



SAFETY DATA SHEET
Clothianidin 48% SC (600g ai/L)

SDS # : 7523-A
Revision date: 2021-11-03
Format: AP
Version 2

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Clothianidin 48% SC (600g ai/L)
Product Code(s) 7523-A
Active Ingredient(s) Clothianidin Technical (98%)
Chemical Family Neonicotinoid
Recommended Use: Insecticide
Restrictions on Use: Use as recommended by the label.

Manufacturer/Supplier

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104
(215) 299-6000 (General Information)
SDS-Info@fmc.com (E-Mail General Information)

Emergency telephone

Medical Emergencies: 0800 140 1447
For leak, fire, spill or accidents: 001-803-017-9114 (CHEMTREC Indonesia)
1 703 741-5970 (CHEMTREC – International)

Section 2: HAZARDS IDENTIFICATION

GHS Classification

Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Label Elements



Signal Word: **WARNING**

Hazard Statements

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

P273 - Avoid release to the environment

Precautionary Statements - Response

P312 - Call a POISON CENTER or doctor if you feel unwell

P391 - Collect spillage

Precautionary Statements - Disposal

P501 - Dispose of contents/container to an approved waste disposal plant

Other Information

- No hazards not otherwise classified were identified.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No	Weight %
Clothianidin	210880-92-5	48
Propylene glycol	57-55-6	<5
Sodium Hydroxide	1310-73-2	<1
Methyl ethyl ketone	78-93-3	<1

Section 4: FIRST AID MEASURES

Inhalation	Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a physician or poison control center immediately.
Skin Contact	Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Seek immediate medical attention/advice. Call a poison control center or doctor for further treatment advice.
Eye Contact	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a physician immediately.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Drink 1 or 2 glasses of water. Do not induce vomiting unless told to do so by a poison control center or doctor. Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting - seek medical advice.
Most important symptoms and effects, both acute and delayed	Asthma-like and/or skin allergy-like symptoms.
Indication of immediate medical attention and special treatment needed, if necessary	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Flammable properties	Not combustible
Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical. Cool containers / tanks with water spray.
Unsuitable extinguishing media	Avoid heavy hose streams.
Specific Hazards Arising from the Chemical	Keep product and empty container away from heat and sources of ignition.
Protective equipment and precautions for firefighters	Isolate fire area. Evaluate upwind. As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions	In case of spill, avoid contact. Isolate area and keep out animals and unprotected persons. Remove all sources of ignition. Heat, flames and sparks. Ensure adequate ventilation.
Other	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
Environmental Precautions	Prevention of fire and explosion. A vapor suppressing foam may be used to reduce vapors. Try to prevent the material from entering drains or water courses. Do not allow material to contaminate ground water system. Vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Keep in suitable and closed containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with all applicable national environmental laws and regulations.

Section 7: HANDLING AND STORAGE

Handling	Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.
Storage	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Store in original container.
Materials to avoid	Strong oxidizing agents, Strong acids, Strong bases.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Component	China	Japan	Korea	Australia	Taiwan
Propylene glycol 57-55-6 (<5)				TWA 150 ppm TWA 474 mg/m ³ TWA 10 mg/m ³	
Sodium Hydroxide 1310-73-2 (<1)	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³	Peak 2 mg/m ³	STEL 4 mg/m ³
Methyl ethyl ketone 78-93-3 (<1)	TWA: 300 mg/m ³ STEL: 600 mg/m ³	OEL: 200 ppm OEL: 590 mg/m ³ ISHL/ACL: 200 ppm	STEL: 300 ppm TWA: 200 ppm	STEL 300 ppm STEL 890 mg/m ³ TWA 150 ppm TWA 445 mg/m ³	STEL 250 ppm STEL 737.5 mg/m ³

Engineering measures	Apply technical measures to comply with the occupational exposure limits.
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Personal protective equipment

