RANCONA (TM) SUMMIT

Version Revision Date: MSDS Number: Country: US 1.8 10/20/2015 000000002727 Language: EN

SECTION 1. IDENTIFICATION

Product name : RANCONA (TM) SUMMIT

Product code : 00000002727

Manufacturer or supplier's details

Company: MacDermid Agricultural Solutions, Inc

245 Freight St Waterbury, CT

United States of America

06702

Telephone: +1 800 423 8569

Prepared by sds.request@arysta.com

Further information for the safety data sheet:

sds.request@arysta.com

1.4 Emergency telephone number

Emergency telephone number: Agriphar Crop Solutions: +1 800 423 8569(24 hours) 800-424-9300

For additional emergency telephone numbers see section 16 of the

Safety Data Sheet.

Recommended use of the chemical and restrictions on use

Recommended use : Seed treatment

Restrictions on use : Agriculture, For professional users only.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Inhalation) : Category 4

Eye irritation : Category 2B

Reproductive toxicity : Category 2

Acute aquatic toxicity : Category 3

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Chronic aquatic toxicity : Category 1

GHS Label element

Hazard pictograms







Signal word : Warning

Hazard statements : H320 Causes eye irritation.

H332 Harmful if inhaled.

H361 Suspected of damaging fertility or the unborn child.

H402 Harmful to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or

doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

P337 + P313 If eye irritation persists: Get medical advice/ atten-

tion.

P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Ipconazole - 0.080 lbs/gal

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Metalaxyl - 0.128 lbs/gal

Ipconazole - 9.6 gm/L Metalaxyl - 15.4 gm/L

Hazardous components

Chemical Name	CAS-No.	Concentration (% w/w)
glycerol	56-81-5	>= 10 - < 20
gamma-butyrolactone	96-48-0	>= 1 - < 5
propane-1,2-diol	57-55-6	>= 1 - < 5
metalaxyl	57837-19-1	1.44
Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-	125225-28-7	0.92
glycerol	56-81-5	>= 10 - < 20
gamma-butyrolactone	96-48-0	>= 1 - < 5
propane-1,2-diol	57-55-6	>= 1 - < 5
metalaxyl	57837-19-1	>= 1 - < 5
Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-	125225-28-7	>= 0.1 -<1

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.

Call a POISON CENTER or doctor/ physician.

In case of skin contact : If skin irritation occurs, seek medical advice/attention.

In case of eye contact : Rinse immediately with plenty of water for at least 15 minutes.

Get medical attention if irritation develops and persists.

If swallowed : Do NOT induce vomiting.

Rinse mouth with water.

Call a POISON CENTER or doctor/ physician.

Most important symptoms and

effects, both acute and delayed

: irritant effects

Symptoms may be delayed.

Causes eye irritation. Harmful if inhaled.

Suspected of damaging fertility or the unborn child.

Notes to physician : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Extinguishing media - large fires

Alcohol-resistant foam

Extinguishing media - small fires

Carbon dioxide (CO2)

Dry chemical

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Specific extinguishing methods : Use extinguishing measures that are appropriate to local circum-

stances and the surrounding environment.

Further information : Prevent fire extinguishing water from contaminating surface water

or the ground water system.

firefighters

Special protective equipment for : Wear full protective clothing and self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency pro-

cedures

: Use personal protective equipment.

Environmental precautions : Avoid release to the environment.

Methods and materials for containment and cleaning up

: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see

section 13).

Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal

according to local regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : NOTE TO END-USERS: The employee protection recommenda-

> tions on this SDS may differ from those on the product label. For normal use of this product, always refer to the personal protective

equipment requirements on the product label.

Conditions for safe storage : Keep in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control parameters	Basis
		(Form of ex-	/ Permissible con-	
		posure)	centration	
glycerol	56-81-5	TWA (Total)	10 mg/m3	OSHA P0
		TWA (Respir-	5 mg/m3	OSHA P0
		able fraction)		
		TWA	10 mg/m3	ACGIH
		TWA (mist,	5 mg/m3	OSHA Z-1
		respirable		
		fraction)		
		TWA (mist,	15 mg/m3	OSHA Z-1

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		total dust)		
		TWA (Mist -	10 mg/m3	OSHA P0
		total dust)		
		TWA (Mist -	5 mg/m3	OSHA P0
		respirable		
		fraction)		
propane-1,2-diol	57-55-6	TWA	10 mg/m3	US WEEL

Hazardous components without workplace control parameters

Components	CAS-No.
gamma-butyrolactone	96-48-0
metalaxyl	57837-19-1
Cyclopentanol,2-[(4-	125225-28-7
chlorophenyl)methyl]-5-(1-	
methylethyl)-1-(1H-1,2,4-	
triazol-1-ylmethyl)-	

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure

limit they must use appropriate certified respirators.

