

FFSECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
 Trade name : CIGAL PLUS
 Product code : FF-050 - Chlorothalonil 375g/l +Tebuconazole 125g/l SC -

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use
 Use of the substance/mixture : Agriculture Fungicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Rotam Europe Ltd
 Hamilton House, Mabledon Place
 WC1H 9BB London - United Kingdom
 T +44 020 7953 0447
msds@rotam.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	NHS Direct (England and Wales)		111	
United Kingdom	NHS 24 (Scotland)		111	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (inhal.), Category 4 H332
 Serious eye damage, Category 1 H318
 Skin sensitisation, Category 1 H317
 Specific target organ toxicity - Single exposure, Category 3, Respiratory tract irritation H335
 Carcinogenicity, Category 2 H351
 Reproductive toxicity, Category 2 H361d
 Hazardous to the aquatic environment - Acute Hazard, Category 1 H400
 Hazardous to the aquatic environment - Chronic Hazard, Category 1 H410
 Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS07

GHS08

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H332 - Harmful if inhaled
 H335 - May cause respiratory irritation
 H351 - Suspected of causing cancer
 H361d - Suspected of damaging the unborn child
 H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) :

P261 - Avoid breathing vapours/spray.
 P273 - Avoid release to the environment.
 P280 - Wear protective eye protection.
 P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 P501 - Dispose of contents/container to a licensed hazardous-waste disposal contractor or

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EUH phrases	:	collection site except for empty clean containers which can be disposed of as non-hazardous waste. EUH401 - To avoid risks to human health and the environment, comply with the instructions for use
PPP safety precautions	:	SP 1 - Do not contaminate water with the product or its container (Do not clean application equipment near surface water/Avoid contamination via drains from farmyards and roads) SPe3 - To protect aquatic organisms, respect an unsprayed buffer zone to surface water bodies as specified for the crop (6 m for wheat).

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Chlorothalonil	(CAS No.) 1897-45-6 (EC no) 217-588-1 (EC index no) 608-014-00-4	31.25	Carc. 2, H351 Acute Tox. 2 (Inhalation), H330 STOT SE 3, H335 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Tebuconazole	(CAS No.) 107534-96-3 (EC no) 403-640-2 (EC index no) 603-197-00-7	10.42	Acute Tox. 4 (Oral), H302 Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Alkyl polysaccharide		1 - 5	Eye Dam. 1, H318
Aqueous preparation of isothiazolinones		0 - 1	Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	:	Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	:	Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	:	Rinse immediately with plenty of water. In case of an skin reaction, consult a physician.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	:	Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO ₂).
Unsuitable extinguishing media	:	High volume water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	:	Hazardous decomposition products may be released during prolonged heating like smokes, carbon monoxide and dioxide, nitrogen oxides (NO _x).
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5.3. Advice for firefighters

Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Take up liquid spill into absorbent material.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not breathe spray, vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Engineering control of operator exposure must be used where reasonably practicable.

Hand protection:

Protective gloves

Eye protection:

Face protection (faceshield)

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Off-White
Odour : mild characteristic odour
Odour threshold : No data available
pH : 6.72 (CIPAC) MT 75)

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pH solution	: 6.81 at 1 % (25 °C, (CIPAC MT 75.3))
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: Does not flash below 100°C (boiling point), (EEC A.9)
Auto-ignition temperature	: 455 °C (EEC A.15)
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 1.20872 at 20°C (EEC A.3)
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 216.0 mPa.s at 20.0oC (at 30 RPM – spindle No: 1), (OECD 114) 188.7 mPa.s at 40.0oC (at 30 RPM – spindle No: 1) (OECD 114)
Explosive properties	: Not explosive (EEC A.14)
Oxidising properties	: Not oxidizing (EEC A.21)
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat. Direct sunlight.

10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agent.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CIGAL PLUS	
LD50 oral rat	>2000 mg/kg (OECD Method 423)
LD50 dermal rat	> 2000 mg/kg (OECD Method 402)
LC50 inhalation rat (mg/l)	1.32 mg/l, 4h, (OECD Method 403)

Skin corrosion/irritation	: Non irritant for skin (OECD Method 404)
Serious eye damage/irritation	: Irreversible irritation for the eyes (OECD Method 405)
Respiratory or skin sensitisation	: Skin sensitiser (OECD Method 406)
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Classified due to the active ingredient: chlorothalonil.
Reproductive toxicity	: Classified due to the active ingredient: tebuconazole.
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

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SECTION 12: Ecological information

12.1. Toxicity

CIGAL PLUS	
LC50 fishes	LC ₅₀ (96h)=0.131 mg product/l Rainbow Trout (<i>Oncorhynchus mykiss</i>), (OECD Method 203)
EC50 Daphnia	EC ₅₀ (48h)= 0.277 mg product /l (nominal). (<i>Daphnia magna</i>), (OECD Method 202)
EC50 algae	ErC50 (growth rate - 72h)=3.25 mg product /l and EyC50 (yield - 72h)=0.52 mg product /l, (<i>Desmosdesmus subspicatus</i>), (OECD Method 206)
EC50 algae	EC ₅₀ (7 Days)= 0.35 mg product /l (<i>Lemna gibba</i>), (OECD Method 221)
NOEC chronic algae	NOEC= 0.2228 mg product /l (<i>Desmosdesmus subspicatus</i>), (OECD Method 206)

12.2. Persistence and degradability

Tebuconazole (CAS No.) 107534-96-3	
Persistence and degradability	Not readily biodegradable

Chlorothalonil (CAS No.) 1897-45-6	
Persistence and degradability	Not readily biodegradable

12.3. Bioaccumulative potential

Tebuconazole (CAS No.) 107534-96-3	
Log Pow	3.7 (EFSA Journal 2014; 12(1):3485)

Chlorothalonil (CAS No.) 1897-45-6	
Log Pow	2.94 (SANCO/4343/2000 final (revised), 28 September 2006).

