioxide is below. Please see the attached "ProKure™V Ready to Use Solution" SDS for full hazards of the reacted pouch solution.*

Chemical	CAS NO.	Approx. W%	Classification (GHS)
Chlorine dioxide	10049-04-4	100	Oxidizing gas, Cat. 1, H270 Compressed gas, H280 Acute toxicity (Inhalation: gas), H330 Skin corrosion/irritation, Cat. 1B, H314 Hazardous to the aquatic environment – acute hazard, Cat. 1, H400 Hazardous to the aquatic environment – chronic hazard, Cat. 1, H410

The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]. A range of concentration as prescribed by Controlled Products Regulations has been used where necessary, due to varying composition.

Section 4: First Aid Measures

Description of 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).

Inhalation: Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a poison center, physician, or emergency medical service.

Skin Contact: Remove contaminated clothing. Immediately flush skin with plenty of water for at least 60 minutes. Get immediate medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

General: Harmful if swallowed. Toxic in contact with skin. Toxic if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. May cause damage to organs through prolonged or repeated exposure.

Symptoms/Injuries After Inhalation: Inhalation of this material can cause serious health effects in small amounts, leading to unconsciousness and death. May be corrosive to the respiratory tract. Dust may be harmful or cause irritation.

Symptoms/Injuries After Skin Contact: This material is toxic in small amounts through skin contact, and can cause adverse health effects or death. This material may be absorbed through the skin and eyes. Causes severe irritation which will progress to chemical burns

Symptoms/Injuries After Eye Contact: Causes serious eye damage. Causes permanent damage to the cornea, iris, or conjunctiva

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock

Chronic Symptoms: May cause damage to organs (spleen) through prolonged or repeated exposure.

Indication of any immediate medical attention and special treatment needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

Section 5: Fire-fighting Measures

Extinguishing Media

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

Unsuitable extinguishing media Do not use a heavy water stream. Use of heavy stream of water may spread fire

Special hazards arising from the substance or mixture

Fire Hazard: Product is not flammable. Combustible Dust.

Explosion Hazard: Dust explosion hazard in air.

Reactivity: Sodium chlorite reacts with acids to form spontaneously explosive chlorine dioxide gas (ClO_2). Ammonia with chlorites produces ammonium chlorite, which is a shock-sensitive compound. Finely divided metallic or organic substances, if mixed with chlorites, are highly flammable and may be ignited on friction. A mixture of organic matter and sodium chlorite can be extremely sensitive to heat, impact, or friction. Sodium chlorite reacts very violently with organic materials containing divalent sulfur or with free sulfur (may ignite).

Advice for Firefighter

Precautionary Measures Fire:	Exercise caution when fighting any chemical fire.
Firefighter Instructions:	Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition.
Protective actions fire-fighters	Do not enter fire area without proper protective equipment, including respiratory protection
Hazard Combustion Products:	Sodium oxides, chlorine, chlorine oxides, corrosive vapors, sulfur compounds.
Further information	Do not allow run-off from firefighting to enter drains or water courses. Risk of dust explosion.

Reference to Other Sections
Reference to Section 9 for flammability properties.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures
Do not get in eyes, on skin, or on clothing. Do not breathe dust. Avoid generating dust. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Remove ignition sources.

For Non-Emergency Personnel

Protective Equipment:	Use appropriate personal protection equipment (PPE).
Emergency Procedures:	Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment:	Use appropriate personal protection equipment (PPE).
Emergency Procedures:	Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions
Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

Methods and materials for containment and cleaning up

For containment:	Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Avoid generation of dust during clean-up of spills. Ventilate area.
Methods for Cleaning Up:	Clean up spills immediately and dispose of waste safely. Cautiously neutralize spill if necessary. Use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Use only non-sparking tools. Contact competent authorities after a spill

Reference to other Sections
See Section 8, Exposure controls and personal protection. See Section 13, Disposal Considerations.