Respiratory Protection	The product does not automatically present an airborne exposure concern during normal handling. In the event of an accidental discharge of the material which produces a heavy vapour or mist, workers should put on officially approved respiratory protection equipment with a universal filter type including particle filter.
Hand Protection	Wear chemical protective gloves made of materials such as nitrile or neoprene.
Eye/Face Protection	Tightly fitting safety goggles.
Skin and Body Protection	Wear suitable protective clothing.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	White Suspension
Odor	Odorless
Color	White
Odor threshold	Not applicable
pH	4-8
Melting point/freezing point	Not applicable
Boiling Point/Range	93 °C
Flash point	No information available
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not flammable
Flammability Limit in Air	
Upper flammability limit:	Not flammable
Lower flammability limit:	Not flammable
Vapor pressure	Not applicable
Vapor density	Not applicable
Specific gravity	1.225
Water solubility	No information available
Solubility(ies)	Not applicable
Partition coefficient	Not applicable
Autoignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity, kinematic	
Viscosity, dynamic	55 mPa s @ 20 deg. C
Molecular weight	No data available
Relative density	1.225 g/mL @ 20°C
Bulk density	No information available

Section 10: STABILITY AND REACTIVITY

Reactivity	Not applicable
Stability	Stable under recommended storage conditions
Hazardous reactions	None under normal processing.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to Avoid	No information available.
Incompatible products	Strong oxidizing agents, Strong acids, Strong bases.
Hazardous Decomposition Products	Carbon monoxide (CO). Carbon dioxide (CO ₂).

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Numerical measures of toxicity - Product Information

LD50 Oral	2500 mg/kg
LD50 Dermal	> 2000 mg/kg
LC50 Inhalation (dust)	5.06 mg/L 4 hr

Skin corrosion/irritation	Non-irritating.
Serious eye damage/eye irritation	Mildly irritating.
Sensitization	Non-sensitizing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Mutagenicity	Clothianidin: Did not show mutagenic effects in animal experiments.
Carcinogenicity	Clothianidin: No evidence of carcinogenicity from animal studies.
Reproductive toxicity	Clothianidin: No toxicity to reproduction in animal studies.
Developmental toxicity	Clothianidin: Developmental LOAEL = 75 mg/kg/day based on an increased litter incidence of a missing lobe of the lung (rabbit).
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target organ effects	Clothianidin: [90 day rat: at 640 mg/kg - atrophy of the testes; atrophy of testicular seminiferous tubules with lack of spermatogenic cells in testes, and severe lack of sperm in epididymal lumen], haematopoietic organs (rat, dog); kidney (mouse).
Aspiration hazard	The product does not present an aspiration pneumonia hazard.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Very toxic to aquatic life with long lasting effects. Highly toxic to bees.

Clothianidin (210880-92-5)				
Active Ingredient(s)	Duration	Species	Value	Units
	96 h LC50	Fish	>104.2	mg/L
	96 h EC50	Algae	55	mg/L
	48 h EC50	Daphnia magna	>40	mg/L
	28 d NOEC	Fish	20	mg/L
	21 d NOEC	Daphnia magna	0.12	mg/L
	48 h LC50	Bee	0.03	mg/L

Persistence and degradability	Clothianidin: Moderately persistent. Hydrolytically stable. Not readily biodegradable.
Bioaccumulation	Clothianidin: The substance has a low potential to bioaccumulate in the environment.
Mobility	Clothianidin: Moderately mobile. Has some potential to reach groundwater.
Other Adverse Effects	No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal methods	Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. In accordance with local and national regulations. The product should not be allowed to enter drains, water courses or the soil.
Contaminated containers and packages	Dispose of in accordance with federal, state and local regulations.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

UN/ID no

Proper Shipping Name

UN3082

Environmentally hazardous substance, liquid, n.o.s.(Clothianidin)

Hazard class	9
Packing Group	III
EmS No.	F-A, S-F
Special Provisions	274, 335
Environmental Hazards	Clothianidin

ICAO/IATA

UN/ID no	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s.(Clothianidin)
Hazard class	9
Packing Group	III
Limited quantity	30 kg G
Special Provisions	A97, A158
Environmental Hazards	Clothianidin

Section 15: REGULATORY INFORMATION

International Inventories

A food, food additive, drug, cosmetic, or device, when manufactured, processed or distributed in commerce for use as a food, food additive, drug, cosmetic, or device may not be subject to local notification requirements. Check local regulations for more information.

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Clothianidin 210880-92-5			X	X	X			
Propylene glycol 57-55-6	X	X	X	X	X	X	X	X
Sodium Hydroxide 1310-73-2	X	X	X	X	X	X	X	X
Methyl ethyl ketone 78-93-3	X	X	X	X	X	X	X	X

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Section 16: OTHER INFORMATION

Revision date: 2021-11-03

Revision note SDS sections updated.

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End of Safety Data Sheet