INSTRATA

Version	Revision Date:	SDS Number:	This version replaces all previous versions.
1.0	12.04.2018	I194285170	

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : INSTRATA

Design code : A14036B

Manufacturer or supplier's details

Company : Syngenta SA (Pty) Ltd

Address : P.O. Box 1044, No. 4 Krokodildrif Avenue
Brits 0250
South Africa

Telephone : +27 12 2502 120

Telefax : +27 12 2503 125

Emergency telephone number : +27 83 1233 911

Recommended use of the chemical and restrictions on use

Recommended use : Fungicide

2. HAZARDS IDENTIFICATION

Most important hazards

Warning
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H351: Suspected of causing cancer.
H361d: Suspected of damaging the unborn child.
H410: Very toxic to aquatic life with long lasting effects.

Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
chlorothalonil (ISO)	1897-45-6	Acute Tox. 2; H330 Eye Dam. 1; H318 Skin Sens. 1; H317 Carc. 2; H351	>= 30 - < 50

		STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	
propiconazole (ISO)	60207-90-1	Acute Tox. 4; H302 Skin Sens. 1; H317 Repr. 2; H361d Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 3 - < 10
poly(oxy-1,2-ethanediyl), -[2,4,6-tris(1-phenylethyl)phenyl]- -hydroxy-	99734-09-5	Aquatic Chronic 3; H412	>= 2,5 - < 10
fludioxonil	131341-86-1	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 1 - < 2,5
1,2-benzisothiazol-3(2H)-one	2634-33-5	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400	>= 0,0025 - < 0,025
Substances with a workplace exposure limit :			
propane-1,2-diol	57-55-6		>= 1 - < 10

For explanation of abbreviations see section 16.

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.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control centre immediately.

In case of skin contact : 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	:	Nonspecific No symptoms known or expected.
Notes to physician	:	There is no specific antidote available. Treat symptomatically.

5. FIREFIGHTING 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 or Water spray
Unsuitable extinguishing media	:	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards during firefighting	:	As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
Specific extinguishing methods	:	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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency 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.

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-ventilated place.
Keep out of the reach of children.
Keep away from food, drink and animal feedingstuffs.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
chlorothalonil (ISO)	1897-45-6	TWA	0,1 mg/m3	Syngenta
propiconazole (ISO)	60207-90-1	TWA	5 mg/m3	Syngenta
propane-1,2-diol	57-55-6	TWA OEL-RL (particulate)	10 mg/m3	ZA OEL
	Further information: Recommended Limit			
		TWA OEL-RL (Vapour + particulates)	150 ppm 470 mg/m3	ZA OEL
	Further information: Recommended Limit			
fludioxonil	131341-86-1	TWA	5 mg/m3	Syngenta

Engineering measures : Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.

The extent of these protection measures depends on the actual risks in use.

Maintain air concentrations below occupational exposure standards.
Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Suitable respiratory equipment:
Respirator with a half face mask
The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when

handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection

Material	:	Nitrile rubber
Break through time	:	> 480 min
Glove length	:	0,5 mm

Remarks : Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Tightly fitting safety goggles
Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Remove and wash contaminated clothing before re-use.
Wear as appropriate:
Impervious clothing

Protective measures : The use of technical measures should always have priority over the use of personal protective equipment.
When selecting personal protective equipment, seek appropriate professional advice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	grey
Odour	:	aromatic
Odour Threshold	:	No data available
pH	:	5,5 (25 °C) Concentration: 1 % w/v

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	:	1,2 g/cm3 (25 °C)
Solubility(ies)		
Solubility in other solvents	:	No data available
Partition coefficient: n-octanol/water	:	No data available
Auto-ignition temperature	:	> 650 °C
Decomposition temperature	:	No data available
Viscosity		
Viscosity, dynamic	:	903 mPa.s (20 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

10. STABILITY AND REACTIVITY

Reactivity	:	None reasonably foreseeable.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	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.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Ingestion
Inhalation
Skin contact
Eye contact

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat, female): 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male): 0,52 - 2,01 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The component/mixture is moderately toxic after short term inhalation., The substance/mixture is not toxic on inhalation as defined by dangerous goods regulations.