Hand protection

Remarks : Impervious gloves

Eye protection : Safety glasses with side-shields

Skin and body protection : Lightweight protective clothing

Hygiene measures : Provide adequate ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : red

Odour : No data available

Odour Threshold : No data available

pH : 5-8

: No data available

: No data available

Flash point : No data available

Evaporation rate : No data available

Upper explosion limit : No data available

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Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : 1.067 (25 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Self-Accelerating decomposition

temperature (SADT)

: Method: No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.

Chemical stability : No decomposition if stored and applied as directed.

Conditions to avoid : None known.

Incompatible materials : None known.

Hazardous decomposition prod-

ucts

: Burning produces noxious and toxic fumes.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 2.56 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

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Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

Components:

glycerol:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 18,700 mg/kg

gamma-butyrolactone:

Acute oral toxicity : LD50 (Rat): 1,540 mg/kg

Acute dermal toxicity : LD50 (Guinea pig): > 5,000 mg/kg

propane-1,2-diol:

Acute oral toxicity : LD50 (Rat): 20,000 mg/kg

LD50 (Rabbit): 18,500 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 20,800 mg/kg

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Acute oral toxicity

: LD50 (Rat, male): 1,338 mg/kg Method: OECD Test Guideline 401

GLP: yes

GLP: yes

LD50 (Rat, female): 888 mg/kg Method: OECD Test Guideline 401

GLP: yes

LD50 (Mouse, male): 537 mg/kg Method: OECD Test Guideline 401

GLP: yes

LD50 (Mouse, female): 468 mg/kg Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : LC50 (Rat, male and female): > 1.88 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

LC50 (Rat, male and female): > 3.53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

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glycerol:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 18,700 mg/kg

gamma-butyrolactone:

Acute oral toxicity : LD50 (Rat): 1,540 mg/kg

Acute dermal toxicity : LD50 (Guinea pig): > 5,000 mg/kg

propane-1,2-diol:

Acute oral toxicity : LD50 (Rat): 20,000 mg/kg

LD50 (Rabbit): 18,500 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 20,800 mg/kg

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Acute oral toxicity

: LD50 (Rat, male): 1,338 mg/kg Method: OECD Test Guideline 401

GLP: yes

LD50 (Rat, female): 888 mg/kg Method: OECD Test Guideline 401

GLP: yes

LD50 (Mouse, male): 537 mg/kg Method: OECD Test Guideline 401

GLP: yes

LD50 (Mouse, female): 468 mg/kg Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : LC50 (Rat, male and female): > 1.88 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

LC50 (Rat, male and female): > 3.53 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: yes

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Skin corrosion/irritation

Product:

Result: slight irritation

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Components:

glycerol:

Species: Rabbit Exposure time: 24 h Result: No skin irritation

gamma-butyrolactone:

Species: Rabbit

Result: No skin irritation

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Species: Rabbit Exposure time: 4 h Result: No skin irritation

GLP: yes

glycerol:

Species: Rabbit Exposure time: 24 h Result: No skin irritation

gamma-butyrolactone:

Species: Rabbit

Result: No skin irritation

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Species: Rabbit Exposure time: 4 h Result: No skin irritation

GLP: yes

Serious eye damage/eye irritation

Product:

Result: Mild eye irritation

Components:

glycerol:

Species: Rabbit

Result: No eye irritation

gamma-butyrolactone:

Species: Rabbit Result: Eye irritation Method: Draize Test

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Species: Rabbit

Result: No eye irritation

glycerol:

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Species: Rabbit

Result: No eye irritation

gamma-butyrolactone:

Species: Rabbit Result: Eye irritation Method: Draize Test

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitisation

Product:

Result: Did not cause sensitisation on laboratory animals.

Components:

glycerol:

Test Type: Patch Test Species: Human

Result: Patch test on human volunteers did not demonstrate sensitisation properties.

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Species: Guinea pig

Method: Magnusson-Kligmann-Test

Result: Did not cause sensitisation on laboratory animals.

GLP: yes

glycerol:

Test Type: Patch Test Species: Human

Result: Patch test on human volunteers did not demonstrate sensitisation properties.

