

Product Name

Chlor-Ex Chlorine
Reducer

MSDS Number

M-022

Chemical Name

Proprietary

Product Number

102231

Hazard Pictograms



Supplier Info

Bio-Dex Laboratories, LLC
4212 W. Innovation Dr
Phoenix, AZ 85086
800-617-3477 // 623-582-240

Signal Word

Warning

**Precautionary
Statements**

Wash Hands, forearms and Exposed areas
thoroughly after handling

Wear eye protection, protective clothing, protective
gloves

IF IN EYES: Rinse cautiously with water for several
minutes. Remove Contact lenses, if present and easy to
do. Continue Rinsing

If eye irritation persists: Get Medical Advice/attention
Collect Spillage

Dispose of contents/container according to
local, regional, national, territorial, provincial
See SDS for additional Statements

Hazard Statement

Causes Serious Eye Irritation

See SDS for additional
Statements

Supplemental Information



102231

71-021
M-022

Safety Data Sheet (SDS)

BIO-DEX LABORATORIES, LLC

Chlor-Ex Chlorine Reducer

SDS Number: 294

Revision Date: 5/20/2015

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1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

BIO-DEX LABORATORIES, LLC
4212 W. INNOVATION DR.
PHOENIX, AZ 85086

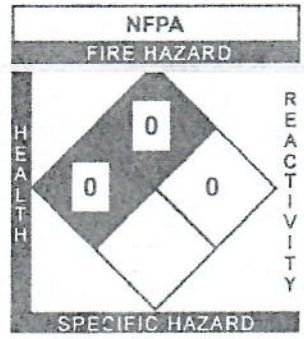
Contact: BIO-DEX LABORATORIES, LLC
Phone: 800-617-3477 // 623-582-2400
Web: www.bio-dex.com

Product Name: Chlor-Ex Chlorine Reducer
Revision Date: 5/20/2015
Version: 1.00
SDS Number: 294
CAS Number: MIXTURE
Chemical Family: Reducing Agent
Chemical Formula: *** PROPRIETARY ***
Product Use: Used to Remove Extra Chlorine in Pools and Spas
Emergency Phone: (800) 424-9300 (CHEMTREC)

2 HAZARDS IDENTIFICATION

NFPA:
HMIS III:

Health = 0, Fire = 0, Reactivity = 0
H0/F0/PH0



HMIS III	
HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PERSONAL PROTECTION	

PERSONAL PROTECTION INDEX									
A	☒	G	☒ + ☒ + ☒						
B	☒ + ☒	H	☒ + ☒ + ☒ + ☒						
C	☒ : ☒ : ☒	I	☒ : ☒ : ☒						
D	☒ + ☒ + ☒	J	☒ + ☒ + ☒ + ☒						
E	☒ + ☒ + ☒	K	☒ + ☒ + ☒ + ☒						
F	☒ + ☒ + ☒ + ☒	X	☒ + ☒ + ☒ + ☒ + ☒						
Consult your supervisor or S.O.P. for "SPECIAL" handling directions									
A	☒	P	☒	Q	☒	R	☒	S	☒
Safety Glasses	Splash Goggles	Face Shield & Eye Protection	Liquor	Shells	Synthetic Apron	Full Suit	Respirator	Respirator	Respirator
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Dust Respirator	Water Respirator	Dust & Vapor Respirator	Full Face Respirator	Antacid Tablets	Antacid Tablets	Antacid Tablets	Antacid Tablets	Antacid Tablets	Antacid Tablets

GHS Precautionary Statements:

- P262 - Do not get in eyes, on skin, or on clothing.
- P264 - Wash skin thoroughly after handling.
- P302+352 - IF ON SKIN: Wash with soap and water.
- P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P332+313 - If skin irritation occurs: Get medical advice/attention.
- P337+313 - If eye irritation persists: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.



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P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

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COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas #	Percentage	Chemical Name
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N/A	100%	Proprietary, non-hazardous, non-regulated
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FIRST AID MEASURES

Inhalation: Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: Promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. Remove contaminated clothing and wash before reuse. If reddening develops and/or persists, obtain medical attention.

Eye Contact: Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses if present and easy to do so. If eye irritation persists, obtain medical attention.

Ingestion: Rinse mouth with water. Do NOT induce vomiting unless instructed to do so. Give 3-4 glasses of water or milk to dilute stomach contents. Never give anything by mouth to an unconscious person. If symptoms develop and/or persist, obtain medical attention.

Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

Indication of any immediate medical attention and special treatment needed:

No data available.

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FIRE FIGHTING MEASURES

Flammability:	Not flammable
Flash Point:	No data available
Flash Point Method:	DNA
Burning Rate:	No data available
Autoignition Temp:	No data available
LEL:	No data available
UEL:	No data available

Extinguishing Media:

Water Spray
Water Fog
Carbon Dioxide
Alcohol-Resistant Foam
Dry Chemical

Special Hazards Arising From the Substance or Mixture:

Sodium Oxides



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Sulfur Oxides

Advice for Firefighters:

Firefighters should wear full-face, positive-pressure respirators.

Further Information:

If incinerated, may release toxic fumes.

Use water spray to cool unopened containers.

See Section 7 for more information on safe handling.

