Safety Data Sheet: CITRATECH

1. PRODUCT AND COMPANY IDENTIFICATION

Supercedes Date 05/27/2011

Product Name CITRATECH Recommended use Cleaning agent Information on Manufacturer

CHEMSEARCH DIV. OF NCH CORP. BOX 152170

IRVING, TX 75015

Product Code 0020 Chemical nature Solvent mixture **Emergency Telephone Number** CHEMTREC[®] 800-424-9300 **Telephone inquiry** 972-579-2477

2. HAZARD IDENTIFICATION		
Color Yellow-orange	Physical State Liquid	Odor Citrus
GHS		
Classification		
Physical Hazards		
Flammable liquids	Category 4	
Health Hazard		
Aspiration Toxicity	Category 1	
Acute Dermal Toxicity	Category 4	
Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation	Category 2 Category 1	
Respiratory Sensitization	Category 1	
Skin Sensitization	Category 1	
Specific target organ systemic toxicity (single exposure)	Category 3	
Specific target organ systemic toxicity (repeated exposure)	Category 2	
<u>Other hazards</u> None		
_abeling		
<u>Signal Word</u> DANGER		
Hazard Statements	Precautionary Statements	
H227 - Combustible liquid	P210 - Keep away from heat, sparks, open flames or h	
H315 - Causes skin irritation	P280 - Wear protective gloves, protective clothing and e	
l317 - May cause an allergic skin reaction l318 - Causes serious eye damage	P264 - Wash face, hands and any exposed skin thorou P272 - Contaminated work clothing should not be allow	
1332 - Harmful if inhaled	P260 - Do not breathe vapors, mist or gas	ed out of the workplace
1336 - May cause drowsiness or dizziness	P271 - Use in a well-ventilated area.	
, , , , ,	culties if P285 - In case of inadequate ventilation wear respirator	ry protection
haled	P302+ P352 - IF ON SKIN: Wash with plenty of soap an	
1304 - May be fatal if swallowed and enters airways	P333 + P313 - If skin irritation or rash occurs, get medic	
H373 - May cause damage to organs through prolonged or repeating processing the process of th	ated P362 - Take off contaminated clothing and wash before P305 + P351 + P338 - IF IN EYES: Rinse cautiously with	
	Remove contact lenses, if present and easy to do. Cont	
	P310 - Immediately call a physician	- -
	P304 + P340 - IF INHALED: Remove person to fresh air	and keep at rest in a position
	comfortable for breathing.	u
	P342 + P311 - If experiencing respiratory symptoms, ca	
	P301+ P330 + P331 - IF SWALLOWED: Rinse mouth. DC	NOT induce vomiting. Call a
	physician if unwell.	0
		0

4 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
1-Tetradecene	1120-36-1	40-70
D-Limonene	5989-27-5	15-40
2,6,8-Trimethyl-4-nonyloxy polyethylene oxyethanol	60828-78-6	3-7
2-Ethyl-1-dodecene	19780-34-8	1-5
2-Butyl-1-decene	51655-65-3	1-5

