according to the OSHA Hazard Communication Standard



## **DEMAND CS INSECTICIDE**

Version 0.0	Revision Date: 10/17/2023	SDS Nu S00071		Date of last issue: - Date of first issue: 10/17/2023
SECTION	1. IDENTIFICATION			
	uct name gn code		1AND CS II 690V	NSECTICIDE
Manu	afacturer or supplier's	details		
Comp Addre	pany name of supplier ess	: Post Gree	Office Box ensboro NC	
Telep Telefa	ohone ax		0 334 9481 6 632 2192	
E-ma	il address	: sds.	requests@:	syngenta.com
Reco	mmended use of the	chemical a	and restric	tions on use
Reco	mmended use	: Inse	cticide	
Restr	ictions on use	: Gen	eral Use Pe	esticide

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accorda 1910.1200)	nce with the OSHA Hazard Communication Standard (29 CFR
Acute toxicity (Inhalation)	Category 4
GHS label elements	
Hazard pictograms	
Signal Word	Warning
Hazard Statements	H332 Harmful if inhaled.
Precautionary Statements	<ul> <li>Prevention:</li> <li>P261 Avoid breathing mist or vapors.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>Response:</li> <li>P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.</li> </ul>

#### Other hazards

May cause temporary itching, tingling, burning or numbness of exposed skin, called paresthesia.

according to the OSHA Hazard Communication Standard



# **DEMAND CS INSECTICIDE**

Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	10/17/2023	S00071785198	Date of first issue: 10/17/2023

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components		
Chemical name	CAS-No.	Concentration (% w/w)
lambda-cyhalothrin	91465-08-6	9.5511
Hydrocarbons, C9, Aromatics	128601-23-0	>= 5 - < 10
propane-1,2-diol	57-55-6	>= 5 - < 10
orthophosphoric acid	7664-38-2	>= 1 - < 5
dioxosilane	14808-60-7	>= 0.1 - < 1
Actual concentration is withheld as	s a trade secret	

ctual concentration is withheid as a trade secre

#### **SECTION 4. FIRST AID MEASURES**

General advice	:	Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.
If inhaled	:	Take the victim into fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest.
In case of skin contact	:	Call a physician or poison control center immediately. Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
In case of eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
If swallowed	:	If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.
Most important symptoms and effects, both acute and delayed	:	Aspiration may cause pulmonary edema and pneumonitis. Skin contact paresthesia effects (itching, tingling, burning or numbness) are transient, lasting up to 24 hours. Harmful if inhaled.
Notes to physician	:	Do not induce vomiting: contains petroleum distillates and/or aromatic solvents. Treat symptomatically.

#### SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Extinguishing media - small fires Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Extinguishing media - large fires Alcohol-resistant foam
Unsuitable extinguishing media	:	or Water spray Do not use a solid water stream as it may scatter and spread fire.

according to the OSHA Hazard Communication Standard



# **DEMAND CS INSECTICIDE**

Version 0.0	Revision Date: 10/17/2023		OS Number: 00071785198	Date of last issue: - Date of first issue: 10/17/2023
Spec fightir	ific hazards during fire	:	will produce dens products of comb	ntains combustible organic ingredients, fire e black smoke containing hazardous ustion (see section 10). mposition products may be a hazard to
Furth	er information	:	courses. Cool closed conta	off from fire fighting to enter drains or water an
	ial protective equipment e-fighters	:	Wear full protectiv apparatus.	e clothing and self-contained breathing

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Refer to protective measures listed in sections 7 and 8.
Environmental precautions	:	Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents. Retain and dispose of contaminated wash water.

#### SECTION 7. HANDLING AND STORAGE

Advice on safe handling	No special protective measures Avoid contact with skin and eyes When using do not eat, drink or For personal protection see sect	s. smoke.
Conditions for safe storage	No special storage conditions re Keep containers tightly closed in ventilated place. Keep out of the reach of childrer Keep away from food, drink and	quired. a dry, cool and well- n.