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Species: Guinea pig

Method: Magnusson-Kligmann-Test

Result: Did not cause sensitisation on laboratory animals.

GLP: yes

Germ cell mutagenicity

Components:

glycerol:

Genotoxicity in vitro : Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo : Test Type: in vivo assay

Species: Rat (males) Cell type: Bone marrow Application Route: Oral

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Result: negative

Germ cell mutagenicity -Assessment : Animal testing did not show any mutagenic effects.

gamma-butyrolactone:

Genotoxicity in vitro

: Test Type: in vitro assay

Metabolic activation: with and without metabolic activation

Result: positive

: Test Type: Chromosome aberration test in vitro

Result: positive

: Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

: Test Type: Unscheduled DNA synthesis (UDS)

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo : Test Type: in vivo assay

Species: Mouse (male)

Result: negative

Test Type: In vivo micronucleus test Species: Mouse (male and female)

Result: negative

Germ cell mutagenicity -

Assessment

: Animal testing did not show any mutagenic effects.

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Genotoxicity in vitro

: Test Type: Ames test

Metabolic activation: with and without metabolic activation Method: Mutagenicity (Escherichia coli - reverse mutation

assay)

Result: negative

 Test Type: In Vitro mammalian Cell Gene Mutation Test Metabolic activation: with and without metabolic activation

Result: negative

: Test Type: Chromosome aberration test in vitro

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo : Species: Mouse

Cell type: Bone marrow

Result: negative

Germ cell mutagenicity -

Assessment

: In vitro tests did not show mutagenic effects

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glycerol:

Genotoxicity in vitro : Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo : Test Type: in vivo assay

Species: Rat (males) Cell type: Bone marrow Application Route: Oral Result: negative

Germ cell mutagenicity -

Assessment

: Animal testing did not show any mutagenic effects.

gamma-butyrolactone:

Genotoxicity in vitro : Test Type: in vitro assay

Metabolic activation: with and without metabolic activation

Result: positive

: Test Type: Chromosome aberration test in vitro

Result: positive

: Test Type: Ames test

Metabolic activation: with and without metabolic activation

Result: negative

: Test Type: Unscheduled DNA synthesis (UDS)

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo : Test Type: in vivo assay

Species: Mouse (male) Result: negative

Test Type: In vivo micronucleus test Species: Mouse (male and female)

Result: negative

Germ cell mutagenicity -

Assessment

: Animal testing did not show any mutagenic effects.

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Genotoxicity in vitro

: Test Type: Ames test

Metabolic activation: with and without metabolic activation Method: Mutagenicity (Escherichia coli - reverse mutation

assay)

Result: negative

: Test Type: In Vitro mammalian Cell Gene Mutation Test Metabolic activation: with and without metabolic activation

Result: negative

Test Type: Chromosome aberration test in vitro

Metabolic activation: with and without metabolic activation

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Result: negative

Genotoxicity in vivo : Species: Mouse

Cell type: Bone marrow

Result: negative

Germ cell mutagenicity -

Assessment

: In vitro tests did not show mutagenic effects

Carcinogenicity

Components:

glycerol:

Carcinogenicity - Assess-

ment

: Animal testing did not show any carcinogenic effects.

gamma-butyrolactone:

Carcinogenicity - Assess-

ment

: Not classifiable as a human carcinogen.

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Carcinogenicity - Assess-

ment

: Animal testing did not show any carcinogenic effects.

glycerol:

Carcinogenicity - Assess-

ment

: Animal testing did not show any carcinogenic effects.

gamma-butyrolactone:

Carcinogenicity - Assess-

ment

: Not classifiable as a human carcinogen.

 $\label{lem:cyclopentanol} Cyclopentanol, 2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:$

Carcinogenicity - Assess-

ment

: Animal testing did not show any carcinogenic effects.

IARC No component of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

OSHANo component of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential carcino-

gen by OSHA.

