# Safety Data Sheet
## acc. to OSHA HCS

Printing date 10/03/2024 Reviewed on 10/03/2024

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## 1 Identification

· **Product identifier**

· **Trade name:** DuroKlor 56

· **Article number:** 6900
· **CAS Number:**
51580-86-0
· **EC number:**
610-700-3
· **Index number:**
613-030-01-7
· **Application of the substance / the mixture**
The product has many industrial, professional and consumer applications.
· **Uses advised against**
Any use involving aerosol formation or vapour release in excess of the assigned WEL where workers are exposed without suitable Respiratory Protective Equpiment.
Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).
Processes involving extreme heat use advised against.
Processes involving the use of incompatible substances - refer to section 10.

· **Details of the supplier of the safety data sheet**
· **Manufacturer/Supplier:**

APTech Group Inc.
5130 Rialto Road
West Chester, OH 45069
1-866-489-9831
info@aptechsolids.com

· **Information department:** Product safety department.
· **Emergency telephone number:**
The American Association of Poison Control Centers (24-hour hotline): 1-800-222-1222
CHEMTREC: 800-424-9300 (Domestic North America) OR 703-527-3887 (International, collect calls accepted).

## 2 Hazard(s) identification

· **Classification of the substance or mixture**

| | |
|---|---|
| Acute Toxicity - Oral 4 | H302 Harmful if swallowed. |
| Eye Irritation 2A | H319 Causes serious eye irritation. |
| Specific Target Organ Toxicity - Single Exposure 3 | H335 May cause respiratory irritation. |

· **Label elements**
· **Hazard pictograms**

GHS07

· **Signal word** Warning
· **Hazard statements**
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
· **Precautionary statements**

| | |
|---|---|
| P261 | Avoid breathing dust. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P301+P312 | If swallowed: Call a poison center/doctor if you feel unwell. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |

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P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391 Collect spillage.

· **Classification system:**
· **NFPA ratings (scale 0 - 4)**


Health = 2
Fire = 0
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**


Health = 2
Fire = 0
Reactivity = 0

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

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## 3 Composition/information on ingredients

· **Chemical characterization: Substances**
· **CAS No. Description**
CAS: 51580-86-0 Troclosene sodium, dihydrate
Alternative CAS number: 2893-78-9
· **Identification number(s)**
· **EC number:** 610-700-3
· **Index number:** 613-030-01-7

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## 4 First-aid measures

· **Description of first aid measures**
· **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· **After inhalation:** Supply fresh air; consult doctor in case of complaints.
· **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
· **After eye contact:**
Check for and remove any contact lenses.
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
· **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
· **Information for doctor:** Treat symptomatically and supportively.
· **Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

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## 5 Fire-fighting measures

· **Extinguishing media**
· **Suitable extinguishing agents:**
Water spray

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Alcohol resistant foam
Carbon dioxide
Use fire fighting measures that suit the environment.
· **For safety reasons unsuitable extinguishing agents:**
ABC powder
Water with full jet
· **Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Nitrogen oxides (NOx)
Hydrogen chloride (HCl)
Product is not classified as oxidizing. However, it enhances combustion of other substances.
· **Advice for firefighters**
· **Protective equipment:**
Wear self-contained respiratory protective device.
Do not inhale explosion gases or combustion gases.
Wear fully protective suit.
· **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.

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## 6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation
Avoid formation of dust.
Use respiratory protective device against the effects of fumes/dust/aerosol.
· **Environmental precautions:**
Do not allow to penetrate the ground/soil.
Do not allow product to reach sewage system or any water course in the undiluted form.
· **Methods and material for containment and cleaning up:**
Pick up mechanically.
Send for recovery or disposal in suitable receptacles.
Do not use combustible materials such as paper towels to clean up spills.
Keep away from water.
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**
· **PAC-1:** Substance is not listed.
· **PAC-2:** Substance is not listed.
· **PAC-3:** Substance is not listed.

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## 7 Handling and storage

· **Handling:**
· **Precautions for safe handling**
Avoid contact with clothing and other combustible materials.
Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.
Do not mix with acids.
Safety showers and eye wash facilities should be available at the work area.
Any deposit of dust which cannot be avoided must be regularly removed.
Keep away from heat and direct sunlight.
When diluting, always stir the product into standing water, not water to product.
Ensure good ventilation/exhaustion at the workplace.
· **Information about protection against explosions and fires:**
Keep respiratory protective device available.

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Can decompose explosively when heated.

