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SECTION	1. IDENTIFICATION						
Produ	ict name	: RIMON® 0.8	33 EC				
Produ	ict code	: 400000040	29				
Manu	facturer or supplier	's details					
Compa	any:	245 Freight S Waterbury, C United States 06702	Т				
Prepar	red by	sds.request@a	arysta.com				
		Further inform sds.request@a	nation for the safety data sheet : arysta.com				
1.4 Emerg	ency telephone nur	nber					
Emerg	gency telephone numbe		p Solutions: +1 800 423 8569(24 hours) 800-424-9300 emergency telephone numbers see section 16 of the heet.				
Reco	mmended use of the	e chemical and rest	rictions on use				
Recor	mmended use	: Insecticide					
Restri	ictions on use	: Agriculture, F	For professional users only.				
SECTION	2. HAZARDS IDENT	IFICATION					
	Classification	: Category 2					
Eye ir	ritation	: Category 2A	Category 2A				
Repro	Reproductive toxicity : Category 1B						

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	fic target organ toxicity ated exposure (Oral)	: Category 2 (Bl	ood)
Acute	aquatic toxicity	: Category 1	
Chron	ic aquatic toxicity	: Category 1	
	L abel element d pictograms		
Signal	l word	: Danger	
Hazar	d statements	H335 May cau H360 May dan H373 May cau or repeated ex	skin irritation. serious eye irritation. se respiratory irritation. hage fertility or the unborn child. se damage to organs (Blood) through prolonged posure if swallowed. ic to aquatic life with long lasting effects.
Preca	utionary statements	P202 Do not h and understoo P260 Do not b P264 Wash sk P271 Use only P273 Avoid rel P280 Wear ey P280 Wear ey P280 Wear pro P281 Use pers Response: P302 + P352 I P304 + P340 + and keep at re POISON CEN P305 + P351 + for several min to do. Continue P308 + P313 I attention. P332 + P313 I tion. P337 + P313 I tion. P362 Take off P391 Collect s Storage:	reathe dust/ fume/ gas/ mist/ vapours/ spray. in thoroughly after handling. outdoors or in a well-ventilated area. ease to the environment. e protection/ face protection. otective gloves. sonal protective equipment as required. F ON SKIN: Wash with plenty of soap and water. - P312 IF INHALED: Remove victim to fresh air st in a position comfortable for breathing. Call a TER or doctor/ physician if you feel unwell. - P338 IF IN EYES: Rinse cautiously with water outes. Remove contact lenses, if present and easy e rinsing. F exposed or concerned: Get medical advice/ f skin irritation occurs: Get medical advice/ atten- f eye irritation persists: Get medical advice/ atten- contaminated clothing and wash before reuse.

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		tightly closed. P405 Store lock Disposal: P501 Dispose o posal plant.	ked up. of contents/ container to an approved waste dis-
Othe	r hazards		

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	: Mixture
Substance name	: Novaluron 9.3% EC
Chemical nature	: Insecticide

Hazardous components

Chemical Name	CAS-No.	Concentration (% w/w)
1-methyl-2-pyrrolidone	872-50-4	>= 30 - < 50
Novaluron	116714-46-6	>= 5 - < 10

SECTION 4. FIRST AID MEASURES

If inhaled	:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a POISON CENTER or doctor/ physician.
In case of skin contact	:	Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Call a POISON CENTER or doctor/ physician.
In case of eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a POISON CENTER or doctor/ physician.
If swallowed	:	Call a physician or poison control centre immediately. If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Have person sip a glass of water if able to swallow. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	:	irritant effects Symptoms may be delayed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

