

Reviewed on 10/11/2023

### **1** Identification

- · Product identifier
- · Trade name: <u>CDR CONCENTRATE ®</u>
- · Article number: CDR
- · Details of the supplier of the safety data sheet

• Manufacturer/Supplier: Chemical Consultants Inc. 1850 Wild Turkey Circle Corona, CA 92878 USA +1 (951) 735-5511 ncollins@ccidom.com

• Information department: Product safety department

• Emergency telephone number: INFOTRAC 1-800-535-5053

#### 2 Hazard(s) identification

· Classification of the substance or mixture

GHS03 Flame over circle

Oxidizing Liquids 2 H272 May intensify fire; oxidizer.

GHS05 Corrosion

Skin Corrosion 1BH314 Causes severe skin burns and eye damage.Eye Damage 1H318 Causes serious eye damage.

· Label elements

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



· Signal word Danger

· Hazard-determining components of labeling: periodic acid · Hazard statements H272 May intensify fire; oxidizer. H314 Causes severe skin burns and eye damage. · Precautionary statements P210 Keep away from heat. P220 Keep/Store away from clothing/combustible materials. Take any precaution to avoid mixing with combustibles. P221 P260 Do not breathe dusts or mists. P264 Wash thoroughly after handling. P280 Wear protective gloves / eye protection / face protection.

(Contd. on page 2)

<sup>—</sup> US

*Printing date 10/11/2023* 

Reviewed on 10/11/2023

Trade name: CDR CONCENTRATE ®

	(Cond. of page 1)
P301+P330+P33	1 If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P35	3 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 comfortable for breathing.
P305+P351+P33	8 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present
	and easy to do. Continue rinsing.
P321	Specific treatment (see on this label).
P337+P313	If eye irritation persists: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P370+P378	In case of fire: Use CO2, powder or water spray to extinguish.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)

HEALTH3Health = \*3FIRE3Fire = 3REACTIVITY0Reactivity = 0

· Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

#### **3** Composition/information on ingredients

· Chemical characterization: Mixtures

• Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:

10450-60-9 periodic acid

#### 4 First-aid measures

· Description of first aid measures

- · General information: Immediately remove any clothing soiled by the product.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.

• Information for doctor:

• Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)

15-30%

Reviewed on 10/11/2023

Trade name: CDR CONCENTRATE ®

• *Indication of any immediate medical attention and special treatment needed No further relevant information available.* 

#### **5** Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

#### **6** Accidental release measures

- Personal precautions, protective equipment and emergency procedures Mount respiratory protective device. Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions:
- Dilute with plenty of water.
- For large spills: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent.
- Dispose contaminated material as waste according to section 13.
- 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 disposal information.
- · Protective Action Criteria for Chemicals

I toto the filleness of	
· PAC-1:	
10450-60-9 periodic acid	$0.18 mg/m^3$
· PAC-2:	
10450-60-9 periodic acid	$2.1 mg/m^3$
· PAC-3:	
10450-60-9 periodic acid	$12 mg/m^3$

#### 7 Handling and storage

- · Handling:
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.
- · Information about protection against explosions and fires: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities

· Storage:

- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed.

(Contd. on page 4)



(Contd. of page 2)

US -

*Printing date 10/11/2023* 

Reviewed on 10/11/2023

Trade name: CDR CONCENTRATE ®

(Contd. of page 3)

· Specific end use(s) No further relevant information available.

#### 8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see section 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:

• General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Breathing equipment:

Personal protective equipment should be selected based on an assessment of risk of exposure as uses and conditions of use vary and there is no single PPE scenario that fits all. There are chemicals in the blend that evaporate into the air and under conditions of large use volumes in combination with limited ventilation, respiratory protection may be warranted. Conditions where the worker uses the product in small amounts with local exhaust ventilation, protective gloves and eye protection may be sufficient to control exposure **Protection** 

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation  $\cdot$  **Material of gloves** 

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Tightly sealed goggles

(Contd. on page 5)

*Printing date 10/11/2023* 

Reviewed on 10/11/2023

Trade name: CDR CONCENTRATE ®

(Contd. of page 4)

Information on basic physical and c	chemical properties	
General Information	nemicui properties	
Appearance:		
Form:	Fluid	
Color:	According to product specification	
Odor:	Characteristic	
Odor threshold:	Not determined.	
<i>pH-value at 20 °C (68 °F):</i>	<1	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	100 °C (212 °F)	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Decomposition temperature:	Not determined.	
Ignition temperature:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)	
Density at 20 °C (68 °F):	1.0938 g/cm³ (9.12776 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
Evaporation rate	Not determined.	
Solubility in / Miscibility with		
Water:	Fully miscible.	
Partition coefficient (n-octanol/wate	er): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	

# **10** Stability and reactivity

• *Reactivity* No further relevant information available.

