

SIERR	A 3.0 AG				
Version 1.0	Revision Date: 11/29/2019)S Number: 0059632485	This version replaces all previous versions	
SECTION	1. IDENTIFICATION				
Produ	uct name	:	SIERRA 3.0 AG		
Desig	gn code	:	A23159A		
Produ	uct Registration number	:	33538		
Other	Other means of identification		No data available		
Manu	facturer or supplier's d	etai	ls		
Com	pany name of supplier	:	Syngenta Canada	a Inc.	
Address		:	140 Research La Guelph ON N1G Canada	ne, Research Park 4Z3	
Telep	phone	:	1-87-SYNGENTA	A (1-877-964-3682)	
Telef	ax	:	1-519-823-0504		
Emer ber	gency telephone num-	:	1-800-327-8633 ((FAST MED)	

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Serious eye damage		Category 1
Skin sensitisation	:	Category 1
Carcinogenicity	:	Category 2
Specific target organ toxicity - repeated exposure	:	Category 2 (Urinary system, Liver)

:

Danger

GHS label elements

Hazard pictograms

Signal word



Hazard statements	: H317 May cause an allergic skin reaction.
	H318 Causes serious eye damage.
	H351 Suspected of causing cancer.
	H373 May cause damage to organs
	(/\$/*_2ORGAN_REPEAT/\$/) through prolonged or repeated ex-
	posure.



ersion 0	Revision Date: 11/29/2019	SDS Number: S00059632485	This version replaces all previous versions.
Preca	autionary statements	P202 Do not h and understoo P260 Do not b P272 Contami the workplace. P280 Wear pro face protection	reathe dust/ fume/ gas/ mist/ vapours/ spray. nated work clothing should not be allowed out o ptective gloves/ protective clothing/ eye protection
		P305 + P351 + water for sever and easy to do CENTER/docto P308 + P313 I tention. P333 + P313 I attention.	F ON SKIN: Wash with plenty of water. P338 + P310 IF IN EYES: Rinse cautiously wit ral minutes. Remove contact lenses, if present b. Continue rinsing. Immediately call a POISON or. F exposed or concerned: Get medical advice/ at f skin irritation or rash occurs: Get medical advice Take off contaminated clothing and wash it befor
		Storage: P405 Store loc	sked up.
		Disposal: P501 Dispose posal plant.	of contents/ container to an approved waste dis

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components

CAS-No.	Concentration (% w/w)
99607-70-2	>= 1 - < 5
64742-94-5	>= 1 - < 5
111-27-3	>= 1 - < 5
91-20-3	>= 0.1 - < 1
	99607-70-2 64742-94-5 111-27-3

Actual concentration or concentration range is withheld as a trade secret

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	:	Move the victim to fresh air.



Version 1.0	Revision Date: 11/29/2019	SDS Number: S00059632485	This version replaces all previous versions.		
		tion. Keep patient	irregular or stopped, administer artificial respira- warm and at rest. an or poison control centre immediately.		
In cas	se of skin contact	Wash off imm If skin irritatio	ontaminated clothing immediately. nediately with plenty of water. n persists, call a physician. ninated clothing before re-use.		
In case of eye contact		for at least 15 Remove cont	Rinse immediately with plenty of water, also under the eyeli for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.		
If swallowed		container or la	e vomiting: contains petroleum distillates and/or		
Most important symptoms and effects, both acute and delayed		: Aspiration ma	y cause pulmonary oedema and pneumonitis.		
Notes	s to physician	Treat sympto	e vomiting: contains petroleum distillates and/or		

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Extinguishing media - small fires Use water spray, alcohol-resistant foam, dry chemical or car- bon dioxide. Extinguishing media - large fires Alcohol-resistant foam or Water spray
Unsuitable extinguishing me- dia	:	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards during fire- fighting	:	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous prod- ucts of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
Further information	:	Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.
Special protective equipment for firefighters	:	Wear full protective clothing and self-contained breathing apparatus.



Version	Revision Date:	SDS Number:
1.0	11/29/2019	S00059632485

This version replaces all previous versions.

