

## 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product Code:</b>	MORGAN-066-BULK	
<b>Product Name:</b>	Duo-Chlor	
<b>Company Name:</b>	Morgan-Gallacher, Inc. 8707 Millergrove Drive Santa Fe Springs, CA 90670	<b>Phone Number:</b> +1 (562)695-1232
<b>Emergency Contact:</b>	CHEMTREC	+1 (800)424-9300

## 2. HAZARDS IDENTIFICATION

**Acute Toxicity: Oral, Category 4**  
**Serious Eye Damage/Eye Irritation, Category 2A**  
**Skin Corrosion/Irritation, Category 1A**  
**Aquatic Toxicity (Acute), Category 3**



<b>GHS Signal Word:</b>	<b>Danger</b>
<b>GHS Hazard Phrases:</b>	Harmful if swallowed. Causes severe skin burns and eye damage. Harmful to aquatic life.
<b>GHS Precautionary Phrases:</b>	Keep out of reach of children. Read label before use. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Take any precaution to avoid mixing with Acid Products
<b>GHS Response Phrases:</b>	IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with plenty of water for 15 minutes. Get immediate medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Get immediate medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for 15 minutes. Get immediate medical advice/attention. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get immediate medical advice/attention.
<b>GHS Storage and Disposal Phrases:</b>	Store locked up. Dispose of contents/container in accordance to local, state and federal regulations.
<b>Inhalation:</b>	May cause respiratory tract irritation. May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.
<b>Skin Contact:</b>	May cause skin irritation. Repeated or prolonged exposure may cause drying of the skin. May cause a burning sensation of the skin.
<b>Eye Contact:</b>	May cause eye irritation and burns.
<b>Ingestion:</b>	May be harmful if swallowed. May cause gastrointestinal irritation.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components (Chemical Name)	Concentration
13573-18-7	Sodium tripolyphosphate	<30.0 %
6834-92-0	Sodium metasilicate	<10.0 %
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt	< 5.0 %
7601-54-9	Sodium phosphate, Tribasic	<20.0 %
68081-81-2	Sodium benzenesulfonate	< 5.0 %

### 4. FIRST AID MEASURES

#### Emergency and First Aid Procedures:

<b>In Case of Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice/attention.
<b>In Case of Skin Contact:</b>	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.
<b>In Case of Eye Contact:</b>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical aid immediately.
<b>In Case of Ingestion:</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. If victim is conscious and alert, give 2-4 cupfuls of water. Get medical attention immediately.
<b>Note to Physician:</b>	Treat symptomatically and supportively. Show this safety data sheet to the doctor in attendance.

### 5. FIRE FIGHTING MEASURES

<b>Flash Pt:</b>	NA	Method Used: Not Applicable
<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.
<b>Autoignition Pt:</b>	NA	
<b>Suitable Extinguishing Media:</b>	Use water spray, dry chemical, carbon dioxide, or appropriate foam.	
<b>Unsuitable Extinguishing Media:</b>	Do not use dry chemical extinguisher containing ammonia compounds.	
<b>Fire Fighting Instructions:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Greatly increases the burning rate of combustible materials.	
<b>Flammable Properties and Hazards:</b>	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, Hydrogen chloride, chlorine, and oxides of: phosphorus, sodium, silicon, nitrogen.	
<b>Hazardous Combustion Products:</b>	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, Hydrogen chloride, chlorine, and oxides of: phosphorus, sodium, silicon, nitrogen.	

## 6. ACCIDENTAL RELEASE MEASURES

<b>Protective Precautions, Protective Equipment and Emergency Procedures:</b>	Use proper personal protective equipment as indicated in Section 8.
<b>Environmental Precautions:</b>	Do not let product enter storm drains, storm sewers, watersheds or water systems unless authorized.
<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Avoid breathing dust. Provide ventilation.

## 7. HANDLING AND STORAGE

<b>Precautions To Be Taken in Handling:</b>	Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.
<b>Precautions To Be Taken in Storing:</b>	Store in a cool, dry, well-ventilated area away from incompatible substances. Store away from acids. Keep away from sources of ignition. Store in a tightly closed container. Keep container closed when not in use. Protect containers against damage.
<b>Other Precautions:</b>	Handle in accordance with good industrial hygiene and safety practice. Keep out of reach of children.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
13573-18-7	Sodium tripolyphosphate	No data.	No data.	No data.
6834-92-0	Sodium metasilicate	No data.	No data.	No data.
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt	No data.	No data.	No data.
7601-54-9	Sodium phosphate, Tribasic	No data.	No data.	No data.
68081-81-2	Sodium benzenesulfonate	No data.	No data.	No data.