Section 7: Handling and Storage

Precautions for safe handling:

Additional Hazards when Proceed:	May release corrosive vapors. Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.
Precautions for Safe Handling:	Do not get in eyes, on skin, or on clothing. Do not breathe dust. Use only outdoors or in a well-ventilated area. Keep away from heat, sparks, open flames, hot surfaces. No smoking. Handle empty containers with care because they may still present a hazard.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking

or smoking and when leaving work. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Use only outdoors or in a well-ventilated area. Keep away from heat, sparks, open flames, hot surfaces. No smoking.

Conditions for safe storage, including any incompatibilities

Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust. Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up. Store in original container or corrosive resistant and/or lined container

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Combustible materials. May react with moisture. Flammable materials. Organic compounds. Wood. Oils and lubricants. Sulfur compounds

Storage Temperature: < 175 °C; Sodium chlorite decomposes at 175°C

Specific Uses: Disinfectant/Sanitizer/Tuberculocide/Virucide/Fungicide/Algaecide/Slimicide/ Deodorizer

Section 8: Exposure Controls/Personal Protection

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government

Chlorine dioxide (CAS#10049-04-4)

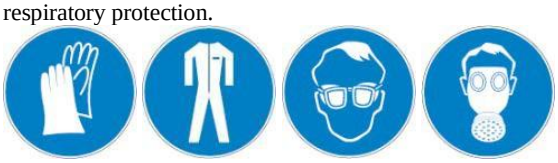
Mexico	OEL TWA (mg/m³)	0.3 mg/m³
Mexico	OEL TWA (ppm)	0.1 ppm
Mexico	OEL STEL (mg/m³)	0.9 mg/m³
Mexico	OEL STEL (ppm)	0.3 ppm
USA ACGIH	ACGIH TWA (ppm)	0.1 ppm
USA ACGIH	ACGIH STEL (ppm)	0.3 pp
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.3 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	0.1 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.3 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	0.1 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	0.9 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	0.3 ppm
USA IDLH	US IDLH (ppm)	5 ppm
Alberta	OEL STEL (mg/m³)	0.8 mg/m³
Alberta	OEL STEL (ppm)	0.3 ppm
Alberta	OEL TWA (mg/m³)	0.3 mg/m³
Alberta	OEL TWA (ppm)	0.1 ppm
British Columbia	OEL STEL (ppm)	0.3 ppm
British Columbia	OEL TWA (ppm)	0.1 ppm
Manitoba	OEL STEL (ppm)	0.3 ppm
Manitoba	OEL TWA (ppm)	0.1 ppm
New Brunswick	OEL STEL (mg/m³)	0.83 mg/m³
New Brunswick	OEL STEL (ppm)	0.3 ppm
New Brunswick	OEL TWA (mg/m³)	0.28 mg/m³
New Brunswick	OEL TWA (ppm)	0.1 ppm
Newfoundland & Labrador	OEL STEL (ppm)	0.3 ppm
Newfoundland & Labrador	OEL TWA (ppm)	0.1 ppm

Nova Scotia	OEL STEL (ppm)	0.3 ppm
Nova Scotia	OEL TWA (ppm)	0.1 ppm
Nunavut	OEL STEL (mg/m³)	0.82 mg/m³
Nunavut	OEL STEL (ppm)	0.3 ppm
Nunavut	OEL TWA (mg/m³)	0.27 mg/m³
Nunavut	OEL TWA (ppm)	0.1 ppm
Northwest Territories	OEL STEL (ppm)	0.3 ppm
Northwest Territories	OEL TWA (ppm)	0.1 ppm
Ontario	OEL STEL (ppm)	0.3 ppm
Ontario	OEL TWA (ppm)	0.1 ppm
Prince Edward Island	OEL STEL (ppm)	0.3 ppm
Prince Edward Island	OEL TWA (ppm)	0.1 ppm
Québec	VECD (mg/m³)	0.83 mg/m³
Québec	VECD (ppm)	0.3 ppm
Québec	VEMP (mg/m³)	0.28 mg/m³
Québec	VEMP (ppm)	0.1 ppm
Saskatchewan	OEL STEL (ppm)	0.3 ppm
Saskatchewan	OEL TWA (ppm)	0.1 ppm
Yukon	OEL STEL (mg/m³)	0.9 mg/m³
Yukon	OEL STEL (ppm)	0.3 ppm
Yukon	OEL TWA (mg/m³)	0.3 mg/m³
Yukon	OEL TWA (ppm)	0.1 ppm