NTP No component of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Reproductive toxicity

Components:

glycerol:

Reproductive toxicity - As- : No toxicity to reproduction

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sessment No effects on or via lactation

gamma-butyrolactone:

Reproductive toxicity - Assessment

No toxicity to reproduction
No effects on or via lactation

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Effects on fertility : Species: Rat

Dose: 0, 30, 100 or 300 ppm

General Toxicity F1: No observed adverse effect level: 9 - 10

mg/kg bw/day

: No toxicity to reproduction

glycerol:

Reproductive toxicity - As-

sessment No effects on or via lactation

gamma-butyrolactone:

Reproductive toxicity - Assessment
: No toxicity to reproduction
No effects on or via lactation

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Effects on fertility : Species: Rat

Dose: 0, 30, 100 or 300 ppm

General Toxicity F1: No observed adverse effect level: 9 - 10

mg/kg bw/day

STOT - single exposure

Product:

Remarks: No data available

STOT - repeated exposure

Components:

glycerol:

Exposure routes: Oral

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

gamma-butyrolactone:

Exposure routes: Oral

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Target Organs: Eyes

Assessment: May cause damage to organs through prolonged or repeated exposure.

glycerol:

Exposure routes: Oral

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

gamma-butyrolactone:

Exposure routes: Oral

Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

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Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Target Organs: Eyes

Assessment: May cause damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Components:

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Species: Rat, female NOAEL: 7 mg/kg LOAEL: 33.2 mg/kg Application Route: Oral Exposure time: 13 weeks

Dose: 3.1, 7.0, 15.4 and 33.2 mg/kg

GLP: yes

Target Organs: Adrenal gland, thymus gland

Species: Rat, male NOAEL: 25.9 mg/kg LOAEL: 52.2 mg/kg Application Route: Oral Exposure time: 13 weeks

Dose: 2.5, 5.8, 12.6, 25.9 and 52.2

GLP: yes

Target Organs: Adrenal gland, thymus gland

Species: Rat, male and female

NOAEL: 10 mg/kg LOAEL: 40 mg/kg

Application Route: Dermal Exposure time: 13 weeks

Dose: 0, 2, 10 or 40 mg/kg bw/day

GLP: yes

Species: Rat, male and female

NOAEL: 30 mg/kg LOAEL: 100 mg/kg

Application Route: Inhalation Exposure time: 28-day

Dose: 0, 30, 100, 300 or 1000 mg/m3

GLP: yes

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Species: Rat, female NOAEL: 7 mg/kg LOAEL: 33.2 mg/kg Application Route: Oral Exposure time: 13 weeks

Dose: 3.1, 7.0, 15.4 and 33.2 mg/kg

GLP: ves

Target Organs: Adrenal gland, thymus gland

Species: Rat, male

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NOAEL: 25.9 mg/kg LOAEL: 52.2 mg/kg Application Route: Oral Exposure time: 13 weeks

Dose: 2.5, 5.8, 12.6, 25.9 and 52.2

GLP: yes

Target Organs: Adrenal gland, thymus gland

Species: Rat, male and female

NOAEL: 10 mg/kg LOAEL: 40 mg/kg

Application Route: Dermal Exposure time: 13 weeks

Dose: 0, 2, 10 or 40 mg/kg bw/day

GLP: yes

Species: Rat, male and female

NOAEL: 30 mg/kg LOAEL: 100 mg/kg

Application Route: Inhalation Exposure time: 28-day

Dose: 0, 30, 100, 300 or 1000 mg/m3

GLP: yes

Further information

Product:

Remarks: The following toxicological data shown are those obtained from tests on products of

similar composition.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

glycerol:

Toxicity to fish : LC50 (Carassius auratus (goldfish)): > 5,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): > 5,000 mg/l

Exposure time: 48 h

gamma-butyrolactone:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 220 - 460 mg/l

Exposure time: 96 h Test Type: static test Method: DIN 38412

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 500 mg/l

Exposure time: 48 h

Toxicity to algae : EC50 (Desmodesmus subspicatus (Scenedesmus subspi-

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catus)): 79 mg/l Exposure time: 96 h

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 1.3 mg/l

Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 1.7 mg/l

Exposure time: 48 h

GLP: yes

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 0.62

mg/

Exposure time: 72 h

GLP: yes

M-Factor (Acute aquatic tox-

icity)

: 1

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 0.00044

mg/l

Exposure time: 28 d

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.0109 mg/l

Exposure time: 21 d

GLP: yes

M-Factor (Chronic aquatic

toxicity)

: 100

glycerol:

Toxicity to fish : LC50 (Carassius auratus (goldfish)): > 5,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia (water flea)): > 5,000 mg/l

Exposure time: 48 h

gamma-butyrolactone:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 220 - 460 mg/l

