



Material Safety Data Sheet

NFPA 	HMIS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">2</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	1	Reactivity	0	Personal Protective Equipment  See Section 15.
Health Hazard	2							
Fire Hazard	1							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
Common Name/Trade Name	Quaternium 15	
	Catalog Number(s)	Q1007
	CAS#	51229-78-8
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
	RTECS	XX8451000
	TSCA	TSCA 8(b) inventory: Quaternium 15
Commercial Name(s)	Dowicil 200	
	CI#	Not available.
Synonym	Cis-1-(3-Chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride; cis-1-(3-Chloroallyl)-3,5,7-triaza-1-azoniaadamantane chloride; 3,5,7-Triaza-1-azoniatricyclo[3.3.1.1 ^{3,7}]decane, 1-(3-chloro-2-propenyl)-, chloride, (Z)-	
Chemical Name	3,5,7-Triaza-1-azoniatricyclo[3.3.1.3,7]decane, 1-[(2Z)-3-chloro-2-propen-1-yl]-chloride (1:1)	
Chemical Family	Not available.	
Chemical Formula	Not applicable.	
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300 CALL (310) 516-8000		

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Quaternium 15	51229-78-8				100
2) Methylene chloride	75-09-2	500			<=0.5
3) cis-1,3-dichloropropene	10061-01-5				<=0.3
Toxicological Data on Ingredients	Quaternium 15: ORAL (LD50): Acute: 2664 mg/kg [Rat (from RTECS)]. 1552 mg/kg [Rat (from other vendor MSDS)]. DERMAL (LD50): Acute: 923 mg/kg [Rabbit (From RTECS)]. >4000 mg/kg [Rabbit (From other vendor MSDS)]. DUST (LC50): Acute: >4.7 mg/l 4 hours [Rat].				

Section 3. Hazards Identification

Potential Acute Health Effects	Hazardous in case of skin contact (irritant, permeator), of eye contact (irritant). Slightly hazardous in case of ingestion, of inhalation.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	391°C (735.8°F)
Flash Points	Not available.
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...), halogenated compounds.
Fire Hazards in Presence of Various Substances	Flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of heat.
Fire Fighting Media and Instructions	Flammable solid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Special Remarks on Fire Hazards	Material in powder form, capable of creating a dust explosion. Decomposition products may include Chlorinated hydrocarbons, Carbon dioxide, Carbon monoxide, Nitrogen oxides, Ammonia, amines, Hydrogen chloride, Triethylamine. Gases are released during decomposition.
Special Remarks on Explosion Hazards	Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill	Flammable solid. Stop leak if without risk. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Section 7. Handling and Storage

Precautions	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, metals, acids.
Storage	Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Powdered solid.)	Odor	Amine like. (Slight.)
Molecular Weight	251.2 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Off-white.
Boiling Point	Not available.		
Melting Point	Melting point: >150°C (302°F) Decomposition temperature: 192 C. (378 F.)		
Critical Temperature	Not available.		
Specific Gravity	Density: 0.41 g/ml (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	The product is more soluble in water; log(oil/water) = -2		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water.		
Solubility	Easily soluble in cold water. Solubility in Water: >50% @ 10 deg. C.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat (over 80 deg. C/176 deg. F). Generation of Gas during decomposition can cause pressure in closed systems. Avoid contact with incompatible materials. Avoid static discharge. Avoid moisture. Water contamination may cause heat generation and decomposition.
Incompatibility with various substances	Reactive with oxidizing agents, metals, acids.
Corrosivity	Not available.
Special Remarks on Reactivity	Avoid contact with metals such as Aluminum. Avoid temperatures above 80 deg. C(176 F). Generation of gas during decomposition can cause pressure in closed systems.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 1552 mg/kg [Rat (from other vendor MSDS)]. Acute dermal toxicity (LD50): 923 mg/kg [Rabbit (From RTECS)]. Acute toxicity of the dust (LC50): >4.7 mg/l 4 hours [Rat].
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant, permeator). Slightly hazardous in case of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	Contains trace amounts of Dichloromethane (Methylene Chloride) and Cis-1,3-dichloroprene which can cause cancer.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation. It may cause a more severe response if the skin is wet. It may be absorbed through the skin in harmful amounts and cause systemic effects and affect behavior and the thymus gland. It may cause allergic skin reaction, which is more likely when in aqueous solutions than in powdered form. It may be a weak sensitizer at concentrations >1% aqueous solution. Eyes: Causes mild to moderate eye irritation. Corneal injury is unlikely. Inhalation: A single exposure to dust is not likely to be hazardous. May cause respiratory tract irritation. Ingestion: May cause hypermotility and diarrhea. Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion may cause weight loss and affect behavior, brain, blood (normocytic anemia, changes in white blood cell count), liver.

Section 12. Ecological Information

Ecotoxicity	Ecotoxicity in water (LC50): 66 mg/l 96 hours [Fish (Blue gill (Lepomis macrochirus))]. 25.8 mg/l 48 hours [Daphnia (Daphnia magna)].
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are as toxic as the product itself.
Special Remarks on the Products of Biodegradation	Not available.

Continued on Next Page

Section 13. Disposal Considerations

Waste Disposal Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification CLASS 4.1: Flammable solid.

Identification UNNA: 1325 : Flammable solid, organic, n.o.s. PG: III

Special Provisions for Transport Not available.

DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Quaternium 15, Dichloromethane (Methylene Chloride); cis-1,3-Dichloroproene
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Dichloromethane (Methylene Chloride); cis-1,3-Dichloroproene
 New Jersey: Quaternium 15
 New Jersey spill list: Quaternium 15
 TSCA 8(b) inventory: Quaternium 15
 SARA 313 toxic chemical notification and release reporting: Quaternium 15

California Proposition 65 Warnings
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Dichloromethane (Methylene Chloride); cis-1,3-Dichloroproene
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications	WHMIS (Canada)	CLASS B-4: Flammable solid. CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC).	
	DSCL (EEC)	R11- Highly flammable. R22- Harmful if swallowed. R38- Irritating to skin. R43- May cause sensitization by skin contact. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R63- Possible risk of harm to the unborn child.	S7- Keep container tightly closed. S22- Do not breathe dust. S33- Take precautionary measures against static discharges. S36/37- Wear suitable protective clothing and gloves. S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

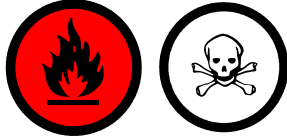
HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	E

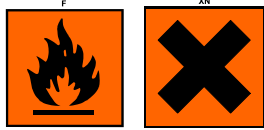
National Fire Protection Association (U.S.A.)

Health Flammability
 Reactivity
 Specific hazard

**WHMIS (Canada)
(Pictograms)**



**DSCL (Europe)
(Pictograms)**



**TDG (Canada)
(Pictograms)**



**ADR (Europe)
(Pictograms)**



Protective Equipment



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent.



Splash goggles.

Section 16. Other Information

MSDS Code Q0001

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 7/28/2010.

Verified by Sonia Owen.
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CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.