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions
  Reacts with reducing agents.
  May produce violant reactions with bases and numerous organic

May produce violent reactions with bases and numerous organic substances including alcohols and amines.

(Contd. on page 6)

<sup>·</sup> Chemical stability

Printing date 10/11/2023

Reviewed on 10/11/2023

(Contd. of page 5)

Reacts with various metals.

Trade name: CDR CONCENTRATE ®

- Conditions to avoid Keep ignition sources away. Do not smoke
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products:
- Hydrogen iodide Iodine compunds

#### **11 Toxicological information**

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- on the skin: Caustic effect on skin and mucous membranes.
- $\cdot$  on the eye:
- Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

#### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

#### **12 Ecological information**

· Toxicity

- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:

· General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.

(Contd. on page 7)

(Contd. of page 6)

## Safety Data Sheet acc. to OSHA HCS

Printing date 10/11/2023

Reviewed on 10/11/2023

Trade name: CDR CONCENTRATE ®

- · **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

#### **13 Disposal considerations**

· Waste treatment methods

· Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations.

- · Uncleaned packagings:
- · Recommendation:

Dispose of content and/or container in accordance with local, regional, national and/or international regulations • **Recommended cleansing agent:** Water, if necessary with cleansing agents.

UN-Number	1011770	
DOT, IMDG, IATA	UN1760	
UN proper shipping name		
DOT	Corrosive liquids, n.o.s.	
IMDG, IATA	CORROSIVE LIQUID, N.O.S.	
Transport hazard class(es)		
DOT		
New York		
CORROSIVE		
8		
Class	8 Corrosive substances	
Label	8	
IMDG, IATA		
8		
Class	8 Corrosive substances	
Label	8	
	0	
Packing group	**	
DOT, IMDG, IATA	II	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Warning: Corrosive substances	
Hazard identification number (Kem		
EMS Number:	F-A,S-B	
Stowage Category	В	
Stowage Code	SW2 Clear of living quarters.	

-US-

Reviewed on 10/11/2023

Trade name: CDR CONCENTRATE ®

Printing date 10/11/2023

	(Contd. of page 7
• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
·DOT	
· Quantity limitations	On passenger aircraft/rail: 1 L
	On cargo aircraft only: 30 L
· IMDG	
Limited quantities (LQ)	1L
$\cdot$ Excepted quantities (EQ)	Code: E2
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1760 CORROSIVE LIQUID, N.O.S. 8, II

## **15 Regulatory information**

· Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available. • Sara

· Sara	
· Section 355 (extremely hazardous substances):	
None of the ingredients is listed.	
· Section 313 (Specific toxic chemical listings):	
None of the ingredients is listed.	
· TSCA (Toxic Substances Control Act):	
All ingredients are listed.	
· Hazardous Air Pollutants	
None of the ingredients is listed.	
· Proposition 65	
· Chemicals known to cause cancer:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
• Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
· Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
New Jersey Special Hazardous Substance List:	
None of the ingredients is listed.	
· Pennsylvania Right-to-Know List:	
None of the ingredients is listed.	
· Pennsylvania Special Hazardous Substance List:	
None of the ingredients is listed.	
	(Contd. on page 9)

*Printing date 10/11/2023* 

Reviewed on 10/11/2023

Trade name: CDR CONCENTRATE ®

(Contd. of page 8)

•	Carcino	genic	categories
---	---------	-------	------------

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

• *TLV* (*Threshold Limit Value*) None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

• *GHS label elements* The product is classified and labeled according to the Globally Harmonized System (GHS). • *Hazard pictograms* 



· Signal word Danger

· Hazard-determining components of labeling: periodic acid · Hazard statements H272 May intensify fire; oxidizer. H314 Causes severe skin burns and eye damage. · Precautionary statements P210 Keep away from heat. P220 Keep/Store away from clothing/combustible materials. P221 Take any precaution to avoid mixing with combustibles. P260 Do not breathe dusts or mists. P264 Wash thoroughly after handling. P280 Wear protective gloves / eye protection / face protection. 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 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. P321 Specific treatment (see on this label). P337+P313 If eye irritation persists: Get medical advice/attention. Wash contaminated clothing before reuse. P363 P370+P378 In case of fire: Use CO2, powder or water spray to extinguish. P405 Store locked up. Dispose of contents/container in accordance with local/regional/national/international P501 regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Department issuing SDS: Environment protection department.

· Contact: Mr. Collins

• Date of preparation / last revision 10/11/2023

(Contd. on page 10)

<sup>•</sup> US

US

## Safety Data Sheet acc. to OSHA HCS

*Printing date 10/11/2023* 

Reviewed on 10/11/2023

#### Trade name: CDR CONCENTRATE ®

(Contd. of page 9) · Abbreviations and acronyms: IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Oxidizing Liquids 2: Oxidizing liquids – Category 2 Skin Corrosion 1B: Skin corrosion/irritation - Category 1B Eye Damage 1: Serious eye damage/eye irritation - Category 1