12.4. Mobility in soil

Components	
Tebuconazole (CAS No.) 107534-96-3	Koc= 769 L/kg (Arithmetic mean), (EFSA Journal 2014; 12(1):3485)
Chlorothalonil (CAS No.) 1897-45-6	Koc= 850 L/kg (median), (SANCO/4343/2000 final (revised), 28 September 2006).

12.5. Results of PBT and vPvB assessment

Components	
Tebuconazole (CAS No.) 107534-96-3	This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Chlorothalonil (CAS No.) 1897-45-6	This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADN / ADR / IATA / IMDG / RID

14.1. UN number

UN-No. (ADR)	: 3082
UN-No. (IMDG)	: 3082
UN-No. (IATA)	: 3082
UN-No. (ADN)	: 3082
UN-No. (RID)	: 3082

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (IATA)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Proper Shipping Name (RID)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport document description (ADR)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorothalonil, Tebuconazole), 9, III, (E)
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorothalonil, Tebuconazole), 9, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS

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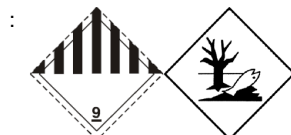
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Transport document description (IATA)	: UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Chlorothalonil, Tebuconazole), 9, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorothalonil, Tebuconazole), 9, III, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Chlorothalonil, Tebuconazole), 9, III, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

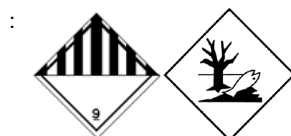
ADR

Transport hazard class(es) (ADR)	: 9
Danger labels (ADR)	: 9



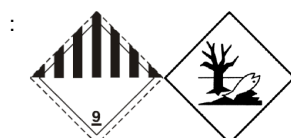
IMDG

Transport hazard class(es) (IMDG)	: 9
Danger labels (IMDG)	: 9



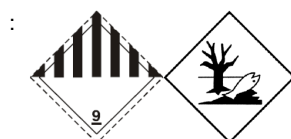
IATA

Transport hazard class(es) (IATA)	: 9
Hazard labels (IATA)	: 9



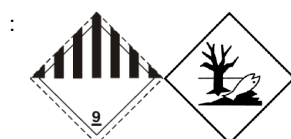
ADN

Transport hazard class(es) (ADN)	: 9
Danger labels (ADN)	: 9



RID

Transport hazard class(es) (RID)	: 9
Danger labels (RID)	: 9



14.4. Packing group

Packing group (ADR)	: III
Packing group (IMDG)	: III
Packing group (IATA)	: III
Packing group (ADN)	: III

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Packing group (RID) : III

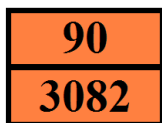
14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : M6
Special provisions (ADR) : 274, 335, 601, 375
Limited quantities (ADR) : 5I
Excepted quantities (ADR) : E1
Packing instructions (ADR) : P001, IBC03, LP01, R001
Special packing provisions (ADR) : PP1
Mixed packing provisions (ADR) : MP19
Portable tank and bulk container instructions (ADR) : T4
Portable tank and bulk container special provisions (ADR) : TP1, TP29
Tank code (ADR) : LGBV
Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V12
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13
Hazard identification number (Kemler No.) : 90
Orange plates :



Tunnel restriction code (ADR) : E
EAC code : •3Z

- Transport by sea

Special provisions (IMDG) : 274, 335, 969
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : P001, LP01
Special packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC03
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP2, TP29
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A

- Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y964
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 964
PCA max net quantity (IATA) : 450L
CAO packing instructions (IATA) : 964
CAO max net quantity (IATA) : 450L
Special provisions (IATA) : A97, A158, A197
ERG code (IATA) : 9L

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- Inland waterway transport

Classification code (ADN)	: M6
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

- Rail transport

Classification code (RID)	: M6
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Special packing provisions (RID)	: PP1
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T4
Portable tank and bulk container special provisions (RID)	: TP1, TP29
Tank codes for RID tanks (RID)	: LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 90

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

This version replaces all previous versions

Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhalation) Category 2
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Repr. 2	Reproductive toxicity Category 2
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Sens. 1	Skin sensitisation Category 1
STOT SE 3	Specific target organ toxicity - Single exposure, Category 3, Respiratory tract irritation

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H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H330	Fatal if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H361d	Suspected of damaging the unborn child.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS EU (REACH Annex II)

Disclaimer: The information provided by Rotam Europe Ltd contained herein is given in good faith and correct to the best of our knowledge. However, the information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.