<b>Respiratory Equipment (Specify Type):</b>	A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.
<b>Eye Protection:</b>	Wear chemical splash goggles.
<b>Protective Gloves:</b>	Wear appropriate protective gloves to prevent skin exposure. Rubber or neoprene gloves.
<b>Other Protective Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Engineering Controls (Ventilation etc.):</b>	Use adequate ventilation to keep airborne concentrations low.
<b>Work/Hygienic/Maintenance Practices:</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical States:</b>	[ ] Gas [ ] Liquid [X] Solid	
<b>Appearance and Odor:</b>	Appearance: White. Free flowing granules.	
<b>pH:</b>	11.0 - 12.5 @1%sol	
<b>Melting Point:</b>	NA	
<b>Boiling Point:</b>	NA	
<b>Flash Pt:</b>	NA Method Used: Not Applicable	
<b>Evaporation Rate:</b>	NA	
<b>Flammability (solid, gas):</b>	No data available.	
<b>Explosive Limits:</b>	LEL: No data.	UEL: No data.
<b>Vapor Pressure (vs. Air or mm Hg):</b>	NA	
<b>Vapor Density (vs. Air = 1):</b>	NA	
<b>Specific Gravity (Water = 1):</b>	NA	
<b>Density:</b>	NA	
<b>Bulk density:</b>	NA	
<b>Solubility in Water:</b>	100%	
<b>Saturated Vapor Concentration:</b>	NA	
<b>Octanol/Water Partition Coefficient:</b>	No data.	
<b>Percent Volatile:</b>	NA	
<b>VOC / Volume:</b>	NA	
<b>HAP / Volume:</b>	NA	
<b>Autoignition Pt:</b>	NA	
<b>Decomposition Temperature:</b>	NA	
<b>Viscosity:</b>	NA	
<b>Particle Size:</b>	NA	
<b>Heat Value:</b>	NA	
<b>Corrosion Rate:</b>	NA	

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Unstable [ ] Stable [X]
<b>Conditions To Avoid - Instability:</b>	Incompatible materials, dust generation, Excess heat.
<b>Incompatibility - Materials To Avoid:</b>	Strong oxidizing agents, fluorine, urea, Acids, ammonia, Strong reducing agents, organic matter, calcium hypochlorite.
<b>Hazardous Decomposition or Byproducts:</b>	High temperatures and fire conditions can result in the formation of carbon monoxide and carbon dioxide, Hydrogen chloride, chlorine, and oxides of: phosphorus, sodium, silicon, nitrogen.
<b>Possibility of Hazardous Reactions:</b>	Will occur [ ] Will not occur [X]
<b>Conditions To Avoid - Hazardous Reactions:</b>	No data available.

## 11. TOXICOLOGICAL INFORMATION

**Toxicological Information:** Epidemiology: No information found.  
 Teratogenicity: Teratogenic effects have occurred in experimental animals.  
 Reproductive Effects: No information available.  
 Mutagenicity: No information available.  
 Neurotoxicity: No information available.  
 Other Studies: CAS# 6834-92-0:  
 Acute toxicity, LD50, Oral, Rat, 1000 mg/kg

CAS# 51580-86-0: 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt:  
 Acute toxicity, LD50, Oral, Rat, 1823. MG/KG.  
 Acute toxicity, LD50, Dermal, Rabbit, > 2000. MG/KG.  
 Acute toxicity, LC50, Inhalation, Rat, 0.270 - 1.170 MG/L, 4 H.  
 CAS# 7601-54-9: Sodium phosphate, Tribasic: Acute toxicity, LD50, Dermal, Rabbit, > 7940. MG/KG.