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when toxic gases may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves, protective clothing, protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.
Hand Protection: Wear protective gloves.
Eye Protection: Chemical safety goggles.
Skin and Body Protection: Wear suitable protective clothing.
Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental Exposure Controls: Do not allow the product to be released to the environment.
Other Information: When using, do not eat, drink or smoke.

Section 9: Physical and Chemical Properties

Appearance – Color: White powder
Physical State: Solid
Odor: Chlorine
pH: Not available
Melting Point/Freezing Point: Not available

Initial Boiling Point and Boiling Range:	Not available
Flash Point:	Not available
Evaporation Rate:	Not available
Flammability (Solid, gas):	Not available
Upper/Lower Flammability or Explosive Limits:	Not available
Vapor Pressure:	Not available
Vapor Density	Not available
Relative Density (@25℃)	Not available
Solubility	Soluble in water
Oxidizing Properties	Not available
Partition Coefficient: n-octanol/water:	Not available
Auto Ignition Temperature:	Not available
Decomposition Temperature:	Not available
Viscosity:	Not available
Explosion Data – Sensitivity to Mechanical Impact:	Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge:	Not expected to present an explosion hazard due to static discharge.

Section 10: Stability and Reactivity

Reactivity:	Sodium chlorite reacts with acids to form spontaneously explosive chlorine dioxide gas (ClO_2). Ammonia with chlorites produces ammonium chlorite, which is a shock-sensitive compound. Finely divided metallic or organic substances, if mixed with chlorites, are highly flammable and may be ignited on friction. A mixture of organic matter and sodium chlorite can be extremely sensitive to heat, impact, or friction. Sodium chlorite reacts very violently with organic materials containing divalent sulfur or with free sulfur (may ignite).
Chemical Stability:	Stable under recommended handling and storage conditions (see section 7).
Conditions to Avoid:	Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition.
Incompatibility (Materials to avoid):	Strong acids. Strong bases. Strong oxidizers. Combustible materials. May react with moisture. Flammable materials. Organic compounds. Wood. Oils and lubricants.
Hazardous Decomposition Products:	Thermal decomposition generates: corrosive vapors. Sodium oxides. Chlorine gas. Chlorine oxides. Chlorine dioxide.

Section 11: Toxicological Information

GHS Required Criteria	Toxicity Criteria	Data	Comments	Chemical Constituent
Acute Toxicity	ATE_{mix} (oral)	540.98mg/kg	Harmful if swallowed	Product
	ATE_{mix} (dermal)	351.48mg/kg	Toxic in contact with skin	Product
	ATE_{mix} (dust, mist)	0.75mg/l/4hr	Toxic if inhaled	Product
	LD_{50} Oral, rat	5400mg/kg		Citric acid
	LD_{50} Dermal, rat	>2000mg/kg		Citric acid
	LD_{50} Oral, rat	165mg/kg		Sodium chlorite
	LD_{50} Dermal, rabbit	107.2mg/kg		Sodium chlorite
	LC_{50} Inhalation, rat	0.23mg/l,4hr		Sodium chlorite
	LD_{50} Oral, rat	93.86mg/kg (0.2%in H_2O)		Chlorine dioxide
	LC_{50} Inhalation, rat	32ppm/4hr		Chlorine dioxide
Skin Corrosion/Irritation		Not available	Causes severe skin burns	Product
Serious Eye Damage / Eye Irritation		Not available	Causes serious eye damamge	Product
Respiratory or Skin Sensitization		Not available	Not classified	Product
Germ Cell Mutagenicity		Not available	Not classified	Product
Teratogenicity		Not available		Product
Carcinogenicity		Group 3	IARC	Sodium chlorite
Reproductive Toxicity		Not available	Not classified	Product
STOST -- Single Exposure		Not available	Not classified	Product
STOST – Repeated Exposure		Not available	Not classified	Product
Aspiration Hazard		Not available	Not classified	Product

