# SAFETY DATA SHEET

## CHEMSERVICE.

# 1. Identification

Product identifier	Chlorbenzuron		
Other means of identification			
Item	N-14426		
CAS number	57160-47-1		
Recommended use	For Laboratory Use Only		
<b>Recommended restrictions</b>	None known.		
Manufacturer/Importer/Supplier	Distributor information		
Manufacturer			
Company name Address	Chem Service, Inc. 660 Tower Lane West Chester, PA 19380 United States		
Telephone	Toll Free Direct	800-452-9994 610-692-3026	
Website E-mail	www.chemservice.com info@chemservice.com		
Emergency phone number	Chemtrec US Chemtrec outside US	800-424-9300 +1 703-527-3887	7
2. Hazard(s) identification			
Physical hazards	Not classified.		
Health hazards	Acute toxicity, oral		Category 4
	Skin corrosion/irritation		Category 2
	Serious eye damage/eye in	ritation	Category 2A
	Specific target organ toxicit	y, single exposure	Category 3 respiratory tract irritation
Environmental hazards	Hazardous to the aquatic e long-term hazard	nvironment,	Category 3
OSHA defined hazards	Not classified.		
Label elements			
Signal word	Warning		
Hazard statement	Harmful if swallowed. Caus irritation. Harmful to aquation		auses serious eye irritation. May cause respiratory ng effects.
Precautionary statement			
Prevention	Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear eye protection/face protection. Wear protective gloves.		
Response	If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.		
Storage	Store in a well-ventilated pl	ace. Keep containe	er tightly closed. Store locked up.
Disposal	Dispose of contents/contair	ner in accordance v	vith local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.		

Material name: Chlorbenzuron N-14426 Version #: 01 Issue date: 06-22-2021 100% of the mixture consists of component(s) of unknown acute dermal toxicity. 100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

## 3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Chlorbenzuron		57160-47-1	100
4. First-aid measures			
Inhalation	Remove victim to fresh air and keep at rest in CENTER or doctor/physician if you feel unwe	•	athing. Call a POISON
Skin contact	Remove contaminated clothing. Wash with plo medical advice/attention. Wash contaminated		irritation occurs: Get
Eye contact	Immediately flush eyes with plenty of water fo present and easy to do. Continue rinsing. Get		
Ingestion	Rinse mouth. If vomiting occurs, keep head lo Get medical advice/attention if you feel unwel		esn't get into the lungs.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include vision. May cause respiratory irritation. Skin ir		
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and trea under observation. Symptoms may be delaye		n warm. Keep victim
General information	If you feel unwell, seek medical advice (show personnel are aware of the material(s) involve this safety data sheet to the doctor in attendar	ed, and take precautions to pro	
5. Fire-fighting measures			
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carb	on dioxide (CO2).	

Do not use water jet as an extinguisher, as this will spread the fire.

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Use standard firefighting procedures and consider the hazards of other involved materials.

During fire, gases hazardous to health may be formed.

Use water spray to cool unopened containers.

No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

Unsuitable extinguishing

Specific hazards arising from

Special protective equipment

equipment/instructions Specific methods

General fire hazards

and precautions for firefighters

media

the chemical

Fire fighting

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Prevent product from entering drains. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

# 7. Handling and storage

Precautions for safe handling	Do not taste or swallow. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
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## 8. Exposure controls/personal protection

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Occupational exposure limits	This substance has no PEL, TLV, or other recommended exposure limit.
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.
Individual protection measures,	such as personal protective equipment
Eye/face protection	Face shield is recommended. Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Chemical respirator with organic vapor cartridge.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Keep away from food and drink. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

Appearance		
Physical state	Solid.	
Form	Solid.	
Color	White	
Odor	Not available.	
Odor threshold	Not available.	
рН	Not available.	
Melting point/freezing point	Not available.	
Initial boiling point and boiling range	Not available.	
Flash point	Not available.	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not available.	
Upper/lower flammability or explosive limits		
Flammability limit - lower (%)	Not available.	
Flammability limit - upper (%)	Not available.	
Explosive limit - lower (%)	Not available.	
Explosive limit - upper (%)	Not available.	
Vapor pressure	Not available.	
Vapor density	Not available.	
Relative density	Not available.	
Solubility(ies)		
Solubility (water)	Not available.	

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Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Molecular formula	C14H10Cl2N2O2
Molecular weight	309.15
Oxidizing properties	Not oxidizing.

# 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

# 11. Toxicological information

## Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.	
Skin contact	Causes skin irritation.	
Eye contact	Causes serious eye irritation.	
Ingestion	Harmful if swallowed.	
Symptoms related to the physical, chemical and toxicological characteristics	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.	
Information on toxicological effe	ects	
Acute toxicity	In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Harmful if swallowed.	
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall Evaluation of Carcinogenicity Not listed. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)		
Not regulated.		
	gram (NTP) Report on Carcinogens	
Not listed.		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	May cause respiratory irritation.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	

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## 12. Ecological information

Ecotoxicity	Harmful to aquatic life with long lasting effects.
Persistence and degradability	
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

#### 13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### ΙΑΤΑ

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

#### 15. Regulatory information

US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication
-	Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated. CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

#### SARA 302 Extremely hazardous substance

Not listed.

# SARA 311/312 Hazardous No chemical

# SARA 313 (TRI reporting)

Not regulated.

Other federal regulations		
Clean Air Act (CAA) Sectio Not regulated.	n 112 Hazardous Air Pollutants (HAPs) List	
Clean Air Act (CAA) Sectio	n 112(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.		
Safe Drinking Water Act (SDWA)	Not regulated.	
US state regulations	California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.	
International Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

# 16. Other information, including date of preparation or last revision

Issue date	06-22-2021
Version #	01
NFPA ratings	Health: 2 Flammability: 0 Instability: 0

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