

SAFETY DATA SHEET - SDS

1. Product and Company Identification

Product Name Chlorine Bleach
Synonyms N/A
CAS Number mixture
Product Use Industrial Cleaning Product

Supplier: Monarch Resources
Address 210 N. East Street
Arlington, TX 76011
Telephone 817.265.4535

Manufacturer: Advanced Blending, Inc.
Address 5230 SE Loop 820
Forest Hill, TX 76140

Emergency Number - CHEMTREC (USA): 1-800-424-9300

2. Hazards Identification

Emergency Overview: DANGER! Causes serious eye damage. Causes skin irritation. Harmful if inhaled. Harmful if swallowed.
May cause respiratory irritation. Very toxic to aquatic life.

Skin: Causes skin irritation.

Eyes: Causes serious eye damage.

Inhalation: Harmful if swallowed and enters airways. May cause respiratory irritation. Avoid breathing dust. Prolonged or excessive inhalation may cause respiratory tract irritation or burns of the mucous membranes.

Ingestion: Harmful if swallowed. Ingestion can also cause burns of the mouth, throat and esophagus.

Chronic exposure: No known carcinogenic effects.

SYMBOLS



Precautionary Statements

Read label before use.
Keep away from children.
Do not eat, drink or smoke when using this product.
Wash hands thoroughly after handling.
Wear protective gloves, eye and face protection.
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
Avoid release into the environment.

3. Composition / Information on Ingredients

<u>Component</u>	<u>CAS Number</u>	<u>Weight %</u>
sodium dichloroisocyanurate dihydrate	51580-86-0	< 20.0

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

4. First Aid Measures

Eye Possible eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

Skin Possible skin irritation. Flush immediately with large amounts of water while removing contaminated clothing. Wash contaminated clothing before reuse.

Inhalation	Possible nasal irritation. Remove exposed person from source of exposure to fresh air.
Ingestion	Drink copious amounts of water. Seek medical attention. Do not induce vomiting unless directed by medical personnel.

5. Fire Fighting Measures

Suitable Extinguishing Media	Use dry chemical, foam, or carbon dioxide to extinguish fire. Water may be ineffective but should be used to cool fire-exposed containers, structures and to protect personnel. Use water to dilute spills and to flush them away from sources of ignition.
Fire Fighting Procedures	Do not flush down sewers or other drainage systems. Exposed firefighters must wear NIOSH approved positive pressure self contained breathing apparatus with full mask and full protective clothing.
Unusual Fire and Explosion Hazards	Not considered to be a fire hazard.
Combustion Products	Irritating substances may be emitted upon thermal decomposition. Thermal decomposition products may include fluoride and sodium oxides.

6. Accidental Release Measures

Use suitable safety equipment including nitrile gloves and safety glasses. Stop leak if possible to do so without risk.

Small spills clean up with sand or other noncombustible absorbent material and place into containers for later disposal. Large spills contain with dike ahead of spill for later disposal. (See Section 8) Flush with water to clean contaminated area.

Do not flush to sewer or waterways. Prevent release to the environment if possible.

7. Handling and Storage

Handling	Do not get in eyes, on skin or clothing. Do not breathe vapor or mists. Keep container closed. Use with adequate ventilation. Use good personal hygiene practices. Wash hands before eating, drinking or smoking. Remove contaminated clothing and clean before re-use.
Storage	Store in tightly closed containers in cool, dry, well-ventilated area away from heat, sources of ignition and incompatibles. Ground lines and equipment to reduce possibility of static spark initiated fire. Store between 0 C (32 F) - 37.7 C (100 F). Best if stored out of direct sunlight. Keep container closed and upright when not in use. Protect container against physical damage.

8. Exposure Controls / Personal Protection

Exposure Limits	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.	
Engineering Controls	Local exhaust ventilation may be necessary to control ventilation for confined spaces. Use explosion proof ventilation equipment.	
Personal Protective Equipment (PPE)	Eye Protection	Wear chemical safety goggles (glasses). Have eye wash stations available where eye contact can occur.
	Skin Protection	Avoid skin contact. Wear gloves impervious to conditions of use. Additional protection may be necessary to prevent skin contact including apron, face shield or boots.
	Respiratory Protection	If exposure limits are exceeded, NIOSH approved respiratory protection should be worn. For unknown concentrations and for oxygen deficient atmospheres use a NIOSH approved air

supplied respirator.

9. Physical and Chemical Properties

Flash Point	> 93 C (200 F)	Lower Flammability Limit	N/A
Autoignition Temperature	N/A	Upper Flammability Limit	N/A
Boiling Point	N/A	Specific Gravity (lbs/ft³ @ 25 C)	1.9 - 2.4
Melting Point	N/A	% Volatile	N/A
Vapor Pressure	N/A	Evaporation Rate (water=1)	1
Vapor Density (Air=1)	N/A	Viscosity (cP)	N/A
Solubility in water	soluble	Octanol/Water Partition Coefficient	N/A
Pour Point	N/A	pH (5% in H₂O @ 25 C)	6.0 - 8.0
Odor	characteristic	Molecular Weight	mixture
Appearance	white powder		

10. Stability and Reactivity

Chemical Stability	Stable
Possibility of Hazardous Reactions	Hazardous polymerization will not occur
Conditions to Avoid	Do not get water inside container. Wet material may generate nitrogen trichloride, an explosion hazard. Avoid contact with easily oxidizable organic material.
Incompatible Materials	Acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds
Hazardous Decomposition	The following may form during or at extremely high temperatures: chlorine, nitrogen, nitrogen trichloride, cyanogen chloride, oxides of carbon, phosgene

11. Toxicological Information

Signs and Symptoms of Overexposure	Eye and nasal irritation with itching/burning of the skin.
Acute Toxicity	(sodium dichloroisocyanurate dihydrate) 1823 mg/kg (Rat) 0.27 - 1.17mg/L (4 hr Rat) >5000 mg/kg (Rabbit)

CARCINOGENICITY: This product is not classified as a carcinogen by NTP, IARC or OSHA.