ATE_{mix} – Acute Toxicity Estimation of mixture

IARC – International Agency for Research on Cancer
STOST – Specific Target Organ Systemic Toxicity

OTHER INFORMATION:

Symptoms/Injuries After Inhalation: Inhalation of this material can cause serious health effects in small amounts, leading to unconsciousness and death. May be corrosive to the respiratory tract. Dust may be harmful or cause irritation.

Symptoms/Injuries After Skin Contact: This material is toxic in small amounts through skin contact, and can cause adverse health effects or death. This material may be absorbed through the skin and eyes. Causes severe irritation which will progress to chemical burns.

Symptoms/Injuries After Eye Contact: Causes serious eye damage. Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock.

Chronic Symptoms: May cause damage to organs (spleen) through prolonged or repeated exposure.

Section 12: Ecological Information

Toxicity

Ecology – General: Not classified.

	Environmental Impacts	**Chemical Constituents**
Toxicity	LC_{50} Fish 1: 1516mg/l, 96hr, Lepomis macrochirus [static]	Citric acid
	LC_{50} Fish 1: 100 - 500 mg/l, 96 h - Brachydanio rerio [static]	Sodium chlorite
	LC_{50} Fish 2: >100mg/l, 96 h - Lepomis macrochirus [static]	Sodium chlorite
	EC_{50} Daphnia 1: 0.026 mg/l, 48 h , Daphnia magna	Sodium chlorite
	EC_{50} Daphnia 2: 0.25-0.33 mg/l, 48 h , Daphnia magna, flow though.	Sodium chlorite
	LC_{50} Fish 1: 0.021Brachydanio rerio	Chlorine dioxide
Bioaccumulative potential	Not available	Product
	Log P_{ow} = -1.75 (at 20° C)	Citric acid
Persistence and degradability:	May cause long-term adverse effects in the environment	Product
Mobility in soil:	Not available	Product
PBT and vPvB assessment:	Not available	Product
Other adverse effects:	Avoid release to the environment	Product

Section 13: Disposal Considerations

Sewage Disposal Recommendations:
The material is hazardous to the aquatic environment, Keep out of sewers and waterways.

Waste Disposal Recommendations:
Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations

Additional Information:
Container may remain hazardous when empty. Continue to observe all precautions.

Ecology – waste materials:
Avoid release to the environment. The material is hazardous to the aquatic environment, Keep out of sewers and waterways.

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Section 14: Transport Information

In accordance with ICAO/IATA/DOT/TDG/IMDG

UN Number

UN Number (DOT):	UN2923
DOT NA no.:	UN2923
UN Number (TDG):	UN2923
UN Number (IMDG):	UN2923
UN Number (IATA):	UN2923