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 absor- bent material, (e.g. sand, earth, diatomaceous earth, vermicu- lite) and place in container for disposal according to local / na- tional 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 against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.
Conditions for safe storage	:	No special storage conditions required. Keep containers tightly closed in a dry, cool and well-venti- lated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of ex- posure)	Control parame- ters / Permissible concentration	Basis
cloquintocet-mexyl	99607-70-2	TWA	5 mg/m3	Syngenta
Solvent naphtha (petroleum), heavy arom.; Kerosine — un- specified	64742-94-5	TWA	8 ppm 50 mg/m3	Supplier
		TWA	200 mg/m3 (total hydrocarbon vapor)	CA AB OEL
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
naphthalene	91-20-3	TWA	10 ppm 52 mg/m3	CA AB OEL
		STEL	15 ppm 79 mg/m3	CA AB OEL



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sion	Revision Date: 11/29/2019	SDS Number: S00059632485	I his vers	sion replaces all pre	evious versions
1			TWA	10 ppm	CA BC C
			TWAEV	10 ppm 52 mg/m3	CA QC C
			STEV	15 ppm 79 mg/m3	CA QC C
			TWA	10 ppm	ACGIH
Eng	ineering measures	CONTROLS FOR THE M PACKAGIN APPLICATIO	6/PERSONAL F IANUFACTURE G OF THE PRO	MENDATIONS FC PROTECTION ARE E, FORMULATION DDUCT. FOR COM DN-FARM APPLIC I LABEL.	INTENDED AND MERCIAL
				pation is the most re sure cannot be elim	
		The extent of tual risks in		ion measures depe	nds on the ac-
		standards.		below occupationa ditional occupationa	
Perso	onal protective equip	ment			
Res	piratory protection	quired. When worke	ers are facing c	otective equipment oncentrations abovitate certified respirations	e the exposure
Han	d protection				
F	Remarks	does not on features and Please obse breakthroug gloves. Also tions under cuts, abrasid depends and and the type each case.	ly depend on its d is different fro erve the instruct h time which ar take into consi which the produ- on, and the con nongst other thing of glove and the Gloves should b	e choice of an appr s material but also of m one producer to tions regarding perr re provided by the s ideration the specifi uct is used, such as tact time. The breat ngs on the material herefore has to be be discarded and re- tation or chemical br	on other quality the other. meability and supplier of the ic local condi- s the danger of k through time , the thickness measured for eplaced if there
Εvρ	protection	: Always wea	r eye protectior	when the potentia	I for inadverten



Version 1.0	Revision Date: 11/29/2019	SDS Number: S00059632485	This version replaces all previous versions.
Skin	and body protection	tration and amo	ash contaminated clothing before re-use. priate:
Prote	ective measures	over the use of	nnical measures should always have priority personal protective equipment. personal protective equipment, seek appro- onal advice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour		grey
Odour	:	characteristic
Odour Threshold	:	No data available
рН	:	5.5 - 7.5 Concentration: 1 %
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
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
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Density	:	1.1 g/cm3
Solubility(ies) Solubility in other solvents	:	No data available
Partition coefficient: n-oc- tanol/water	:	No data available



	Revision Date: 1/29/2019		S Number:)059632485	This version replaces all previous versions.
Auto-ignit	ion temperature	:	No data available	
Decompo	sition temperature	:	No data available	
Viscosity Viscos	ity, dynamic	:	No data available	
Explosive properties		:	No data available	9
Oxidizing	properties	:	No data available	

SECTION 10. STABILITY AND REACTIVITY

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

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely route Ingestion Inhalation Skin contact Eye contact	s of expos	ure
Acute toxicity		
Product: Acute oral toxicity		e toxicity estimate: > 5,000 mg/kg nod: Calculation method
Acute inhalation toxicity	Expo Test	e toxicity estimate: > 10 mg/l osure time: 4 h atmosphere: dust/mist nod: Calculation method
Acute dermal toxicity		e toxicity estimate: > 5,000 mg/kg nod: Calculation method
Components:		
cloquintocet-mexyl: Acute oral toxicity	: LD50	0 (Rat, male and female): > 5,000 mg/kg