Acute dermal toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

Components:

chlorothalonil (ISO):

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): 0,10 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

propiconazole (ISO):

Acute oral toxicity : LD50 (Rat, male and female): 1.517 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 5,8 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 4.000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

poly(oxy-1,2-ethanediyl), -[2,4,6-tris(1-phenylethyl)phenyl]- -hydroxy-:

Acute oral toxicity : LD50 Oral (Rat): 5.000 mg/kg
Assessment: The substance or mixture has no acute oral toxicity

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

fludioxonil:

Acute oral toxicity : LD50 (Rat, male and female): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 2,6 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat): 1.020 mg/kg

Skin corrosion/irritation

Product:

Species : Rabbit
Result : No skin irritation

Components:

chlorothalonil (ISO):

Species : Rabbit
Result : No skin irritation

propiconazole (ISO):

Species : Rabbit
Result : No skin irritation

fludioxonil:

Species : Rabbit
Result : No skin irritation

1,2-benzisothiazol-3(2H)-one:

Result : Irritating to skin.

Serious eye damage/eye irritation

Product:

Species : Rabbit
Result : Irritation to eyes, reversing within 7 days

Components:

chlorothalonil (ISO):

Species : Rabbit
Result : Risk of serious damage to eyes.

propiconazole (ISO):

Species : Rabbit
Result : No eye irritation

fludioxonil:

Species : Rabbit
Result : No eye irritation

1,2-benzisothiazol-3(2H)-one:

Result : Risk of serious damage to eyes.

Respiratory or skin sensitisation

Product:

Test Type : Buehler Test
Species : Guinea pig
Result : May cause sensitisation by skin contact.

Components:

chlorothalonil (ISO):

Species : Guinea pig
Result : May cause sensitisation by skin contact.
Remarks : In very rare cases may cause an allergic response of the respiratory system.

propiconazole (ISO):

Species : Guinea pig
Result : May cause sensitisation by skin contact.

fludioxonil:

Species : Guinea pig
Result : Did not cause sensitisation on laboratory animals.

1,2-benzisothiazol-3(2H)-one:

Result : Probability or evidence of skin sensitisation in humans

Germ cell mutagenicity

Components:

chlorothalonil (ISO):

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

Assessment

propiconazole (ISO):

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

poly(oxy-1,2-ethanediyl), -[2,4,6-tris(1-phenylethyl)phenyl]- -hydroxy-:

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

fludioxonil:

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

Carcinogenicity

Components:

chlorothalonil (ISO):

Carcinogenicity - Assessment : Chlorothalonil causes kidney tumours in rats and mice via a non-gentoxic mode of action secondary to target organ toxicity.
,Limited evidence of carcinogenicity in animal studies

propiconazole (ISO):

Carcinogenicity - Assessment : Animal testing did not show any carcinogenic effects.

fludioxonil:

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Components:

chlorothalonil (ISO):

Reproductive toxicity - Assessment : No toxicity to reproduction

propiconazole (ISO):

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments.

fludioxonil:

Reproductive toxicity - Assessment : No toxicity to reproduction

STOT - single exposure

Product:

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

Components:

chlorothalonil (ISO):

Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

Repeated dose toxicity

Components:

chlorothalonil (ISO):

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

propiconazole (ISO):

Remarks : No adverse effect has been observed in chronic toxicity tests.

fludioxonil:

Remarks : No adverse effect has been observed in chronic toxicity tests.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,155 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,45 mg/l
Exposure time: 48 h

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 2,05 mg/l
Exposure time: 72 h

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,05 mg/l
Exposure time: 72 h
Test Type: Growth inhibition

Components:

chlorothalonil (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,039 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,07 mg/l
Exposure time: 48 h

Toxicity to algae : ErC50 (Navicula pelliculosa (Freshwater diatom)): 0,02 mg/l
Exposure time: 96 h

NOEC (Navicula pelliculosa (Freshwater diatom)): 0,0035 mg/l
End point: Growth rate
Exposure time: 96 h

ErC50 (Skeletonema costatum (marine diatom)): 0,017 mg/l
Exposure time: 96 h

NOEC (Skeletonema costatum (marine diatom)): 0,012 mg/l
End point: Growth rate
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 10

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0,003 mg/l
Exposure time: 297 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0,035 mg/l
Exposure time: 21 d

NOEC (Americamysis bahia (Mysid shrimp)): 0,00083 mg/l
Exposure time: 28 d

M-Factor (Chronic aquatic toxicity) : 100

propiconazole (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4,3 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna Straus): 10,2 mg/l
Exposure time: 48 h

EC50 (Americamysis bahia (Mysid shrimp)): 0,51 mg/l
Exposure time: 96 h

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): 8,9 mg/l
Exposure time: 96 h

NOEC (Pseudokirchneriella subcapitata (green algae)): 0,13 mg/l
End point: Growth rate
Exposure time: 96 h