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of	Control parame- ters / Permissible	Basis
		exposure)	concentration	
lambda-cyhalothrin	91465-08-6	TWA	0.04 mg/m3 (Skin)	Syngenta
Hydrocarbons, C9, Aromatics	128601-23-0	TWA	19 ppm 100 mg/m3	Supplier

according to the OSHA Hazard Communication Standard



## **DEMAND CS INSECTICIDE**

Version	Re
0.0	10/

evision Date: /17/2023 SDS Number: S00071785198

Date of last issue: -Date of first issue: 10/17/2023

propane-1,2-diol	57-55-6	TWA	10 mg/m3	US WEEL
orthophosphoric acid	7664-38-2	TWA	1 mg/m3	ACGIH
		STEL	3 mg/m3	ACGIH
		TWA	1 mg/m3	NIOSH REL
		ST	3 mg/m3	NIOSH REL
		TWA	1 mg/m3	OSHA Z-1
		TWA	1 mg/m3	OSHA P0
		STEL	3 mg/m3	OSHA P0
dioxosilane	14808-60-7	TWA (respir- able)	10 mg/m3 / %SiO2+2	OSHA Z-3
		TWA (respir- able)	250 mppcf / %SiO2+5	OSHA Z-3
		TWA (respir- able dust fraction)	0.1 mg/m3	OSHA P0
		TWA (Res- pirable par- ticulate mat- ter)	0.025 mg/m3 (Silica)	ACGIH
		TWA (Res- pirable dust)	0.05 mg/m3 (Silica)	NIOSH REL
		TWA (Res- pirable dust)	0.05 mg/m3	OSHA Z-1
	PACKAGING APPLICATIC CONSULT T Containment protection m The extent o actual risks i Maintain air standards.	G OF THE PROD DNS AND/OR ON THE PRODUCT L t and/or segregat easure if exposur f these protectior n use. concentrations be	ion is the most relia re cannot be elimin n measures depend elow occupational e	ERCIAL FIONS able technical ated. ds on the
	advice.	ssary, seek addit	ional occupational	hygiene
Personal protective equip	ment	-		
Personal protective equip Respiratory protection	ment : Where conce unknown, ap Follow OSH/ use NIOSH/I by air purifyin hazardous c supplied resp release, exp	entrations are abo propriate respira A respirator regul MSHA approved ng respirators ag hemical is limited pirator if there is osure levels are o e where air purify	onal occupational ove recommended tory protection sho ations (29 CFR 19 respirators. Protect ainst exposure to a . Use a positive pro any potential for un unknown, or any ot ing respirators may	limits or are uld be worn. 10.134) and tion provided any essure air icontrolled her
	ment : Where conce unknown, ap Follow OSH/ use NIOSH/I by air purifyin hazardous c supplied resp release, exp circumstance	entrations are abo propriate respira A respirator regul MSHA approved ng respirators ag hemical is limited pirator if there is osure levels are o e where air purify	ove recommended tory protection sho ations (29 CFR 19 respirators. Protect ainst exposure to a . Use a positive pre any potential for un unknown, or any ot	limits or are uld be worn. 10.134) and tion provided any essure air icontrolled her
Respiratory protection	ment : Where conce unknown, ap Follow OSH/ use NIOSH/I by air purifyin hazardous c supplied res release, exp circumstance adequate pre	entrations are abo propriate respira A respirator regul MSHA approved ng respirators ag hemical is limited pirator if there is a osure levels are u e where air purify otection.	ove recommended tory protection sho ations (29 CFR 19 respirators. Protect ainst exposure to a . Use a positive pre any potential for un unknown, or any ot	limits or are uld be worn. 10.134) and tion provided any essure air acontrolled her y not provide

according to the OSHA Hazard Communication Standard



# **DEMAND CS INSECTICIDE**

Version 0.0	Revision Date: 10/17/2023	SDS Number: S00071785198	Date of last issue: - Date of first issue: 10/17/2023
		features and is Please observe breakthrough t gloves. Also ta conditions und danger of cuts, through time d material, the th has to be meas discarded and degradation or	depend on its material but also on other quality different from one producer to the other. e the instructions regarding permeability and ime which are provided by the supplier of the ke into consideration the specific local er which the product is used, such as the abrasion, and the contact time. The break epends amongst other things from the ickness and the type of glove and therefore sured for each case. Gloves should be replaced if there is any indication of chemical breakthrough.
	protection and body protection	: Choose body p	tective equipment required. protection in relation to its type, to the and amount of dangerous substances, and to rk-place.
Prot	ective measures	Wear as appro Impervious clo : The use of tecl over the use of When selecting	•