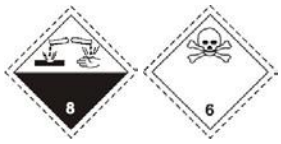
UN Proper Shipping Name

Proper Shipping Name (DOT):	CORROSIVE SOLIDS, TOXIC, N.O.S., (SODIUM CHLORITE), 8; 6.1, II, Marine Pollutant.
Proper Shipping Name (TDG):	CORROSIVE SOLIDS, TOXIC, N.O.S., (SODIUM CHLORITE), 8; 6.1, II, Marine Pollutant.
Proper Shipping Name (IATA):	CORROSIVE SOLIDS, TOXIC, N.O.S., (SODIUM CHLORITE), 8; 6.1, II, Marine Pollutant.
Proper Shipping Name (IMDG):	CORROSIVE SOLIDS, TOXIC, N.O.S., (SODIUM CHLORITE), 8; 6.1, II, Marine Pollutant.
Transport Document Description (DOT):	CORROSIVE SOLIDS, TOXIC, N.O.S., (SODIUM CHLORITE), 8; 6.1, II, Marine Pollutant.
Transport Document Description (TDG):	CORROSIVE SOLIDS, TOXIC, N.O.S., (SODIUM CHLORITE), 8; 6.1, II, Marine Pollutant.
Transport Document Description (Adr)(IMDG/IATA):	CORROSIVE SOLIDS, TOXIC, N.O.S., (SODIUM CHLORITE), 8; 6.1, II, Marine Pollutant.

Transport Hazard Class(es)

Hazard Classes (DOT): 8 – Class 8 – Corrosive Material, 49CFR173.136

Hazard Labels (DOT): 8 – Corrosive
6.1 – Poison



DOT Symbols: G – Identifies PSN requiring a technical name.

Packing Group (DOT): II – Medium Danger

DOT Special Provisions (49CFR172.102): IB8 – Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).
IP2 – When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.
IP4 – Flexible, fiberboard or wooden IBCs must be sift-proof and water- resistant or be fitted with a sift-proof and water-resistant liner.
T3 – 2.65 178.274(d)(2) Normal.....178.275(d)(2)
TP33 – The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for

transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure- relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

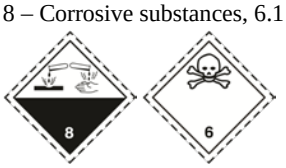
DOT Packaging Exceptions (49CFR173.XXX): 154
DOT Packaging Non Bulk (49CFR173.XXX): 212
DOT Packaging Bulk (49CFR173.XXX): 240

TDG Primary Hazard Classes: 8 – Corrosives
TDG Subsidiary Classes: 6.1 – Toxic
Hazard Labels (TDG): 8 – Corrosive substances
6.1 – Toxic substances

Packing Group(TDG): II – Medium Danger
TDG Special Provisions: 16 - 1). The technical name of the most dangerous substance related to the primary class must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(i)(A) of Part 3, Documentation. The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4, Dangerous Goods Safety Marks.
2). subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical: a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S.; b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S.; c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S.; d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S.; or e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example in Canada is the "Food and Drugs Act".

Explosive Limit And Limited Quantity Index: 1
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index: 15

Class (IMDG): 8 – Corrosive substances
Subsidiary Risks (IMDG): 6.1
Danger Labels (IMDG): 8 – Corrosive substances, 6.1 – Toxic substances



Packing Group (IMDG): II – Medium Danger

Class (IATA):	8 – Corrosive substances
Subsidiary Risks (IATA):	6.1
Hazard Labels (IATA):	8 – Corrosive substances, 6.1 – Toxic substances

Packing Group (IATA):	II – Medium Danger
Marine Pollutant:	P

Additional Information

Emergency Response Guide (ERG) Number:	138
Additional Information:	This Product meets the limited quantities as follows: DOT – Not regulated as dangerous goods when shipped in inner packagings equal to or less then 1 kg. Otherwise, the above descriptions apply.