Exposure time: 96 h Test Type: static test Method: DIN 38412

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 500 mg/l

Exposure time: 48 h

Toxicity to algae : EC50 (Desmodesmus subspicatus (Scenedesmus subspi-

catus)): 79 mg/l Exposure time: 96 h

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 1.3 mg/l

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Exposure time: 96 h

Test Type: flow-through test

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): 1.7 mg/l

Exposure time: 48 h

GLP: yes

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 0.62

ma/l

Exposure time: 72 h

GLP: yes

M-Factor (Acute aquatic tox-

icity)

: 1

Toxicity to fish (Chronic tox-

icity)

: NOEC (Pimephales promelas (fathead minnow)): 0.00044

mg/i

Exposure time: 28 d

GLP: yes

Toxicity to daphnia and other

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.0109 mg/l

Exposure time: 21 d

GLP: yes

M-Factor (Chronic aquatic

toxicity)

: 100

Persistence and degradability

Components:

glycerol:

Biodegradability : aerobic

Inoculum: activated sludge Result: Readily biodegradable

Biodegradation: 92 % Exposure time: 30 d

gamma-butyrolactone:

Biodegradability : aerobic

Inoculum: activated sludge Concentration: 100 mg/l Result: Readily biodegradable Biodegradation: 62 - 90 % Exposure time: 14 d

glycerol:

Biodegradability : aerobic

Inoculum: activated sludge Result: Readily biodegradable

Biodegradation: 92 % Exposure time: 30 d

gamma-butyrolactone:

Biodegradability : aerobic

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Inoculum: activated sludge Concentration: 100 mg/l Result: Readily biodegradable Biodegradation: 62 - 90 % Exposure time: 14 d

Bioaccumulative potential

Components:

glycerol:

Bioaccumulation : Bioconcentration factor (BCF): 3.16

Remarks: Bioaccumulation is unlikely.

Partition coefficient: n- : log Pow: -1.76

octanol/water Method: calculated

log Pow: -2.6 Method: calculated

gamma-butyrolactone:

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n- : log Pow: -0.566

octanol/water Method: OECD Test Guideline 107

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Partition coefficient: n-

octanol/water

: log Pow: 4.28 - 4.49

glycerol:

Bioaccumulation : Bioconcentration factor (BCF): 3.16

Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

: log Pow: -1.76

Method: calculated

log Pow: -2.6 Method: calculated

gamma-butyrolactone:

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n- : log Pow: -0.566

octanol/water Method: OECD Test Guideline 107

Cyclopentanol,2-[(4-chlorophenyl)methyl]-5-(1-methylethyl)-1-(1H-1,2,4-triazol-1-ylmethyl)-:

Partition coefficient: n- : log Pow: 4.28 - 4.49

octanol/water

Mobility in soil

No data available

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Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Pro-

tection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Sec-

tion 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological infor-

mation

: The product itself has not been tested.

The following information is applicable to a component of this

material:

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 : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Ipconazole)

Class : 9
Packing group : III
Labels : 9

IATA-DGR

UN/ID No. : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Ipconazole)

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo

aircraft)

Packing instruction (passen-

: 964

964

ger aircraft)

IMDG-Code

UN number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Ipconazole)

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Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

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

Not applicable for product as supplied.

National Regulations

49 CFR

UN/ID/NA number : UN 3082

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID,

N.O.S.

(Ipconazole)

Class : 9 Packing group : III

Labels : CLASS 9 ERG Code : 171

Marine pollutant : yes(lpconazole)
Remarks : RQ may apply

Not regulated by DOT and TDG if shipped or transported in packaging less than 450 liters by road and/or rail. Please

refer to 49 CFR 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 : 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.

Clean Air Act

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).

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The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

glycerol 56-81-5 16.5005 % propane-1,2-diol 57-55-6 1.5746 %

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 This product does not contain any chemicals known to State

of California to cause cancer, birth defects, or any other re-

productive harm.

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other re-

productive harm.

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

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.

CAUTION

Causes moderate eye irritation.

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwater or rinsate. Ipconazole may persist in soil, and long-term use in the same field may result in an accumulation of active ingredient.

Metalaxyl is known to leach through soil into groundwater under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

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SECTION 16. OTHER INFORMATION

Full text of other abbreviations

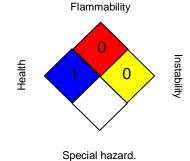
(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency 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 concentration; 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

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Further information

NFPA:



HMIS III:



0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

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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 United States of America and Canada <u>America</u> +1866 928 0789 +1 215 207 0061 Brazil Latin America: +55 11 3197 5891 Mexico +52 555 004 8763 Chile +56 225 829 336 All other countries +44 (0) 1235 239 670