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	beige
Odor	:	No data available
Odor Threshold	:	No data available
рН	:	5.5 Concentration: 1 %w/v
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	Method: method not specified does not flash
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available

according to the OSHA Hazard Communication Standard



## **DEMAND CS INSECTICIDE**

Version 0.0	Revision Date: 10/17/2023		S Number: 0071785198	Date of last issue: - Date of first issue: 10/17/2023
Vap	or pressure	:	No data available	2
Rela	ative vapor density	:	No data available	9
Den	sity	:	1.047 g/cm3	
	ıbility(ies) Vater solubility	:	No data available	
Ś	Solubility in other solvents	:	No data available	9
	ition coefficient: n- nol/water	:	No data available	9
	bignition temperature	:	1175 °F / 635 °C	
Dec	omposition temperature	:	No data available	9
	cosity /iscosity, kinematic	:	No data available	
Exp	losive properties	:	No data available	9
Oxio	dizing properties	:	No data available	9
Part	icle size	:	No data available	9

#### SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability Possibility of hazardous reac- tions	:	None reasonably foreseeable. Stable under normal conditions. No dangerous reaction known under conditions of normal use.
Conditions to avoid Incompatible materials Hazardous decomposition products	:	No decomposition if used as directed. None known. No hazardous decomposition products are known.

#### SECTION 11. TOXICOLOGICAL INFORMATION

#### Information on likely routes of exposure

Ingestion Inhalation Skin contact Eye contact

#### Acute toxicity

Harmful if inhaled.

#### Product:

Acute oral toxicity

: LD50 (Rat, male and female): > 5,000 mg/kg Remarks: Based on data from similar materials

according to the OSHA Hazard Communication Standard



# **DEMAND CS INSECTICIDE**

rsion )	Revision Date: 10/17/2023	SDS Number: S00071785198	Date of last issue: - Date of first issue: 10/17/2023
Acute	inhalation toxicity	Exposure to Test atmos Assessmer short term inhalation a	male and female): > 4.62 mg/l ime: 4 h phere: dust/mist nt: The component/mixture is moderately toxic a inhalation., The substance/mixture is not toxic o as defined by dangerous goods regulations. Based on data from similar materials
Acute dermal toxicity		Assessmer toxicity	male and female): > 4,000 mg/kg nt: The substance or mixture has no acute derm Based on data from similar materials
Comp	onents:		
lambd	la-cyhalothrin:		
	oral toxicity	: LD50 (Rat,	female): 56 mg/kg
Acute	inhalation toxicity	Exposure t	male and female): 0.06 mg/l ime: 4 h phere: dust/mist
Acute	dermal toxicity	: LD50 (Rat,	male): 632 mg/kg
Hydro	carbons, C9, Aroma	atics:	
Acute	oral toxicity	: LD50 (Rat,	female): 3,492 mg/kg
orthop	phosphoric acid:		
Acute	oral toxicity	: LD50 (Rat)	: 301 mg/kg
Acute	dermal toxicity	: LD50 (Rab	bit): 2,750 mg/kg
Skin c	orrosion/irritation		
Based	on available data, th	e classification crit	eria are not met.
<u>Produ</u>			
Specie		: Rabbit	
Result Rema		: No skin irrit : Based on c	tation lata from similar materials
<u>Comp</u>	onents:		
lambd	la-cyhalothrin:		
Specie	-	: Rabbit	
Result		: No skin irrit	tation
Hydro	carbons, C9, Aroma	atics:	
Result		: Repeated e	exposure may cause skin dryness or cracking.
Specie		: Rabbit	

according to the OSHA Hazard Communication Standard



## **DEMAND CS INSECTICIDE**

Version	Revision Date:	SDS Number:	Date of last issue: -	
0.0	10/17/2023	S00071785198	Date of first issue: 10/17/2023	