· **Conditions for safe storage, including any incompatibilities**
· **Storage:**
· **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
· **Information about storage in one common storage facility:**
Do not store together with acids.
Do not store together with alkalis (caustic solutions).
Store away from flammable substances.
Store away from reducing agents.
Store away from foodstuffs.
Store away from oxidizing agents.
· **Further information about storage conditions:** Store in cool, dry conditions in well sealed receptacles.
· **Storage class:** 13
· **Specific end use(s)** No further relevant information available.

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## 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:** Not required.
· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**
· **Personal protective equipment:**
Select PPE appropriate for the operations taking place taking into account the product properties.
· **General protective and hygienic measures:**
Do not breathe dust
A safe system of work must be formulated and followed to ensure safe working with this product. Relevant workers must receive suitable and sufficient training and supervision.
Do not eat, drink, smoke or sniff while working.
Depending on the degree of exposure, periodic medical examination is suggested.
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 and skin.
Ensure that eyewash stations and safety showers are close to the workstation location.
· **Breathing equipment:**
Use suitable respiratory protective device in case of insufficient ventilation.
Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.
· **Protection of hands:**

Protective gloves.
Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· **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.
· **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.

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· **Eye protection:**

Safety glasses with side-shields conforming to EN166.
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Goggles recommended during refilling.

· **Body protection:**

Protective work clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

· **Limitation and supervision of exposure into the environment**
Do not allow to enter drains, sewers or watercourses.

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## 9 Physical and chemical properties

| | |
|---|---|
| · **Information on basic physical and chemical properties** | |
| · **General Information** | |
| · **Appearance:** | |
| **Form:** | Granulate |
| **Color:** | White |
| · **Odor:** | Like chlorine |
| · **Odor threshold:** | Not determined. |
| · **pH-value (10 g/l) at 20 °C (68 °F):** | 6-7 |
| · **Change in condition** | |
| **Melting point/Melting range:** | 250 °C (482 °F) |
| **Boiling point/Boiling range:** | Undetermined. |
| · **Flash point:** | Not applicable. |
| · **Flammability:** | Product is not flammable. |
| · **Auto igniting:** | 250 °C (482 °F) |
| · **Decomposition temperature:** | Not determined. |
| · **Ignition temperature:** | Not determined. |
| · **Danger of explosion:** | Product does not present an explosion hazard. |
| · **Explosion limits:** | |
| **Lower:** | Not determined. |
| **Upper:** | Not determined. |
| · **Vapor pressure:** | Not applicable. |
| · **Density at 20 °C (68 °F):** | 0.97 g/cm³ (8.095 lbs/gal) |
| · **Bulk density:** | 1,000 kg/m³ |
| · **Relative density** | Not determined. |
| · **Vapor density** | Not applicable. |
| · **Evaporation rate** | Not applicable. |
| · **Solubility in / Miscibility with** | |
| **Water at 25 °C (77 °F):** | 250 g/l |
| · **Partition coefficient (n-octanol/water):** | Not determined. |
| · **Viscosity:** | |
| **Dynamic:** | Not applicable. |

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| | |
|---|---|
| **Kinematic:** | Not applicable. |
| · **Other information** | NOTE: The physical data presented above are typical values and should not be construed as a specification.<br>*Hydrolyses rapidly upon addition to water. |

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## 10 Stability and reactivity

· **Reactivity** No further relevant information available.
· **Chemical stability**
· **Thermal decomposition / conditions to be avoided:** Decomposes on heating, producing toxic fumes.
· **Possibility of hazardous reactions**
Reacts violently with many substances.
Acts as an oxidizing agent on organic materials such as wood, paper and fats.
Risk of explosion in contact with:
Strong reducing agents
Strong bases
Reacts with acids releasing chlorine.
· **Conditions to avoid** No further relevant information available.
· **Incompatible materials:**
Strong acids and oxidising agents
Substances specificaly listed in section 10.3 as incompatible.
Ammonia
Strong bases.
Combustible materials.
Flammable materials
Reducing agents
· **Hazardous decomposition products:**
Hydrogen cyanide (prussic acid)
Chlorine
Hydrogen chloride (HCl)
Chlorine compounds
Nitrogen oxides (NOx)
Carbon monoxide and carbon dioxide

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## 11 Toxicological information

· **Information on toxicological effects**
· **Acute toxicity:**

| · **LD/LC50 values that are relevant for classification:** | | |
|---|---|---|
| Oral | LD50 | 1,500 mg/kg (rat) |
| Dermal | LD50 | > 5,000 mg/kg (rabbit) |

· **Primary irritant effect:**
· **on the skin:** Based on available data, the classification criteria are not met.
· **on the eye:**
Causes serious eye irritation.
Irritating effect.
· **Sensitization:**
No sensitizing effects known.
Based on available data, the classification criteria are not met.
· **Subacute to chronic toxicity:** Prolonged or repeated skin contact may irritate and cause dermatitis.
· **Additional toxicological information:**
INHALATION RISK: A harmful concentration of airborne particles can be reached quickly especially if powdered.