ersion)	Revision Date: 11/29/2019		umber: 9632485	This version replaces all previous version
Acute	inhalation toxicity	Exp Tes Ass sho	oosure time: st atmosphe sessment: T ort term inha	re: dust/mist he component/mixture is moderately toxic a
Acute dermal toxicity		Ass		le and female): > 2,000 mg/kg he substance or mixture has no acute derm
hexan	-1-ol:			
Acute	e oral toxicity	Ass		t): 300 - 2,000 mg/kg he component/mixture is moderately toxic a ו.
Acute	e dermal toxicity	Ass		Rabbit): 1,000 - 2,000 mg/kg he component/mixture is moderately toxic a with skin.
napht	halene:			
Acute	e oral toxicity		sessment: T gle ingestior	he component/mixture is moderately toxic a n.
Skin o	corrosion/irritation			
<u>Comp</u>	onents:			
cloqu	intocet-mexyl:			
Speci Resu			bbit skin irritatio	n
Seriou	us eye damage/eye ii	ritation		
Produ	ict:			
Resu Rema			k of serious rived from c	damage to eyes. omponents.
<u>Comp</u>	onents:			
cloqu	intocet-mexyl:			
Speci Resu			bbit eye irritatio	n
hexan	-1-ol:			
Speci		: Ral		



rsion	Revision Date: 11/29/2019		S Number: 0059632485	This version replaces all previous version
Respir	atory or skin sensitisa	atior	ı	
Comp	onents:			
cloqui	ntocet-mexyl:			
Specie Resul		:	Guinea pig May cause sens	itisation by skin contact.
Germ	cell mutagenicity			
Comp	onents:			
cloqui	ntocet-mexyl:			
Germ sessm	u	:	Animal testing d	d not show any mutagenic effects.
Carcin	ogenicity			
Comp	onents:			
cloqui	ntocet-mexyl:			
Carcir ment	nogenicity - Assess-	:	No evidence of o	arcinogenicity in animal studies.
-	nalene:		Limited avidance	
ment	nogenicity - Assess-	·		e of carcinogenicity in animal studies
Repro	ductive toxicity			
Comp	onents:			
cloqui	ntocet-mexyl:			
Repro sessm	ductive toxicity - As- nent	:	No toxicity to rep	production
стот	- single exposure			
Comp	onents:			
cloqui	ntocet-mexyl:			
Asses	sment	:	The substance of gan toxicant, sin	r mixture is not classified as specific targe gle exposure.
стот	- repeated exposure			
Comp	onents:			
cloqui	ntocet-mexyl:			
	t Organs sment	:	Urinary system, The substance of	Liver r mixture is classified as specific target or



Version	
1.0	

Revision Date: 11/29/2019

SDS Number: S00059632485 This version replaces all previous versions.

Aspiration toxicity

Components:

Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified: May be fatal if swallowed and enters airways.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

cloquintocet-mexyl:					
Toxicity to fish :	LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.97 mg/l Exposure time: 96 h				
	LC50 (Gobiocypris rarus (rare gudgeon)): 0.102 mg/l Exposure time: 96 h				
Toxicity to daphnia and other : aquatic invertebrates	EC50 (Daphnia magna (Water flea)): > 0.82 mg/l Exposure time: 48 h				
Toxicity to algae/aquatic : plants	ErC50 (Desmodesmus subspicatus (green algae)): > 2.2 mg/l Exposure time: 72 h				
	NOEC (Desmodesmus subspicatus (green algae)): 0.12 mg/l End point: Growth rate Exposure time: 72 h				
Toxicity to daphnia and other : aquatic invertebrates (Chronic toxicity)	NOEC (Daphnia (water flea)): > 0.437 mg/l Exposure time: 21 d				
Toxicity to microorganisms :	EC50 (activated sludge): > 1,000 mg/l Exposure time: 3 h				
Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified:					
Footoxicology Assessment					