#### orthophosphoric acid:

Result : Corrosive after 3 minutes to 1 hour of exposure

#### Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

#### Product:

Species	:	Rabbit
Result	:	No eye irritation

#### Components:

#### lambda-cyhalothrin:

Species	:	Rabbit
Result	:	No eye irritation

#### Respiratory or skin sensitization

#### Skin sensitization

Not classified due to lack of data.

#### **Respiratory sensitization**

Not classified due to lack of data.

#### Components:

#### lambda-cyhalothrin:

Test Type Species Result	:	Maximization Test Guinea pig Does not cause skin sensitization.
Test Type Species Recult	:	Local lymph node assay (LLNA) Mouse
Result		Does not cause skin sensitization

#### Germ cell mutagenicity

Not classified due to lack of data.

#### Components:

lambda-cyhalothrin:		
Germ cell mutagenicity - Assessment	:	Animal testing did not show any mutagenic effects.
orthophosphoric acid:		

Germ cell mutagenicity -	:	In vitro tests did not show mutagenic effects
Assessment		

#### Carcinogenicity

Not classified due to lack of data.

according to the OSHA Hazard Communication Standard



## **DEMAND CS INSECTICIDE**

sion	Revision Date: 10/17/2023	-	OS Number: 0071785198	Date of last issue: - Date of first issue: 10/17/2023
<u>Comp</u>	onents:			
lambd	la-cyhalothrin:			
	ogenicity - Assess-	:	Weight of evic cinogen	lence does not support classification as a car-
dioxo	silane:			
Carcin ment	ogenicity - Assess-	:	Weight of evic cinogen	lence does not support classification as a car-
			mans for the c form of quartz experimental a was noted how all industrial c ent characteris	cluded that there is sufficient evidence in hu- carcinogenicity of inhaled crystalline silica in the or cristobalite from occupational sources and animals from quartz and cristobalite (Group 1) wever, that carcinogenicity was not detected in rcumstances and may be dependent on inher stics of the crystalline silica or external factors ological activity.
Repro	ductive toxicity			
Not cla	assified due to lack of	data.		
<u>Comp</u>	onents:			
lambo	la-cyhalothrin:			
Repro sessm	ductive toxicity - As- ent	:	Weight of evic reproductive to	lence does not support classification for oxicity
ortho	phosphoric acid:			
Repro sessm	ductive toxicity - As- ent	:	No toxicity to r	reproduction
	-single exposure assified due to lack of	data.		
<u>Comp</u>	<u>onents:</u>			
lambo	la-cyhalothrin:			
Asses	sment	:		e or mixture is not classified as specific target , single exposure.
Hydro	carbons, C9, Aroma	tics:		
Asses	sment	:	toxicant, single The substance	e or mixture is classified as specific target org- e exposure, category 3 with narcotic effects., e or mixture is classified as specific target org- e exposure, category 3 with respiratory tract

#### STOT-repeated exposure

Not classified due to lack of data.

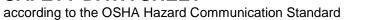
according to the OSHA Hazard Communication Standard