Transport by Sea

DOT Vessel Stowage Location:	B – (i). The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) ‘‘On deck only’’ on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
DOT Vessel Stowage Other:	40 – Stow “clear of living quarters”
Subsidiary Risks (IMDG):	6.1
Limited Quantities (IMDG):	1kg
Special Provisions (IMDG):	274
Excepted Quantities (IMDG):	E2
IBC Packing Instructions (IMDG):	IBC08
IBC Special Provisions (IMDG):	B2, B4
Packing Instructions (IMDG):	P002
Tank Instructions (IMDG):	T3
Tank Special Provisions (IMDG):	TP33
Stowage Category (IMDG):	B
EMS-NO. (Fire):	F-A
MFAG-NO:	154
EMS-NO. (Spillage):	S-B

Air Transport

DOT Quantity Limitations Passenger Aircraft/Rail (49 CFR 173.27):	15kg
DOT Quantity Limitations Cargo Aircraft Only (49 CFR 175.75):	50kg
Subsidiary Risks (IATA):	6.1
CAO Packing Instruction (IATA):	863
CAO Max Net Quantity (IATA):	50kg
PCA Packing Instruction (IATA):	859
PCA Limited Quantities (IATA):	Y844
PCA Limited Quantity Max Net Quantity (IATA):	5kg
PCA Max Net Quantities (IATA):	15kg
PCA Excepted Quantities (IATA):	E2
Special Provision (IATA):	A3, A803
ERG Code (IATA):	8P

ProKure SOLUTIONS
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Section 15: Regulatory Information

US Federal Regulations

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:
Citric acid, sodium chlorite, and chlorine dioxide are listed on TSCA.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) Section 311/312
Product – Immediate (acute) health hazard, Delayed (chronic) health hazard.
Citric acid – Immediate (acute) health hazard.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) Section 313
Chlorine dioxide is subject to Emission Reporting at 1.0%

US State Regulations:

Citric acid (CAS#77-92-9)

U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Sodium chlorite (7758-19-2)

U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category2
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
RTK - U.S. - Massachusetts - Right To Know List
U.S. - Minnesota - Chemicals of High Concern
U.S. - California - Safer Consumer Products - Initial List of Candidate Chemicals and Chemical Groups.
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List
RTK - U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Chlorine dioxide (CAS#10049-04-4)

U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)
U.S. - Colorado - Primary Drinking Water Regulations - Maximum Residual Disinfectant Level Goals (MRDLGs)
U.S. - Colorado - Primary Drinking Water Regulations - Maximum Residual Disinfectant Levels (MRDLs)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
U.S. - Delaware - Accidental Release Prevention Regulations - Sufficient Quantities
U.S. - Delaware - Accidental Release Prevention Regulations - Threshold Quantities
U.S. - Delaware - Accidental Release Prevention Regulations - Toxic Endpoints
U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities
U.S. - Georgia - Drinking Water - Maximum Residual Disinfectant Levels (MRDLs)
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
U.S. - Idaho - Occupational Exposure Limits - TWAs
U.S. - Louisiana - Reportable Quantity List for Pollutants
U.S. - Maine - Air Pollutants - Hazardous Air Pollutants
U.S. - Massachusetts - Drinking Water - Maximum Contaminant Levels (MCLs)
U.S. - Massachusetts - Drinking Water - Maximum Residual Disinfectant Levels (MRDLs)
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category2
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity

U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1

U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2

RTK - U.S. - Massachusetts - Right To Know List

U.S. - Massachusetts - Toxics Use Reduction Act

U.S. - Michigan - Occupational Exposure Limits - STELs

U.S. - Michigan - Occupational Exposure Limits - TWAs

U.S. - Michigan - Process Safety Management Highly Hazardous Chemicals

U.S. - Minnesota - Chemicals of High Concern

U.S. - Minnesota - Hazardous Substance List

U.S. - Minnesota - Permissible Exposure Limits - STELs

U.S. - Minnesota - Permissible Exposure Limits - TWAs

U.S. - Missouri - Drinking Water - Maximum Residual Disinfectant Levels (MRDLs)

U.S. - Nebraska - Drinking Water - Maximum Residual Disinfectant Levels (MRDLs)

U.S. - New Hampshire - Drinking Water - Maximum Residual Disinfectant Levels (MRDLs)