**Irritation or Corrosion:** Other Studies: CAS# 6834-92-0:  
 Standard Draize Test, Skin, Species: Rabbit, 250.0 mg, 24H

**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
13573-18-7	Sodium tripolyphosphate	n.a.	n.a.	n.a.	n.a.
6834-92-0	Sodium metasilicate	n.a.	n.a.	n.a.	n.a.
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt	n.a.	n.a.	n.a.	n.a.
7601-54-9	Sodium phosphate, Tribasic	n.a.	n.a.	n.a.	n.a.
68081-81-2	Sodium benzenesulfonate	n.a.	n.a.	n.a.	n.a.

## 12. ECOLOGICAL INFORMATION

**General Ecological Information:** Environmental: No information available.  
 Physical: No information available.

CAS# 6834-92-0: Sodium metasilicate: Effective concentration to 50% of test organisms., Water Flea (Ceriodaphnia dubia), neonate, 33.53 MG/L, 48 H, Intoxication., Effective concentration to 50% of test organisms., Blue-Green Algae (Microcystis aeruginosa), 800000. UG/L, Population.  
 Effective concentration to 50% of test organisms., Diatom (Nitzschia fonticola), 800000. UG/L, Population.  
 CAS# 51580-86-0: 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt: LC50, No data available. , 1.210 PPM.  
 CAS# 68081-81-2: Sodium benzenesulfonate: Effective concentration to 50% of test organisms., Water Flea (Daphnia magna), 61700. UMOL/L, 24 H, Intoxication.,

**Results of PBT and vPvB assessment:** Other Studies: CAS# 51580-86-0:  
 LC50, Bluegill (Lepomis macrochirus), 0.460 ppm, 96H, Mortality  
 LC50, Rainbow trout (Oncorhynchus mykiss), 0.250 ppm, 96H, Mortality  
 Effective concentration to 50% of test organisms, Water Flea (Daphnia magna), 0.280 ppm, 48H, Intoxication

**Persistence and Degradability:** No data available.

**Bioaccumulative Potential:** No data available.

**Mobility in Soil:** No data available.

**13. DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification. Observe all federal, state, and local environmental regulations.

**14. TRANSPORT INFORMATION**

**LAND TRANSPORT (US DOT):**

**DOT Proper Shipping Name:** Not Regulated.

**DOT Hazard Class:**

**UN/NA Number:**

**15. REGULATORY INFORMATION**

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
13573-18-7	Sodium tripolyphosphate	No	No	No
6834-92-0	Sodium metasilicate	No	No	No
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt	No	No	No
7601-54-9	Sodium phosphate, Tribasic	No	Yes 5000 LB	No
68081-81-2	Sodium benzenesulfonate	No	No	No

**This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:**

<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Explosive	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Acute toxicity (any route of exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Flammable (gases, aerosols, liquid, or solid)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Skin Corrosion or Irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Oxidizer (liquid, solid or gas)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Serious eye damage or eye irritation
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-reactive	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Respiratory or Skin Sensitization
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric (liquid or solid)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Germ cell mutagenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Pyrophoric gas	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Carcinogenicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Self-heating	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Reproductive toxicity
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Organic peroxide	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Specific target organ toxicity (single or repeated exposure)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Corrosive to metal	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Aspiration Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Gas under pressure (compressed gas)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Simple Asphyxiant
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	In contact with water emits flammable gas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	(Health) Hazard Not Otherwise Classified (HNOC)
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Combustible Dust		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	(Physical) Hazard Not Otherwise Classified (HNOC)		

**CAS # Hazardous Components (Chemical Name)**

**Other US EPA or State Lists**

13573-18-7	Sodium tripolyphosphate	CWA NPDES: No; TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No
6834-92-0	Sodium metasilicate	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: No
51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt	CWA NPDES: No; TSCA: No; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No; NJ EHS: No; NY Part 597: No; PA HSL: Yes - 1
7601-54-9	Sodium phosphate, Tribasic	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8; MA Oil/HazMat: Yes; MI CMR, Part 5: Part 5; NJ EHS: No; NY Part 597: Yes: HS; PA HSL: Yes - E
68081-81-2	Sodium benzenesulfonate	CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: No; MA Oil/HazMat: No; MI CMR, Part 5: No;

## 16. OTHER INFORMATION

**Revision Date:** 01/15/2019

**Additional Information About** No data available.

**This Product:**

**Company Policy or**

**Disclaimer:**

While Morgan-Gallacher believes the statements set forth herein are accurate as of the date hereof, Morgan-Gallacher makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data is offered solely for your consideration, investigation, and verification.