	4. FIRST AID MEASURES				
General advice Eye Contact					
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation develops and persists. Wash contaminated clothing				
nhalation	before re-use. Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificia respiration. Get medical attention immediately.				
ngestion	give anything by mouth to an unconscious pe				
Notes to physician	Aspiration hazard if swallowed - can enter lur enters airways. May cause sensitization of su	ngs and cause damage. May be fatal if swallowed and usceptible persons.			
	5. FIRE-FIGHTING MEASUR	ES			
Flash Point 150 °F / 66 °C Flammability Limits in Air % Mixture. Suitable Extinguishing Media	Method Upper 9.2	Seta closed cup Lower 0.5			
urrounding environment. Specific hazards arising from the che		hat are appropriate to local circumstances and the			
Protective Equipment and Precaution As in any fire, wear self-contained breat IFPA Health 2	as for Firefighters athing apparatus pressure-demand, MSHA/NIOSH Flammability 2	(approved or equivalent) and full protective gear. Instability 0			
Protective Equipment and Precaution As in any fire, wear self-contained breat IFPA Health 2	as for Firefighters athing apparatus pressure-demand, MSHA/NIOSH Flammability 2 Flammability 2	d (approved or equivalent) and full protective gear. Instability 0 Instability 0			
Protective Equipment and Precaution As in any fire, wear self-contained brea NFPA Health 2 HMIS Health 2	athing apparatus pressure-demand, MSHA/NIOSH Flammability 2 Flammability 2 6. ACCIDENTAL RELEASE MEAS Use personal protective equipment. Remove	A (approved or equivalent) and full protective gear. Instability 0 Instability 0 SURES all sources of ignition. Ensure adequate ventilation.			
Protective Equipment and Precaution As in any fire, wear self-contained breat IFPA Health 2 IMIS Health 2 Personal Precautions Environmental Precautions	Athing apparatus pressure-demand, MSHA/NIOSH Flammability 2 Flammability 2 6. ACCIDENTAL RELEASE MEAS Use personal protective equipment. Remove Prevent further leakage or spillage if safe to d Do not flush into storm sewer systems. Contain spillage, soak up with non-combustil diatomaceous earth, vermiculite) and transfe	A (approved or equivalent) and full protective gear. Instability 0 Instability 0 SURES all sources of ignition. Ensure adequate ventilation. do so. Material can create slippery conditions. ble absorbent material, (e.g. sand, earth,			
Protective Equipment and Precaution As in any fire, wear self-contained breat NFPA Health 2 HMIS Health 2 Personal Precautions Environmental Precautions Methods for Cleaning Up	As for Firefighters athing apparatus pressure-demand, MSHA/NIOSH Flammability 2 Flammability 2 6. ACCIDENTAL RELEASE MEAS Use personal protective equipment. Remove Prevent further leakage or spillage if safe to d Do not flush into storm sewer systems. Contain spillage, soak up with non-combustil diatomaceous earth, vermiculite) and transfe regulations (see section 13). Use clean non-sparking tools to collect absol containers.	A (approved or equivalent) and full protective gear. Instability 0 Instability 0 SURES all sources of ignition. Ensure adequate ventilation. do so. Material can create slippery conditions. ble absorbent material, (e.g. sand, earth, ar to a container for disposal according to local / nation			
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Protective Equipment and Precaution As in any fire, wear self-contained breat NFPA Health 2 MIS Health 2 Personal Precautions Environmental Precautions Methods for Cleaning Up Neutralizing Agent	As for Firefighters athing apparatus pressure-demand, MSHA/NIOSH Flammability 2 Flammability 2 6. ACCIDENTAL RELEASE MEAS Use personal protective equipment. Remove Prevent further leakage or spillage if safe to d Do not flush into storm sewer systems. Contain spillage, soak up with non-combustil diatomaceous earth, vermiculite) and transfe regulations (see section 13). Use clean non-sparking tools to collect absor- containers. Not applicable. 7. HANDLING AND STORAG	A (approved or equivalent) and full protective gear. Instability 0 Instability 0 SURES all sources of ignition. Ensure adequate ventilation. do so. Material can create slippery conditions. ble absorbent material, (e.g. sand, earth, rr to a container for disposal according to local / nation rbed material. Pick up and transfer to properly labeled BE			
Protective Equipment and Precaution As in any fire, wear self-contained breat NFPA Health 2 HMIS Health 2 Personal Precautions Environmental Precautions Methods for Cleaning Up Neutralizing Agent Handling Storage	As for Firefighters athing apparatus pressure-demand, MSHA/NIOSH Flammability 2 Flammability 2 6. ACCIDENTAL RELEASE MEAS Use personal protective equipment. Remove Prevent further leakage or spillage if safe to d Do not flush into storm sewer systems. Contain spillage, soak up with non-combustil diatomaceous earth, vermiculite) and transfe regulations (see section 13). Use clean non-sparking tools to collect absol containers. Not applicable. 7. HANDLING AND STORAC Keep away from open flames, hot surfaces and clothing. Avoid breathing vapors or mists. Keep away from heat and sources of ignition. closed in a cool, well-ventilated place.	A (approved or equivalent) and full protective gear. Instability 0 Instability 0 SURES all sources of ignition. Ensure adequate ventilation. do so. Material can create slippery conditions. ble absorbent material, (e.g. sand, earth, er to a container for disposal according to local / nation rbed material. Pick up and transfer to properly labeled GE nd sources of ignition. Avoid contact with skin, eyes an . Store in original container. Keep containers tightly			
Protective Equipment and Precaution As in any fire, wear self-contained brea NFPA Health 2	As for Firefighters athing apparatus pressure-demand, MSHA/NIOSH Flammability 2 Flammability 2 6. ACCIDENTAL RELEASE MEAS Use personal protective equipment. Remove Prevent further leakage or spillage if safe to d Do not flush into storm sewer systems. Contain spillage, soak up with non-combustil diatomaceous earth, vermiculite) and transfe regulations (see section 13). Use clean non-sparking tools to collect absol containers. Not applicable. 7. HANDLING AND STORAC Keep away from open flames, hot surfaces and clothing. Avoid breathing vapors or mists. Keep away from heat and sources of ignition.	A (approved or equivalent) and full protective gear. Instability 0 Instability 0 SURES all sources of ignition. Ensure adequate ventilation. do so. Material can create slippery conditions. ble absorbent material, (e.g. sand, earth, or to a container for disposal according to local / nation rbed material. Pick up and transfer to properly labeled BE DE nd sources of ignition. Avoid contact with skin, eyes an			

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures Personal Protective Equipment Eye/Face Protection Skin Protection Respiratory Protection

General Hygiene Considerations

Ensure adequate ventilation, especially in confined areas.