:	Toxic to aquatic life with long lasting effects.
:	Very toxic to aquatic life.
:	Very toxic to aquatic life with long lasting effects.
	:



sion	Revision Date: 11/29/2019		DS Number: 00059632485	This version replaces all previous version
	11/29/2019	30	0009032400	
Persist	tence and degradabili	ty		
Compo	onents:			
-	n tocet-mexyl: gradability	:	Result: Not read	lily biodegradable.
Stabili	ty in water	:	Degradation ha	f life: 0.4 d uct is not persistent.
Bioacc	umulative potential			
Compo	onents:			
	ntocet-mexyl: cumulation	:	Remarks: Does	not bioaccumulate.
Partitic tanol/v	on coefficient: n-oc- vater	:	log Pow: 5.24 (2	25 °C)
Mobilit	y in soil			
Compo	onents:			
Distrib	ntocet-mexyl: ution among environ- l compartments	:	Remarks: immo	bile
Stabili	ty in soil	:		: 2.4 d sipation: 50 % (DT50) uct is not persistent.
Other a	adverse effects			
Compo	onents:			
cloquii	ntocet-mexyl:			
Result sessm	s of PBT and vPvB as- ent	:	lating and toxic	is not considered to be persistent, bioaccur (PBT). This substance is not considered to and very bioaccumulating (vPvB).
hexan-	1-ol:			
Result sessm	s of PBT and vPvB as- ent	:	lating and toxic	is not considered to be persistent, bioaccur (PBT). This substance is not considered to and very bioaccumulating (vPvB).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods		
Waste from residues	:	Refer to the product label for specific disposal/recycling infor- mation



Version Revision Date: 1.0 11/29/2019		SDS Number: S00059632485	This version replaces all previous versions.	
Conta	aminated packaging	 cal or used con Do not dispose Where possible tion. If recycling is n cal regulations. Refer to the promation Empty remaining Triple rinse con Empty contained dling site for re 	e of waste into sewer. e recycling is preferred to disposal or incinera- ot practicable, dispose of in compliance with lo- oduct label for specific disposal/recycling infor- ng contents.	

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG UN number Proper shipping name	:	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class Packing group Labels	:	(CLOQUINTOCET-MEXYL) 9 III 9
IATA-DGR UN/ID No. Proper shipping name	:	UN 3082 Environmentally hazardous substance, liquid, n.o.s. (CLOQUINTOCET-MEXYL)
Class Packing group Labels Packing instruction (cargo aircraft)	:	9 III Class 9 - Miscellaneous dangerous substances and articles 964
Packing instruction (passen- ger aircraft) Environmentally hazardous	:	964 yes
IMDG-Code UN number Proper shipping name	:	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CLOQUINTOCET-MEXYL)
Class Packing group Labels EmS Code Marine pollutant	:	9 III 9 F-A, S-F yes

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

Not applicable for product as supplied.



Version	Revision Date:	SDS Number:	This version replaces all previous versions.
1.0	11/29/2019	S00059632485	

National Regulations

TDG		
UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
		N.O.S.
		(CLOQUINTOCET-MEXYL)
Class	:	9
Packing group	:	III
Labels	:	9
ERG Code	:	171
Marine pollutant	:	yes(CLOQUINTOCET-MEXYL)

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

Read the label, authorised under the Pest Control Products Act, prior to using or handling the pest control product

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label: There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

Danger

Corrosive to eyes Potential skin sensitiser

NPRI Components

: naphthalene

The components of this product are reported in the following inventories:

DSL

This product contains the following components that are not on the Canadian DSL nor NDSL.

cloquintocet-mexyl

flucarbazone

Canadian lists

No substances are subject to a Significant New Activity Notification.

:

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

: USA. ACGIH Threshold Limit Values (TLV)
: Canada. Alberta, Occupational Health and Safety Code (table
2: OEL)
: Canada. British Columbia OEL



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Version 1.0	Revision Date: 11/29/2019	SDS NI S00059	umber:This version replaces all previous versions.0632485		
CA QC OEL		safe	 Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants 		
ACGIH / TWA		: 8-ho	: 8-hour, time-weighted average		
CA AB OEL / TWA		: 8-ho	: 8-hour Occupational exposure limit		
CA AB OEL / STEL		: 15-r	15-minute occupational exposure limit		
CA BC OEL / TWA		: 8-ho	our time weighted average		
CA QC	COEL / TWAEV	: Tim	e-weighted average exposure value		
CA QC	COEL / STEV	: Sho	ort-term exposure value		

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

Revision Date

11/29/2019

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.

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