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					lity or the unborn child. ge to organs through prolonged or repeated owed.			
	Notes to physician		:	The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.				
SEC	TION 5	. FIREFIGHTING MEA	SU	RES				
	Suitable	extinguishing media	:	Extinguishing med Alcohol-resistant fo (on small fires) Carbon dioxide (Co Dry chemical Water spray	Dam			
	Unsuita	ble extinguishing media	:	Water spray jet				
	Specific	extinguishing methods	:		neasures that are appropriate to local circum- rounding environment.			
	Further	information	:	Do not discharge e	stinguishing waters into streams, rivers and lakes.			
	Special firefight	protective equipment for ters	:		ective clothing, full "turn-out" gear. thing apparatus (EN 133)			

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency pro- cedures	: Wear suitable protective equipment.
Environmental precautions	: Prevent leaks and prevent soil / water pollution caused by leaks. May be harmful to aquatic life.
Methods and materials for con- tainment and cleaning up	 Absorb on inert material such as sand, earth, vermiculite. Collect for disposal. Dam up. Large spills should be collected mechanically (remove by pumping) for disposal. Pump excess material into suitable container (metal drums, metal tank, or such).
	In accordance with local and national regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Avoid contact with skin, eyes and clothing.
		Use with adequate ventilation.

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Condit	ions for safe storage	: Keep in a dry plac Keep away from a Keep in a cool pla Keep away from s	direct sunlight. ace away from acids.	

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of ex- posure)	Control parameters / Permissible con- centration	Basis
1-methyl-2-pyrrolidone	872-50-4	TWA	10 ppm	US WEEL

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentra- tion	Basis
1-methyl-2-pyrrolidone	872-50-4	5-Hydroxy- N-methyl-2- pyrrolidone	Urine	End of shift (As soon as possible after exposure ceases)	100 mg/l	ACGIH BEI

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Remarks	:	Impervious gloves
Eye protection	:	Safety glasses with side-shields
Skin and body protection	:	Lightweight protective clothing

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: light yellow
Odour	: slight, characteristic
Odour Threshold	: No data available
pH	: 2.9, 1% Solution
Melting point/range	: Not applicable

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Boil	ing point/boiling range	: No data available	
Flas	h point	: > 102 °C	
Evap	poration rate	: No data available	
Upp	er explosion limit	: No data available	
Low	er explosion limit	: No data available	
Vapo	our pressure	: No data available	
Rela	tive vapour density	: No data available	
Rela	tive density	: No data available	
Dens	sity	: 1.08 g/cm3	
	ibility(ies) Vater solubility	: No data available	
S	olubility in other solvents	: No data available	
	tion coefficient: n- nol/water	: No data available	
Auto	o-ignition temperature	: No data available	
Dece	omposition temperature	: No data available	
	osity iscosity, dynamic	: No data available	
V	iscosity, kinematic	: No data available	
	Accelerating decomposition perature (SADT)	: Method: No information available.	

SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reac- tions	:	Hazardous polymerisation does not occur.
Conditions to avoid	:	Exposure to sunlight. Heat, flames and sparks.
Incompatible materials	:	Strong acids Strong bases
Hazardous decomposition prod- ucts	:	Burning produces noxious and toxic fumes.

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SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes o Inhalation Eye contact Skin contact Ingestion	f exposure
Acute toxicity	
Product: Acute oral toxicity	: Acute toxicity estimate: 4,723 mg/kg Method: Calculation method
Components: 1-methyl-2-pyrrolidone: Acute oral toxicity Acute dermal toxicity	: LD50 Oral (Rat): 3,914 mg/kg : LD50 Dermal (Rabbit): 8,000 mg/kg
Novaluron:	
Acute oral toxicity	: LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	: LC50 (Rat, male and female): > 5.15 mg/l
Acute dermal toxicity	: LD50 (Rabbit): > 2,000 mg/kg
Skin corrosion/irritation	
<u>Components:</u> 1-methyl-2-pyrrolidone: Result: Mild skin irritation	
Novaluron: Species: Rabbit Result: No skin irritation	
Serious eye damage/eye irr	itation
<u>Components:</u> 1-methyl-2-pyrrolidone: Result: Severe irritation	
Novaluron: Species: Rabbit Result: No eye irritation	
Respiratory or skin sensitis	sation