See Section 8 for more information on personal protection equipment.

See Section 13 for disposal information.

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ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment.

Keep from contacting skin or eyes.

Avoid breathing vapors, mist or gas.

Ensure adequate ventilation.

Evacuate personnel to safe areas.

Take care to avoid slippage.

Environmental Precautions:

Prevent further release (leakage/spillage) if safe to do so.

Methods and Materials for Containments and Cleaning Up:

Pick up and arrange disposal without creating dust.

Sweep up, shovel or collect spillage with an electrically protected vacuum cleaner.

Dispose of contaminated material according to Section 13.

After spillage has been collected, area may be flushed with water or wet-brushed.

Ensure adequate ventilation.

Reference to Other Sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on proper disposal.

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HANDLING AND STORAGE

Handling Precautions:

Avoid breathing dusts, vapors or mist.

Avoid formation of dusts.

Avoid contact with eyes, skin, or clothing.

Use approved, original containers only.

Keep containers closed when not in use.

Do not expose containers to open flame, excessive heat, or direct sunlight.

Do not smoke, eat or drink when using this product.

Do not puncture or drop containers.

Handle with care and avoid spillage on the floor.

Keep material out of reach of children.

Keep material away from incompatible materials.

Wash thoroughly after handling.

Ensure adequate ventilation.



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Storage Requirements:

Keep container tightly closed.
Do not store in direct sunlight.
Store away from strong acids and strong oxidizing agents.

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EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip:

Eye/face protection:

When using material, personal protective equipment is not required. If desired, ensure that a safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection:

Not required. If desired, handle with gloves made from Neoprene, Nitrile or Buna rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

Body Protection:

Not require. If desired, use chemically resistant safety glasses. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection:

Full-face dust respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds. Respiratory protection must comply with 29 CFR 1910.134.

Control of environmental exposure:

Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters:

Contains no substances with occupational exposure limit values.

Biological occupational exposure limits:

Contains no substances with biological occupational exposure limit values.



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PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White powder	Odor:	Slight, sulfurous
Physical State:	Solid	Molecular Formula:	Proprietary
Odor Threshold:	Not determined	Solubility:	(g/l @ 20 °C): 210
Particle Size:	Not determined	Softening Point:	Not determined
Spec Grav./Density:	1.667 g/cm ³	Percent Volatile:	DNA
Viscosity:	Not determined	Heat Value:	Not determined
Sat. Vap. Conc.:	Not determined	Freezing/Melting Pt.:	52 °C (126 °F)
Boiling Point:	Not determined	Flash Point:	Not determined
Flammability:	(solid, gas): Not flammable	Octanol:	Not determined
Partition Coefficient:	Not determined	Vapor Density:	(air = 1): Not determined
Vapor Pressure:	(mm Hg @ 25 °C): Not determined	VOC:	DNA
pH:	@ 10%: 6.0 - 8.5	Bulk Density:	Not determined
Evap. Rate:	(N-Butyl Acetate = 1): Not determined	Auto-Ignition Temp:	Not determined
Molecular weight:	Proprietary	UFL/LFL:	Not determined
Decomp Temp:	52 °C (126 °F)		

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STABILITY AND REACTIVITY

Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Incompatibilities, flames, ignition sources.
Materials to Avoid:	Strong acids and strong oxidizing agents.
Hazardous Decomposition:	Sodium Oxides and Sulfur Oxides.
Hazardous Polymerization:	Will not occur.

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TOXICOLOGICAL INFORMATION

Component(s): Chlor-Ex Chlorine Reducer
CAS No(s): N/A

Acute Toxicity:

LD50 Oral - Rat: > 8,000 mg/kg
LD50 Intraperitoneal: 5,200 mg/kg

Skin Corrosion/Irritation: No data available.

Serious Eye Damage/Eye Irritation: No data available.

Respiratory or Skin Sensitation: No data available.

Germ Cell Mutagenicity: No data available.

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or



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potential carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity - Single Exposure: No data available.

Specific Target Organ Toxicity - Repeated Exposure: No data available.

Aspiration Hazard: No data available.

Additional Information: No data available.

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ECOLOGICAL INFORMATION

Component(s): Chlor-Ex Chlorine Reducer

CAS No(s): N/A

Toxicity:

Toxicity to fish:

LC50 *Gambusia affinis* (Mosquito Fish): 24,000 mg/l (96 h).

Toxicity to daphnia and other aquatic invertebrates:

No data available.

Persistence and Degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in Soil:

No data available.

Results of PBT and vPvB assessment:

Not required/conducted.

Other Adverse Effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.



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14 TRANSPORT INFORMATION

DOT (US)

Non-regulated material, solid

IMDG

Non-regulated material, solid

IATA

Non-regulated material, solid

15 REGULATORY INFORMATION

COMPONENT / (CAS/PERC) / CODES

Proprietary, non-hazardous, non-regulated (N/A 100%) None - Reporting not required

REGULATORY KEY DESCRIPTIONS

None - Not applicable

16 OTHER INFORMATION

Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that BIO-DEX LABORATORIES, LLC. believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of BIO-DEX LABORATORIES, LLC's control, BIO-DEX LABORATORIES, LLC. makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

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