MUTAGENIC DATA: Not mutagenic in 5 salmonella strains and 1 E. coli strain with or without mammalian microsomal activation.

REPRODUCTIVE TOXICITY: There are no known or recorded effects on reproductive function or fetal development.

12. Ecological Information

Ecotoxicity	Fish Toxicity: LC50 Bluegill sunfish: 0.25-1.0 mg/L (96 hour) LC50 Rainbow trout: 0.13-0.36 mg/L (96 hour) LC50 Inland silversides: 1.21 mg/L (96 hour)
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..... from this material hydrolyzes in water, releasing non-volatile cyanide and cyanate ions. These products are not bioaccumulative.

BIODEGRADATION: This material is subject to hydrolysis. Cyanuric acid produced by hydrolysis is biodegradable.

13. Disposal Considerations

Waste Disposal Method

This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other state and local regulations. Dispose in accordance with local, provincial and federal regulations at a licensed hazardous waste disposal facility. It is the responsibility of the end user to determine if the material meets the criteria of hazardous waste at the time of disposal. Empty containers that have not been rinsed and purged, contain residual material and must be disposed of or recycled in accordance with local regulations.

14. Transport Information

United States Department of Transportation (U.S. DOT)

Non-Bulk Packaging: Not Regulated under DOT unless transported by Vessel
Bulk Packaging or Shipment by Vessel: Regulated
UN3077, Environmentally hazardous substances, solid, n.o.s., (sodium dichloroisocyanurate dihydrate), 9, PG III

International Maritime Dangerous Goods (IMO / IMDG)

Non-Bulk Packaging: Not Regulated under DOT unless transported by Vessel
Bulk Packaging or Shipment by Vessel: Regulated
UN3077, Environmentally hazardous substances, solid, n.o.s., (sodium dichloroisocyanurate dihydrate), 9, PG III

International Air Transport Association (IATA)

Non-Bulk Packaging: Not Regulated under DOT unless transported by Vessel
Bulk Packaging or Shipment by Vessel: Regulated
UN3077, Environmentally hazardous substances, solid, n.o.s., (sodium dichloroisocyanurate dihydrate), 9, PG III

Transportation of Dangerous Goods (TDG)

Non-Bulk Packaging: Not Regulated under DOT unless transported by Vessel
Bulk Packaging or Shipment by Vessel: Regulated
UN3077, Environmentally hazardous substances, solid, n.o.s., (sodium dichloroisocyanurate dihydrate), 9, PG III

Agreement on Dangerous Goods by Road (ADR)

Non-Bulk Packaging: Not Regulated under DOT unless transported by Vessel
Bulk Packaging or Shipment by Vessel: Regulated
UN3077, Environmentally hazardous substances, solid, n.o.s., (sodium dichloroisocyanurate dihydrate), 9, PG III

15. Regulatory Information

U.S. Federal Regulations

Clean Air Act (CCA) This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61)

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances (40 CFR 355)	None			
Section 304 CERCLA Hazardous Substances (40 CFR 302)	None			
Section 311/312 Hazard Class (40 CFR 370)				
Acute: Yes	Chronic: Yes	Fire: No	Pressure: No	Reactive: Yes
Section 313 Toxic Chemicals (40 CFR 372)	None			

International Regulations

Canadian Environmental Protection Act All of the components of this product are included on the Canadian Domestic Substances list (DSL).

Canadian Workplace Hazardous Materials Information System Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects

(WHMIS)

Chemical Inventories

TSCA	All ingredients are on the inventory.
DSL	All ingredients are on the inventory.
EINECS	All ingredients are on or exempted from the inventory.
AICS	All ingredients are on the inventory.
IECSC	All ingredients are on the inventory.
KECL	All ingredients are on the inventory.
NZIoC	All ingredients are on the inventory.
PICCS	All ingredients are on the inventory.

16. Other Information

National Fire Protection Association (NFPA) Ratings	This information is intended solely for individuals trained in the NFPA.		
	Health:	2	0 - LEAST
	Flammability:	0	1 - SLIGHT
	Reactivity:	1	2 - MODERATE
	Other	-	3 - HIGH
			4 - EXTREME
Revisions Date	August 18, 2015		

Disclaimer Individuals handling this product should be informed of the recommended safety precautions and should have access to this information. This information relates to the specific product designated and may not be valid for such product used in combination with any other materials or in any other processes. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty, or guarantee is made as to its accuracy, reliability, or completeness. It is user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement. End users are responsible for compliance with local, state, and federal regulations that may be pertinent in the storage, application, and disposal of this product.

Abbreviations and acronyms:

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average

ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%	N/A	Not Available