Components: Novaluron:

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Spec	Type: Maximisation Test cies: Guinea pig essment: Did not cause s		atory animals.
Gerr	n cell mutagenicity		
	ponents:		
	aluron: otoxicity in vitro		omosome aberration test in vitro ation: with and without metabolic activation e
			cheduled DNA synthesis (UDS) ation: with and without metabolic activation e
		: Test Type: Am Metabolic activ Result: negativ	ation: with and without metabolic activation
Geno	otoxicity in vivo	: Test Type: In v Species: Mous Result: negativ	
	n cell mutagenicity - essment	: In vitro tests did	not show mutagenic effects
Carc	inogenicity		
Nova	ponents: aluron: inogenicity - Assess-	: Not classifiable a	as a human carcinogen.
IAR			this product present at levels greater than or dentified as probable, possible or confirmed n by IARC.
OSH	A		this product present at levels greater than or dentified as a carcinogen or potential carcino-
NTP	•		this product present at levels greater than or dentified as a known or anticipated carcinogen
Repi	roductive toxicity		
Com	ponents:		
Repr	aluron: oductive toxicity - As- ment	: No toxicity to re No effects on or	

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STOT - single exposure

Product:

Remarks: No data available

STOT - repeated exposure

Components:

Novaluron: Exposure routes: Oral Target Organs: Blood Assessment: May cause damage to organs through prolonged or repeated exposure.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:		
1-methyl-2-pyrrolidone:		
Toxicity to fish	:	LC50 (Fish): > 100 mg/l Exposure time: 96 h
Novaluron:		
Toxicity to fish	:	LC50 (Cyprinodon variegatus (sheepshead minnow)): > 0.002 mg/l Exposure time: 96 h Test Type: flow-through test GLP: yes
Toxicity to algae	:	EC50 (Selenastrum capricornutum (green algae)): > 9.68 mg/l
Toxicity to fish (Chronic tox- icity)	:	NOEC (Oncorhynchus mykiss (rainbow trout)): 0.00616 mg/l Exposure time: 28 d Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.00003 mg/l
Persistence and degradabilit	y	
Bioaccumulative potential		
<u>Components:</u> Novaluron: Bioaccumulation	:	Species: Lepomis macrochirus (Bluegill sunfish)
		Bioconcentration factor (BCF): 14,431
Partition coefficient: n-	:	log Pow: 4.3
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octan	ol/water		
No da	lity in soil ata available r adverse effects		
Prod	uct:		
Ozon	e-Depletion Potential	tection of Stratos Substances Remarks: This pro a Class I or Class	CFR Protection of Environment; Part 82 Pro- spheric Ozone - CAA Section 602 Class I oduct neither contains, nor was manufactured with II ODS as defined by the U.S. Clean Air Act Sec- 82, Subpt. A, App.A + B).

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal	methods
----------	---------

Waste from residues

: In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulation	
UNRTDG UN number Proper shipping name	: UN 3082 : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron)
Class Packing group Labels	: 9 : III : 9
IATA-DGR UN/ID No. Proper shipping name	: UN 3082 : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Novaluron)
Class Packing group Labels Packing instruction (cargo aircraft) Packing instruction (passen- ger aircraft)	: 9 : III : Miscellaneous : 964 : 964
IMDG-Code UN number Proper shipping name	: UN 3082 : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

