SAFETY DATA SHEET

Issue Date: May 22, 2018.

Revision Date: August 25, 2020.

SECTION 1 - COMPANY AND PRODUCT IDENTIFICATION

1.1	Product Name:	CHELENE 451 PX
1.2	Company Identification:	Clarke Minerals LLC
		1700 66 th Street North
		Suite 104-1028
		St. Petersburg, FL 33710.
		(863) 868-0088
1.3	Emergency Phone Number:	CHEMTREC (24 hours every day): 1-800-424-9300

SECTION 2 - HAZARDS IDENTIFICATION

Appearance: White Crystalline Powder that causes little or no known hazards

Potential Health Effects:

- Skin: May cause irritation
- Eye: May cause eye irritation
- Inhalation: May cause irritation to the upper respiratory tract
- Ingestion: Not hazardous in normal industrial use
- Carcinogenic Effects: Not listed under OSHA, IARC, or NTP

GHS Classification

Acute toxicity - Oral Category 4 Acute toxicity – Inhalation (Vapors) Category 4 Serious eye damage/eye irritation Category 1 Label Elements Symbols/Pictograms



Signal Word Hazard Statements	Danger Harmful if swallowed Harmful if inhaled Causes serious eye damage
Precautionary Statements	
Prevention	Avoid breathing dust/fume/gas/mist/vapors/spray
	Wash face, hands and any exposed skin thoroughly after handling
	Do not eat, drink or smoke when using this product
	Use only outdoors or in a well-ventilated area
	Wear eye/face protection
Response	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician
Storage	None
Disposal	Dispose of waste product or used containers according to local regulations.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Tetrasodium EDTA C10H16N2O8 · 4Na 64-02-8 SECTION 4 - FIRST AID MEASURES Skin Contact: Wash off skin with plenty of soap and water Eye Contact: Flush eyes with plenty of water for at least 15 mins, occasionally lifting the upper and lower lids un no evidence of chemical remains. Get medical aid at once. Inhalation: Move victim to fresh air. Keep victim warm and at rest. Ingestion: Wash out mouth, then dilute by drinking several glasses of water SECTION 5 - FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Flash Points: N/A Upper Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors	Ingredient	Chemical Formula	CAS #
Skin Contact: Wash off skin with plenty of soap and water Eye Contact: Flush eyes with plenty of water for at least 15 mins, occasionally lifting the upper and lower lids un no evidence of chemical remains. Get medical aid at once. Inhalation: Move victim to fresh air. Keep victim warm and at rest. Ingestion: Wash out mouth, then dilute by drinking several glasses of water SECTION 5 – FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Ipper Flammable Limit: N/A Lower Flammable Limit: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors	Tetrasodium EDTA	C ₁₀ H ₁₆ N ₂ O ₈ ·4Na	64-02-8
Skin Contact: Wash off skin with plenty of soap and water Eye Contact: Flush eyes with plenty of water for at least 15 mins, occasionally lifting the upper and lower lids un no evidence of chemical remains. Get medical aid at once. Inhalation: Move victim to fresh air. Keep victim warm and at rest. Ingestion: Wash out mouth, then dilute by drinking several glasses of water SECTION 5 – FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Ipper Flammable Limit: N/A Lower Flammable Limit: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors			
Wash off skin with plenty of soap and water Eye Contact: Flush eyes with plenty of water for at least 15 mins, occasionally lifting the upper and lower lids un no evidence of chemical remains. Get medical aid at once. Inhalation: Move victim to fresh air. Keep victim warm and at rest. Ingestion: Wash out mouth, then dilute by drinking several glasses of water SECTION 5 – FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Flash Points: N/A Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors	SECTION 4 - FIRST AID ME	ASURES	
Eye Contact: Flush eyes with plenty of water for at least 15 mins, occasionally lifting the upper and lower lids un no evidence of chemical remains. Get medical aid at once. Inhalation: Move victim to fresh air. Keep victim warm and at rest. Ingestion: Wash out mouth, then dilute by drinking several glasses of water SECTION 5 – FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Ipper Flammable Limit: N/A Upper Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors	Skin Contact:		
Flush eyes with plenty of water for at least 15 mins, occasionally lifting the upper and lower lids un no evidence of chemical remains. Get medical aid at once. Inhalation: Move victim to fresh air. Keep victim warm and at rest. Ingestion: Wash out mouth, then dilute by drinking several glasses of water SECTION 5 – FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Flash Points: N/A Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors	Wash off skin with plenty of soap a	ind water	
no evidence of chemical remains. Get medical aid at once. Inhalation: Move victim to fresh air. Keep victim warm and at rest. Ingestion: Wash out mouth, then dilute by drinking several glasses of water SECTION 5 – FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Flash Points: N/A Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors	•		
Inhalation: Move victim to fresh air. Keep victim warm and at rest. Ingestion: Wash out mouth, then dilute by drinking several glasses of water SECTION 5 – FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Flash Points: N/A Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors			ly lifting the upper and lower lids until
Ingestion: Wash out mouth, then dilute by drinking several glasses of water SECTION 5 - FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Flash Points: N/A Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritating and toxic gases and vapors			
SECTION 5 – FIRE AND EXPLOSION DATA Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Flash Points: N/A Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors			
Flammability of the Product: Non-flammable Auto-Ignition Temperature: N/A Flash Points: N/A Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatin and toxic gases and vapors	-	, ,	glasses of water
Auto-Ignition Temperature: N/A Flash Points: N/A Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritating and toxic gases and vapors	SECTION 5 – FIRE AND EXP	LUSION DATA	
Flash Points: N/A Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatir and toxic gases and vapors	Flammability of the Product: No	n-flammable	
Upper Flammable Limit: N/A Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatin and toxic gases and vapors	Auto-Ignition Temperature: N/A	L	
Lower Flammable Limit: N/A Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatin and toxic gases and vapors	Flash Points: N/A		
Hazardous Combustion Products: N/A Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritating and toxic gases and vapors	Upper Flammable Limit: N/A		
Unusual Fire Explosion Data: N/A Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatin and toxic gases and vapors	Lower Flammable Limit: N/A		
 Special Remarks on Fire Hazards: Use fire-fighting procedure that is appropriate to treat surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatin and toxic gases and vapors 	Hazardous Combustion Products:	N/A	
surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatin and toxic gases and vapors	Unusual Fire Explosion Data: N	/A	
surrounding fire Specific hazards arising from the chemical: Thermal decomposition can lead to release of irritatin and toxic gases and vapors	Special Remarks on Fire Hazards:	Use fire-fighting procedure	e that is appropriate to treat
and toxic gases and vapors	surrounding fire		
	Specific hazards arising from the c	hemical: Thermal decomp	osition can lead to release of irritating
			-
Protective equipment and precautions for firefighters: As in any fire, wear self-contained		tions for firefighters: As in	any fire, wear self-contained
breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective		•	
gear.			. , ,