## **DEMAND CS INSECTICIDE**

ersion .0	Revision Date: 10/17/2023		S Number: 0071785198	Date of last issue: - Date of first issue: 10/17/2023	
<u>Co</u>	mponents:				
lan	nbda-cyhalothrin:				
As	sessment	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.		
dic	oxosilane:				
Ta	utes of exposure rget Organs sessment	:		e or mixture is classified as specific target organ ated exposure, category 1.	
As	piration toxicity				
No	t classified due to lack of c	lata.			
<u>Co</u>	mponents:				
-	drocarbons, C9, Aromati		ers airways.		
Fu	rther information				
	oduct: marks	:		nporary itching, tingling, burning or numbness c called paresthesia.	
<u>Co</u>	mponents:				
lan	nbda-cyhalothrin:				
	marks	:		nporary itching, tingling, burning or numbness c called paresthesia.	
ECTIC	ON 12. ECOLOGICAL INF	ORI	ATION		
Ec	otoxicity				
<u>Co</u>	mponents:				
lan	nbda-cyhalothrin:				
	xicity to fish	:	LC50 (Leucisc Exposure time	eus idus (Golden orfe)): 0.000078 mg/l e: 96 h	
			LC50 (Ictaluru Exposure time	s punctatus (channel catfish)): 0.00016 mg/l e: 96 h	
	xicity to daphnia and other uatic invertebrates	' :	EC50 (Daphni Exposure time	a magna (Water flea)): 0.00036 mg/l :: 48 h	
			LC50 (America	amysis): 0.000007 mg/l	