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Class Packing group Labels EmS Code Marine pollutant		(Novaluron) : 9 : III : 9 : F-A, S-F : yes	
	pplicable for product a	-	POL 73/78 and the IBC Code
Natio	nal Regulations		
Prope Class Packi Label ERG	NA number er shipping name ng group s	 : UN 3082 : ENVIRONMEN^T N.O.S. (Novaluron) : 9 : III : CLASS 9 : 171 : yes(Novaluron) 	TALLY HAZARDOUS SUBSTANCES, LIQUID,
Rema	•	: RQ appllies Not regulated by	y DOT and TDG if shipped or transported in than 450 liters by road and/or rail. Please for any details.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SSARA 311/312 Hazards	:	Acute Health Hazard Chronic Health Hazard		
SARA 302	:	No chemicals in this material are subject to the reporting require- ments of SARA Title III, Section 302.		
SARA 313	:	The following components are subject to reporting levels es- tablished by SARA Title III, Section 313:		
		1-methyl-2-pyrrolidone	872-50-4	50 %
Clean Air Act				

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This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

California Prop. 65	WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive	
1-methyl-2-pyrr	harm. olidone 872-50-4	
r-meury-z-pyn	012-30-4	

FIFRA Hazard Information:

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use.

The hazard information required on the pesticide label is reproduced below.

WARNING

Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

This pesticide is toxic to freshwater and estuarine/ marine invertebrates. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate. This product may contaminate water through drift of spray in wind. This product has a potential for runoff for several days to weeks after application. Poorly draining soil with shallow water tables is more prone to produce runoff. A level, well maintained vegetative (grass) buffer strip between areas to which this product is applied and the surface water features such as ponds, streams, and springs will reduce the potential for contamination of water from rainfall runoff. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. Sound erosion control practices will reduce this product's contribution to surface water contamination.

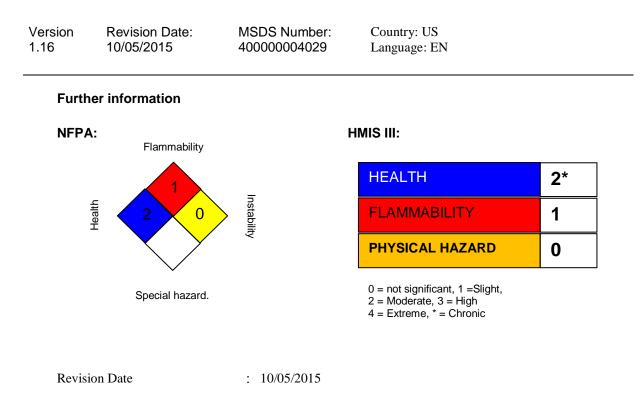
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In order to minimize the possibility of developmental effects on pollinator larvae, including honey bee brood, do not use Rimon 0.83EC Insecticide on blooming crops.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; 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 concentra-tion; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods: IMO - International Maritime Organization; ISO - International Organisation for Standardization; 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; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; 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: UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods



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 / EN

Carechem24 International Worldwide Coverage

Emergency Phone Number

Europe:	All European Countries	+44 (0) 1235 239 670 (NCEC)
Asia Pacific:	East / South East Asia – Regional Number	+65 3158 1074
	Australia	+61 2801 44558
	New Zealand	+64 9929 1483
	China	+86 532 8388 9090
	China Taiwan	+86 10 5100 3039
	Japan	+81 345 789 341
	Indonesia	00780 3011 0293
	Malaysia	+60 3 6207 4347
	Thailand	001800 1 2066 6751
	Korea	+65 3158 1285 +82 (0)234 798 401
	Vietnam	+65 3158 1255
	India	+65 3158 1198 0800 100 7479

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	Pakistan	+65 3158 1329
	Philippines	+65 31581203
	Sri Lanka	+65 3158 1195
	Emergency Phone Number	+65 3158 1200
Middle East / Africa:	Arabic speaking countries	+44 (0) 1235 239 671
	South Africa	+27 21 300 2732
	All other countries	+44 (0) 1235 239 670
America	United States of America and Canada	+1866 928 0789 +1 215 207 0061
Latin America:	Brazil	+55 113 711 9144
	Mexico	+52 555 004 8763
	Chile	+56 225 829 336
	All other countries	+44 (0) 1235 239 670