M-Factor (Acute aquatic : 1

toxicity)

Toxicity to fish (Chronic toxicity)	:	NOEC (Cyprinodon variegatus (sheepshead minnow)): 0,068 mg/l Exposure time: 95 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Americamysis bahia (Mysid shrimp)): 0,11 mg/l Exposure time: 28 d
M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to microorganisms	:	EC50 (activated sludge): > 100 mg/l Exposure time: 3 h

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.

poly(oxy-1,2-ethanediyl), -[2,4,6-tris(1-phenylethyl)phenyl]- -hydroxy-:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 21 mg/l Exposure time: 96 h

Ecotoxicology Assessment

Chronic aquatic toxicity	:	Harmful to aquatic life with long lasting effects.

fludioxonil:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 0,23 mg/l Exposure time: 96 h LC50 (Pimephales promelas (fathead minnow)): 0,7 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,4 mg/l Exposure time: 48 h EC50 (Americamysis bahia (Mysid shrimp)): 0,27 mg/l Exposure time: 96 h
Toxicity to algae	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): > 0,44 mg/l Exposure time: 96 h NOEC (Pseudokirchneriella subcapitata (green algae)): 0,132 mg/l Exposure time: 96 h ErC50 (Skeletonema costatum (marine diatom)): 0,43 mg/l Exposure time: 96 h NOEC (Skeletonema costatum (marine diatom)): 0,14 mg/l End point: Growth rate

Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0,04 mg/l
Exposure time: 28 d

NOEC (Pimephales promelas (fathead minnow)): 0,039 mg/l
Exposure time: 33 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0,035 mg/l
Exposure time: 21 d

NOEC (Americamysis): 0,018 mg/l
Exposure time: 28 d

M-Factor (Chronic aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h

1,2-benzisothiazol-3(2H)-one:

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Persistence and degradability

Components:

chlorothalonil (ISO):

Stability in water : Degradation half life: < 5 d (20 °C)
Remarks: Product is not persistent.

propiconazole (ISO):

Biodegradability : Result: Not readily biodegradable.

fludioxonil:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

Components:

chlorothalonil (ISO):

Bioaccumulation : Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water : log Pow: 2,94 (25 °C)

propiconazole (ISO):

Bioaccumulation	:	Remarks: Low to medium mobility in soil.
Partition coefficient: n-octanol/water	:	log Pow: 3,72 (25 °C)

fludioxonil:

Bioaccumulation	:	Remarks: Does not bioaccumulate.
Partition coefficient: n-octanol/water	:	log Pow: 4,12 (25 °C)

Mobility in soil

Components:

chlorothalonil (ISO):

Distribution among environmental compartments	:	Remarks: Chlorothalonil has low to slight mobility in soil.
Stability in soil	:	Dissipation time: 7 d Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

propiconazole (ISO):

Distribution among environmental compartments	:	Remarks: Low to medium mobility in soil.
Stability in soil	:	Dissipation time: 66 - 170 d Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

fludioxonil:

Distribution among environmental compartments	:	Remarks: immobile
Stability in soil	:	Dissipation time: 14 d Percentage dissipation: 50 % (DT50) Remarks: Product is not persistent.

Other adverse effects

Product:

Results of PBT and vPvB assessment	:	This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

Components:

chlorothalonil (ISO):

Results of PBT and vPvB assessment	:	This substance is not considered to be very persistent and very bioaccumulating (vPvB). This substance is not

considered to be persistent, bioaccumulating and toxic (PBT).

propiconazole (ISO):

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

poly(oxy-1,2-ethanediyl), -[2,4,6-tris(1-phenylethyl)phenyl]- -hydroxy-:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

fludioxonil:

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging : Empty remaining contents.
Triple rinse containers.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(CHLOROTHALONIL AND FLUDIOXONIL)
Class : 9
Packing group : III
Labels : 9

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (CHLOROTHALONIL AND FLUDIOXONIL)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger aircraft)	:	964
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CHLOROTHALONIL AND FLUDIOXONIL)
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.

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.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

None known.

Hazardous components which must be listed on the label	:	chlorothalonil 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole

16. OTHER INFORMATION

Full text of other abbreviations

ZA OEL	:	South Africa. Hazardous Chemical Substances Regulations, Occupational Exposure Limits
ZA OEL / TWA OEL-RL	:	Long term occupational exposure limits - recommended limit

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; CPR - Controlled Products Regulations; 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

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.

ZA / EN