EC50 (Hyalella azteca (Amphipod)): 0.000002 mg/l





# **DEMAND CS INSECTICIDE**

plants       0.31 mg/l Exposure time: 96 h         M-Factor (Acute aquatic tox- icity)       100,000         Toxicity to fish (Chronic tox- icity)       100,000         Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)       NOEC (Daphnia magna (Water flea)): 0.00002 mg/l Exposure time: 20 d         M-Factor (Chronic aquatic ic toxicity)       NOEC (Americamysis): 0.00022 µg/l Exposure time: 28 d         M-Factor (Chronic aquatic ic toxicity)       100,000         Toxicity to microorganisms       EC50 (activated sludge): > 100 mg/l Exposure time: 3 h         Hydrocarbons, C9, Aromatics:       EC50 (activated sludge): > 100 mg/l Exposure time: 96 h         Toxicity to daphnia and other aquatic invertebrates       EL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 48 h         Toxicity to daphnia and other aquatic invertebrates       ErC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 h         Toxicity to fish (Chronic tox- ic toxicity)       : NOELR (Qncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 d         Toxicity to fish (Chronic tox- ic toxicity)       : NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 21 d         Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)       : NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 d         Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)       : NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 d	sion	Revision Date: 10/17/2023		0S Number: 0071785198	Date of last issue: - Date of first issue: 10/17/2023		
plants0.31 mg/l Exposure time: 96 hM-Factor (Acute aquatic tox- icity)100,000Toxicity to fish (Chronic tox- icity): NOEC (Pimephales promelas (fathead minnow)): 0.0000 mg/l Exposure time: 300 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity): NOEC (Daphnia magna (Water flea)): 0.000022 mg/l Exposure time: 21 dM-Factor (Chronic aquatic toxicity): 100,000M-Factor (Chronic aquatic toxicity): 100,000M-Factor (Chronic aquatic toxicity): 100,000Toxicity to microorganisms: EC50 (activated sludge): > 100 mg/l Exposure time: 3 hHydrocarbons, C9, Aromatics: Toxicity to fish: LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 hToxicity to daphnia and other aquatic invertebrates: ErC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hToxicity to fish (Chronic tox- icity): NOELR (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hToxicity to fish (Chronic tox- icity): NOELR (Chronic northice is 28 dToxicity to fish (Chronic tox- icity): NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 28 dToxicity to fish (Chronic tox- ic toxicity): NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fish: LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 n				Exposure time: 48	3 h		
icity) Toxicity to fish (Chronic tox- icity): NOEC (Pimephales promelas (fathead minnow)): 0.0000 mg/l Exposure time: 300 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity): NOEC (Daphnia magna (Water flea)): 0.00002 mg/l 			:				
Toxicity to fish (Chronic tox- icity): NOEC (Pimephales promelas (fathead minnow)): 0.0000 mg/l Exposure time: 300 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity): NOEC (Daphnia magna (Water flea)): 0.000022 mg/l Exposure time: 21 dM-Factor (Chronic aquatic toxicity): 100,000M-Factor (Chronic aquatic toxicity): 100,000Toxicity to microorganisms: EC50 (activated sludge): > 100 mg/l Exposure time: 3 hHydrocarbons, C9, Aromatics: Toxicity to fish: LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 hToxicity to daphnia and other aquatic invertebrates: EC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hToxicity to fish (Chronic tox- icity): NOELR (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hToxicity to fish (Chronic tox- icity): NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to daphnia and other aquatic invertebrates: NOELR (Docorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 21 dToxicity to fish (Chronic tox- icity): NOELR (Docorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 21 dToxicity to daphnia and other ic toxicity): Toxic to aquatic life with long lasting effects.orticity to fish (Chronic tox- ic toxicity): Toxic to aquatic life with long lasting effects.orticity to fish (Chronic tox- ic toxicity): Toxic to aquatic life with long lasting effects.		tor (Acute aquatic tox-	:	100,000			
aquatic invertebrates (Chron- ic toxicity)Exposure time: 21 dAverage StructureExposure time: 28 dM-Factor (Chronic aquatic toxicity):Toxicity to microorganisms:EC50 (activated sludge): > 100 mg/l Exposure time: 3 hHydrocarbons, C9, Aromatics: Toxicity to fish:Toxicity to fish:LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 hToxicity to daphnia and other aquatic invertebrates:EL50 (Daphnia magna (Water flea)): 3.2 mg/l Exposure time: 48 hToxicity to algae/aquatic plants:ErC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hToxicity to fish (Chronic tox- icity):NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity):NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicity:Toxicity to fish:Chronic aquatic toxicity:Toxicity to fish:Chronic aquatic toxicity:Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fish:LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r	Toxicity to fish (Chronic tox-		:				
NOEC (Americamysis): 0.00022 µg/l Exposure time: 28 dM-Factor (Chronic aquatic toxicity)100,000Toxicity to microorganismsEC50 (activated sludge): > 100 mg/l Exposure time: 3 hHydrocarbons, C9, Aromatics: Toxicity to fish1L50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 hToxicity to daphnia and other aquatic invertebratesEL50 (Daphnia magna (Water flea)): 3.2 mg/l Exposure time: 48 hToxicity to algae/aquatic plantsErC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga) mg/l End point: Growth rate Exposure time: 28 dToxicity to fish (Chronic tox- icity)NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to daphnia and other icity)NOELR (Docorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 21 dToxicity to daphnia and other ic toxicity)NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dToxicity to daphnia and other ic toxicity)Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fishToxic to aquatic life with long lasting effects.	aquatio	invertebrates (Chron-	:				
toxicity) Toxicity to microorganismsEC50 (activated sludge): > 100 mg/l Exposure time: 3 hHydrocarbons, C9, Aromatics: Toxicity to fishEL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 hToxicity to daphnia and other aquatic invertebratesEL50 (Daphnia magna (Water flea)): 3.2 mg/l Exposure time: 48 hToxicity to algae/aquatic plants:ErC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hToxicity to fish (Chronic tox- icity):NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to daphnia and other icity):NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicity:Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fish:LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r		aty)					
Toxicity to microorganisms:EC50 (activated sludge): > 100 mg/l Exposure time: 3 hHydrocarbons, C9, Aromatics::LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 hToxicity to daphnia and other aquatic invertebrates:EL50 (Daphnia magna (Water flea)): 3.2 mg/l Exposure time: 48 hToxicity to algae/aquatic plants:ErC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga) mg/l End point: Growth rate Exposure time: 72 hNOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to fish (Chronic tox- ic toxicity):NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicity:Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fish:LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r			:	100,000			
Toxicity to fish:LL50 (Oncorhynchus mykiss (rainbow trout)): 9.2 mg/l Exposure time: 96 hToxicity to daphnia and other aquatic invertebrates:EL50 (Daphnia magna (Water flea)): 3.2 mg/l Exposure time: 48 hToxicity to algae/aquatic plants:ErC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga) ng/l End point: Growth rate Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga) mg/l End point: Growth rate Exposure time: 72 hToxicity to fish (Chronic tox- icity):NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity):NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicity:Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fish:LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r			:				
Exposure time: 96 hToxicity to daphnia and other aquatic invertebratesEL50 (Daphnia magna (Water flea)): 3.2 mg/l Exposure time: 48 hToxicity to algae/aquatic plants:ErC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga) mg/l End point: Growth rate Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga) mg/l End point: Growth rate Exposure time: 72 hToxicity to fish (Chronic tox- icity):NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity):NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicity:Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fish:LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r	Hydro	carbons, C9, Aromatio	s:				
aquatic invertebratesExposure time: 48 hToxicity to algae/aquatic plants:ErC50 (Raphidocelis subcapitata (freshwater green alga) mg/l Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga 1.0 mg/l End point: Growth rate Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga 1.0 mg/l End point: Growth rate Exposure time: 72 hToxicity to fish (Chronic tox- icity):NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity):NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicity:Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fish:LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r	Toxicit	y to fish	:				
plantsmg/l Exposure time: 72 hNOELR (Raphidocelis subcapitata (freshwater green alga 1.0 mg/l End point: Growth rate Exposure time: 72 hToxicity to fish (Chronic tox- icity):NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity):NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicity:Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fish:LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r			:				
1.0 mg/l End point: Growth rate Exposure time: 72 hToxicity to fish (Chronic tox- icity): NOELR (Oncorhynchus mykiss (rainbow trout)): 1.228 m Exposure time: 28 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity): NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicity: Toxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fish: LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r			:	mg/l			
icity)Exposure time: 28 dToxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)NOELR (Daphnia magna (Water flea)): 2.144 mg/l Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicityToxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fishLC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r				1.0 mg/l End point: Growth	nrate		
aquatic invertebrates (Chron- ic toxicity)Exposure time: 21 dEcotoxicology Assessment Chronic aquatic toxicityToxic to aquatic life with long lasting effects.orthophosphoric acid: Toxicity to fishEcoto (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r		y to fish (Chronic tox-	:				
Chronic aquatic toxicity       : Toxic to aquatic life with long lasting effects.         orthophosphoric acid:       : LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r	aquatio	invertebrates (Chron-	:				
orthophosphoric acid: Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r							
Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 3 - 3.25 r	Chronic aquatic toxicity		:	Toxic to aquatic li	fe with long lasting effects.		
	-	-					
	I oxicit	y to fish	:	LC50 (Lepomis m Exposure time: 96			