Tightly fitting safety goggles. Wear suitable protective clothing, Impervious gloves. In case of inadequate ventilation wear respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure that eyewash stations and safety showers are close to the workstation location. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Color Odor Threshold pH Evaporation Rate VOC Content (%) Vapor Pressure Solubility Melting Point/Range Boiling Point/Range Flash Point Autoignition Temperature Flammability Limits in Air % Liquid Yellow-orange Not applicable Not applicable 0.08 (Butyl acetate=1) 94.9 2.2 mmHg @ 70°F Negligible No data available 348 °F / 176 °C 150 °F / 66 °C No information available. Mixture. Viscosity Odor Appearance Specific Gravity Percent Volatile (Volume) VOC Content (g/L) Vapor Density n-Octanol/Water Partition Decomposition Temperature Flammability (solid, gas) Method Non viscous Citrus Transparent - Slightly hazy 0.801 96 760 2.8 (Air = 1.0) No data available No data available No data available Seta closed cup

Upper 9.2 Lower 0.5

10. STABILITY AND REACTIVITY

Chemical Stability Conditions to Avoid Incompatible Products

Hazardous Decomposition Products

Possibility of Hazardous Reactions

Stable. Hazardous polymerization does not occur. Keep away from open flames, hot surfaces, and sources of ignition Strong oxidizing agents, Reducing agents, Acids, Strong bases, Highly halogenated compounds, Metals. Carbon oxides, Nitrogen oxides (NOx), Aldehydes, Ketones, Organic acids.

None under normal processing

11. TOXICOLOGICAL INFORMATION

Product Information

No information available.

Oral LD50	No information available
Dermal LD50	No information available
Inhalation LC50	
Gas	No information available
Mist	No information available
Vapor	No information available
Principle Route of Exposure	Inhalation, Skin contact, Eye contact.
Primary Routes of Entry	Inhalation, Skin Absorption.
Acute Effects	
Eyes	Severe irritation.
Skin	Causes skin irritation. May cause allergic skin reaction.
Inhalation	May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. May cause allergic respiratory reaction.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.
Chronic Toxicity	May cause sensitization by skin contact. May cause sensitization by inhalation. Prolonged skin contact may defat the skin and produce dermatitis. Liver and kidney injuries may occur.
Target Organ Effects	Central nervous system, Lungs, Kidney, Liver, Bladder, Immune system, Skin, Eyes.
Aggravated Medical Conditions Component Information	Respiratory disorders, Skin disorders, Kidney disorders, Liver disorders.

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
1-Tetradecene	= 21300 mg/kg (Rat) >	= 10000 mg/kg (Rabbit)	no data available	no data available	no data available
	10000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)			
		> 2430 mg/kg (Rabbit)			
D-Limonene	= 4400 mg/kg (Rat)	> 5 g/kg(Rabbit)	no data available	no data available	no data available
2,6,8-Trimethyl-4-nonyloxy	no data available	= 4780 µL/kg (Rabbit)	no data available	no data available	no data available

polyethylene oxyethanol					
Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
D-Limonene	no data available	Skin sensitization,	no data available	no data available	CNS, immune system,
		Respiratory sensitization			lungs, liver, kidneys
2,6,8-Trimethyl-4-nonyloxy polyethylene oxyethanol	no data available	no data available	no data available	no data available	Bladder, Liver, Kidneys

Carci	nogen	icitv
ouioi	nogen	nony

There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
D-Limonene	not applicable	Group 3	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information

NO	information	available.

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Component	Informatio

Component Information					
Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
1-Tetradecene	EC50 22 - 24 mg/L Pseudokirchneriella subcapitata 96 h	LC50 1 - 3.2 mg/L Brachydanio rerio 96 h LC50 10.0 - 32.0 mg/L Poecilia reticulata 96 h LC50 = 0.39 mg/L Oncorhynchus mykiss 96 h LC50 = 1.06 mg/L Pimephales promelas 96 h	EC50 > 10000 mg/L 6 h	0.74: 48 h Daphnia magna mg/L EC50	N/A
D-Limonene	no data available	LC50 0.619 - 0.796 mg/L Pimephales promelas 96 h LC50 = 35 mg/L Oncorhynchus mykiss 96 h	no data available	no data available	N/A

Persistence and Degradability Bioaccumulation Mobility

No information available. No information available. No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal **Container Disposal** Dispose of in accordance with local regulations. Empty containers should be taken for local recycling, recovery, or waste disposal

14. TRANSPORT INFORMATION

DOT	Proper Shipping Name Hazard Class UN-No Packing Group Description	<119 gallons Not Regulated >119 Gals = Terpene Hydrocarbons, N.O.S. 3 UN2319 III UN2319, Terpene Hydrocarbons, N.O.S., 3, PG III (Exceptions may exist under DOT CFR49 173.150)
TDG	Hazard Class UN-No Packing Group	3 UN2319 III
ICAO		Not regulated
ΙΑΤΑ		Not regulated
IMDG	/імо	Not regulated

15. REGULATORY INFORMATION

Inventories TSCA DSL **U.S. Federal Regulations SARA 313**

Does not Comply Does not Comply Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40 of the Code of Federal Regulations, Part 372.

Acute Health Hazard	Chronic Health Hazard	Fire Hazard	Sudden Release of Pressure Hazard	Reactive Hazard
Yes	Yes	Yes	No	No

16. OTHER INFORMATION		
Prepared By	Sarah Williamson	
Supercedes Date	05/27/2011	
Issuing Date	12/02/2014	
Reason for Revision	No information available.	
Glossary	No information available.	
List of References.	No information available.	
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