U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour

U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual

U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances

U.S. - New Jersey - Environmental Hazardous Substances List

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

U.S. - New Jersey - Special Health Hazards Substances List

U.S. - New Jersey - TCPA - Extraordinarily Hazardous Substances (EHS)

U.S. - New York - Occupational Exposure Limits - TWAs

U.S. - Pennsylvania - Drinking Water - Maximum Residual Disinfectant Levels (MRDLs)

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

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

U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - 24-Hour

U.S. - Rhode Island - Air Toxics - Acceptable Ambient Levels - Annual

U.S. - South Carolina - Maximum Residual Disinfectant Levels (MRDLs)

U.S. - Tennessee - Occupational Exposure Limits - STELs

U.S. - Tennessee - Occupational Exposure Limits - TWAs

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

U.S. - Utah - Drinking Water - Maximum Residual Disinfectant Levels (MRDLs)

U.S. - Vermont - Permissible Exposure Limits - STELs

U.S. - Vermont - Permissible Exposure Limits - TWAs

U.S. - Washington - Permissible Exposure Limits - STELs

U.S. - Washington - Permissible Exposure Limits - TWAs

U.S. - West Virginia - Water Quality - Groundwater Standards - Ceiling Concentrations

U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet

U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 75 Feet

U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater

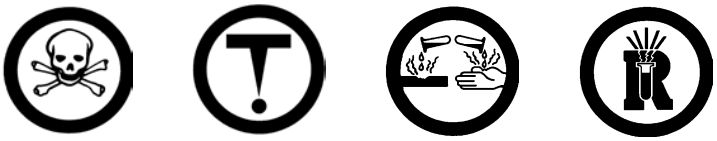
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

U.S. - Wyoming - Process Safety Management - Highly Hazardous Chemicals

Canadian Regulations

ProKure™V Unreacted Pouch

WHMIS Classification	Class D Division 1 Subdivision B – Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision B – Toxic material causing other toxic effects. Class E – Corrosive Material Class F – Dangerously Reactive Material



Citric acid (CAS#77-92-9	
DSL	Listed on the Canadian DSL (Domestic Substance List)
IDL	Listed on the Canadian IDL (Ingredient Disclosure List) – Concentration 1.0%
WHMIS Classification	Class D Division 2 Subdivision B – Toxic material causing other toxic effects.
Sodium chlorite (CAS#7758-19-2)	
DSL	Listed on the Canadian DSL (Domestic Substance List)
IDL	Listed on the Canadian IDL (Ingredient Disclosure List) – Concentration 1.0%
WHMIS Classification	Class C – Oxidizing Material
	Class D Division 1 Subdivision B – Toxic material causing immediate and serious effects
	Class E – Corrosive Material
Chlorine dioxide (CAS#10049-04-4)	
DSL	Listed on the Canadian DSL (Domestic Substance List)
IDL	Listed on the Canadian IDL (Ingredient Disclosure List) – Concentration 1.0%
WHMIS Classification	Class A – Compressed Gas Class C – Oxidizing Material Class D Division 1Subdivision A – Very toxic material causing immediate and serious toxic effects Class E – Corrosive Material Class F – Dangerously Reactive Material

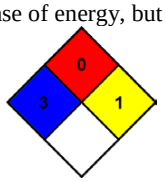
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

Section 16: Other Information

NFPA Health Hazard: 3 – Short exposure could cause serious temporary or residual injury even though prompt attention was given.

NFPA Fire Hazard: 0 – Materials that will not burn.

NFPA Reactivity: 1 – Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.



Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Revision Number: 4.0

Revision explanation: Name changed from ProKure V to ProKure V Unreacted Pouch Information in sections 2, 9, 10 updated to pertain to unreacted pouch only. Information in sections 8, 11, 12, 13, 15, 16 updated. UN number and related information changed in section 14. Please see ProKure V Ready to Use Solution SDS for more information on chlorine dioxide solution.

Information Sources: RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

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