according to the OSHA Hazard Communication Standard



# **DEMAND CS INSECTICIDE**

ersion 0	Revision Date: 10/17/2023	-	OS Number: 00071785198	Date of last issue: - Date of first issue: 10/17/2023	
Ecoto	oxicology Assessment				
	ic aquatic toxicity	:	This product ha	s no known ecotoxicological effects.	
Persis	stence and degradabil	ity			
Comp	oonents:				
lambo	da-cyhalothrin:				
Biode	gradability	:	Result: Not read	dily biodegradable.	
Stabili	Stability in water		Degradation half life (DT50): 7 d Remarks: Product is not persistent.		
Hvdro	ocarbons, C9, Aromati	cs:			
-	gradability	:	Result: Readily	biodegradable.	
Bioac	cumulative potential				
Comp	oonents:				
	<b>la-cyhalothrin:</b> cumulation	:	Remarks: Bioad	cumulates	
Mobil	ity in soil				
<u>Comp</u>	oonents:				
lambo	da-cyhalothrin:				
	oution among environ-	:	Remarks: immo	bile	
	al compartments ity in soil	:		e: 56 d sipation: 50 % (DT50) uct is not persistent.	
Other	adverse effects				
Comp	oonents:				
lambo	da-cyhalothrin:				
Resul	ts of PBT and vPvB sment	:	lating and toxic	is not considered to be persistent, bioaccum (PBT). This substance is not considered to b and very bioaccumulating (vPvB).	
ortho	phosphoric acid:				
	ts of PBT and vPvB sment	:	lating and toxic	is not considered to be persistent, bioaccum (PBT). This substance is not considered to b and very bioaccumulating (vPvB).	