SECTION 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8

Spills/Leaks: Contain spill, sweep up material and place into a suitable disposal container. Clean up spills immediately. Avoid runoff into storm sewers and ditches which lead to waterways.

SECTION 7 - HANDLING AND STORAGE

Handling Procedures and Equipment: Wash thoroughly after handling. Avoid breathing dust. Avoid contact with eyes and skin. Wear suitable protective clothing. If ingested, seek medical advice immediately. Use proper personal protective equipment as indicated in Section 8

Storage Requirements: Store in a cool, dry area away from other incompatible materials. Product is slightly hydroscopic and should be stored so as to avoid moisture pickup and caking.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

ACGIH TLV: 10 mg/m³ OSHA PEL (Total): 15 mg/m³ OSHA PEL (Respirable): 5 mg/m³ Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eye wash facility and a safety shower. Use adequate general or local exhaust ventilation to keep dust concentrations below the permissible exposure limits above.

Personal Protective Equipment:

Eye: No contact lenses while working with chemicals. Eye wash fountain must be available.Wear appropriate eyeglasses or safety goggles described in 29 CFR 1910.133.Skin: Wear appropriate protective clothing such as neoprene gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing such as gloves to prevent skin exposure. **Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134. Use NIOSH/MSHA approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Work/Hygienic Practices: Do not leave food or smoke in work area. Wash thoroughly and remove or clean any contaminated clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical Sate:Solid PowderOdor and Appearance:Odorless White PowderOdor Threshold:N/ABoiling Point:N/AFreezing Point:N/AMelting Point:N/ACritical Temperature:N/AEvaporation Rate:N/APH:11.5 @ 1% solutionSolubility in Water:soluble in water.

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal temperatures and pressures
 Incompatibility with other substances: Somewhat reactive with oxidizing acids
 Hazardous Decomposition Products: Oxides of carbon and nitrogen
 Polymerization: Will not occur
 Keep away from: None Known

SECTION 11 - TOXICOLOGICAL INFORMATION

-Cancer Lists ---NIP Carcinogen---Ingredient Known Anticipated IARC Category Ethylenediaminetetraacetic Acid No No None Acute toxicity 0.6~1% of the mixture consists of ingredient(s) of unknown toxicity.

Serious eye damage/eye irritation: Causes serious eye damage

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate: No information found Environmental Toxicity: No information found

Bio accumulative potential: Material does not bioaccumulate

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of in accordance with Federal, State, and local regulations

SECTION 14 - TRANSPORT INFORMATION

DOT Proper Shipping Name: Tetrasodium EDTA

DOT Hazard Class/ Identification No.: N/A

SECTION 15 - REGULATORY INFORMATION

ernational Inven	1			51100	15000	1/5.01	DIGGS	
Component	AICS	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	TSCA
Tetrasodium	Х	Х	Х	Х	Х	Х	Х	Х
EDTA (64-02-8)								
"X" Listed								
US Federal Regu	lations							
SARA 313								
No information av	allable							
SARA 311/312 H No information a		ategories						
NO INICITIATION A	avaliable							
CWA (Clean Wa	ater Act)							
No information a								
CERCLA								
No information a	vailable							
US State Regula	ations							
California Propos	ition 65							
No information av								
U.S. State Right		Regulations						
No information a	available							

SECTION 16 - OTHER INFORMATION

References: Not available

Created: 05/22/2018

Last Updated: 08/25/20

Key to abbreviations and acronyms used in the safety data sheet

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Disclaimer

This MSDS has been prepared according to OSHA Hazard Communication Standard [29 CFR 1910.1200]. The information is based on sources believed to be reliable. Notwithstanding, data, safety standards and government regulations are subject to changes that are beyond the scope of our control. As such, Clarke Minerals LLC makes no warranty, either expressed or implied, with regards to the completeness or future accuracy of the information contained herein. Similarly, Clarke Minerals LLC disclaims all liability for reliance thereon. Furthermore, additional information may be necessary for specific conditions and circumstances. It is therefore the responsibility of the user to determine the suitability of this product and determine the appropriate precautions for protection of their employees.

----- End of Safety Data Sheet ------