· **Carcinogenic categories**
· **IARC (International Agency for Research on Cancer)** Substance is not listed.
· **NTP (National Toxicology Program)** Substance is not listed.

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· **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

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## 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** Product is not expected to bioaccumulate.
· **Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
· **Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **Other adverse effects** No further relevant information available.

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## 13 Disposal considerations

· **Waste treatment methods**
· **Recommendation:**
Recommended Hierarchy of Controls:
- Minimize waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Contact waste processors for recycling information.

· **Uncleaned packagings:**
· **Recommendation:**
Container remains hazardous when empty. Continue to observe all precautions.
Do not mix with other waste streams.
This product is a registered pesticide.
Dispose in accordance with all applicable regulations.
Do not put product, spilled product, or filled or partially filled containers into the trash or waste compactor.
DO NOT transport wet or damp material. Damp material should be neutralized to a safe state.
Disposal must be made according to official regulations.
Containers, even those that are “empty,” may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.
· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

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## 14 Transport information

| | |
|---|---|
| · **UN-Number** | |
| · **DOT, ADR/RID/ADN, IMDG, IATA** | UN3077 |
| · **UN proper shipping name** | |
| · **DOT** | Environmentally hazardous substance, solid, n.o.s. (Troclosene sodium, dihydrate) |

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| | |
|---|---|
| · **ADR/RID/ADN** | UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Troclosene sodium, dihydrate) |
| · **IMDG, IATA** | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Troclosene sodium, dihydrate) |

· **Transport hazard class(es)**

· **DOT**

| | |
|---|---|
| · **Class** | 9 Miscellaneous dangerous substances and articles |
| · **Label** | 9 |

· **ADR/RID/ADN, IMDG, IATA**

| | |
|---|---|
| · **Class** | 9 Miscellaneous dangerous substances and articles |
| · **Label** | 9 |
| · **Packing group** | |
| · **DOT, ADR/RID/ADN, IMDG, IATA** | III |
| · **Environmental hazards:** | |
| · **Marine pollutant:** | No<br>Symbol (fish and tree) |
| · **Special marking (ADR/RID/ADN):** | Symbol (fish and tree) |
| · **Special marking (IATA):** | Symbol (fish and tree) |
| · **Special precautions for user** | Warning: Miscellaneous dangerous substances and articles |
| · **Stowage Category** | A |
| · **Stowage Code** | SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9. |
| · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** | Not applicable. |
| · **Transport/Additional information:** | Amounts up to 5kg or 5L per single or inner package are not regulated according to ADR/RID SP 375, IMDG 2.10.2.7 and IATA SP A197.<br>DO NOT transport wet or damp product. |
| · **ADR/RID/ADN** | |
| · **Excepted quantities (EQ)** | Code: E1<br>Maximum net quantity per inner packaging: 30 g<br>Maximum net quantity per outer packaging: 1000 g |
| · **IMDG** | |
| · **Limited quantities (LQ)** | 5 kg |
| · **Excepted quantities (EQ)** | Code: E1<br>Maximum net quantity per inner packaging: 30 g<br>Maximum net quantity per outer packaging: 1000 g |
| · **UN "Model Regulation":** | UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (TROCLOSENE SODIUM, DIHYDRATE), 9, III |



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## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**
No further relevant information available.
· **Sara**
· **Section 355 (extremely hazardous substances):** Substance is not listed.
· **Section 313 (Specific toxic chemical listings):** Substance is not listed.
· **TSCA (Toxic Substances Control Act):** ACTIVE
· **Hazardous Air Pollutants** Substance is not listed.
· **Proposition 65**
· **Chemicals known to cause cancer:** Substance is not listed.
· **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
· **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
· **Chemicals known to cause developmental toxicity:** Substance is not listed.

· **Cancerogenity categories**
· **EPA (Environmental Protection Agency)** Substance is not listed.
· **TLV (Threshold Limit Value)** Substance is not listed.
· **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
· **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
· **Hazard pictograms**

GHS07

· **Signal word** Warning
· **Hazard statements**
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
· **Precautionary statements**

| | |
|---|---|
| P261 | Avoid breathing dust. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P301+P312 | If swallowed: Call a poison center/doctor if you feel unwell. |
| 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. |
| P391 | Collect spillage. |

· **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:** Product safety department.
· **Contact:**
· **Date of preparation / last revision** 10/03/2024 / 1
· **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
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
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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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
Acute Toxicity - Oral 4: Acute toxicity – Category 4
Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A
Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3
· *** Data compared to the previous version altered.**