according to the OSHA Hazard Communication Standard



# **DEMAND CS INSECTICIDE**

Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	10/17/2023	S00071785198	Date of first issue: 10/17/2023

#### SECTION 13. DISPOSAL CONSIDERATIONS

#### **Disposal methods**

Waste from residues	<ul> <li>Do not contaminate ponds, waterways or ditches with chemical or used container.</li> <li>Do not dispose of waste into sewer.</li> <li>Where possible recycling is preferred to disposal or incineration.</li> <li>If recycling is not practicable, dispose of in compliance with</li> </ul>
Contaminated packaging	<ul> <li>local regulations.</li> <li>Empty remaining contents.</li> <li>Triple rinse containers.</li> <li>Empty containers should be taken to an approved waste handling site for recycling or disposal.</li> <li>Do not re-use empty containers.</li> </ul>

#### **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

UNRTDG		
UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
		N.O.S.
		(LAMBDA-CYHALOTHRIN)
Class	:	9
Packing group	:	III
Labels	:	9
Environmentally hazardous	:	yes
Remarks	:	This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.
IATA-DGR		
UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (LAMBDA-CYHALOTHRIN)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	964
Packing instruction (passen- ger aircraft)	:	964
Environmentally hazardous	:	yes
Remarks	:	This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.
IMDG-Code		
UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

according to the OSHA Hazard Communication Standard



## **DEMAND CS INSECTICIDE**

Version	Revision Date: 10/17/2023	SDS Number:	Date of last issue: -
0.0		S00071785198	Date of first issue: 10/17/2023
Label EmS	ng group s Code e pollutant	: 9 : III : 9 : F-A, S-F : yes : This product of single or comb single or inner	HALOTHRIN) can be subject to exemptions when packaged in pination packagings containing a net quantity per r packaging of 5 L or less for liquids, or having a kg or less for solids.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

#### **Domestic regulation**

#### 49 CFR

Not regulated as a dangerous good Remarks : SI

Shipment by ground under DOT is non-regulated; however it may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Acute toxicity (any route of exposure)
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **SECTION 16. OTHER INFORMATION**

**Further information** 





1

0

0

#### DEMAND CS INSECTICIDE Version Revision Date: SDS Number: Date of last issue: -10/17/2023 S00071785198 Date of first issue: 10/17/2023 0.0 NFPA 704: HMIS® IV: Flammability HEALTH 1 FLAMMABILITY Health Instability 0 1 HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents Special hazard the absence of a chronic hazard. Full text of other abbreviations ACGIH USA. ACGIH Threshold Limit Values (TLV) NIOSH REL USA. NIOSH Recommended Exposure Limits : OSHA P0 USA. Table Z-1-A Limits for Air Contaminants (1989 vacated : values) OSHA Z-1 USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants OSHA Z-3 USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts Syngenta Occupational Exposure Limits Syngenta US WEEL USA. Workplace Environmental Exposure Levels (WEEL) ACGIH / TWA 8-hour, time-weighted average ACGIH / STEL Short-term exposure limit

NIOSH REL / TWA Time-weighted average concentration for up to a 10-hour ÷ workday during a 40-hour workweek NIOSH REL / ST STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday OSHA P0 / TWA 8-hour time weighted average OSHA P0 / STEL Short-term exposure limit 5 OSHA Z-1 / TWA 8-hour time weighted average 5 OSHA Z-3 / TWA 8-hour time weighted average : Syngenta / TWA Time weighted average 2 US WEEL / TWA 8-hr TWA •

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -

according to the OSHA Hazard Communication Standard



## **DEMAND CS INSECTICIDE**

Version	Revision Date:	SDS Number:	Date of last issue: -
0.0	10/17/2023	S00071785198	Date of first issue: 10/17/2023

International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Revision Date** 

10/17/2023

1

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8