Almandine Corporation SA

Gotthardstrasse 3, 6300 Zug, Switzerland
Tel: +41 41 726 30 65 Fax: +41 41 726 30 61

Email: almch@almandine.com

SAFETY DATA SHEET

COLONEL SC

SDS/GHS/V1.1/ISR **Issue date:** 30.11.2021

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifiers

Product name:	COLONEL SC
Chemical name:	Azoxystrobin/Chlorothalonil
CAS No.:	131860-33-8/1897-45-6

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

Identified uses: fungicide for agricultural use

Details of the supplier of the safety data sheet

Supplier:
Almandine Corporation SA
Gotthardstrasse 3
6300 Zug
Switzerland
Tel: +44 20 8995 8391 (UK office)
Fax: +44 20 8995 7639
Email: almuk@almandine.com

Formulation site:

a.
Agrosmart UK LTD
Clayton West
Huddersfield
West Yorkshire
UK

b.
IRCA Service SpA
San Giovanni (BG)
Italy

Emergency telephone number

Tel: +44 208 995 8391 (SDS support, 9.00-5.00 pm; Mon-Fri,UK)

SECTION 2: HAZARDS IDENTIFICATION

Acute tox (inhal) 3
Carc 2
Skin sens 1
Eye Irrit. 2
STOT SE 3
Aq. acute 1
Aq. chronic 1

Classification and Label Elements:

Pictograms:

Signal word: Danger

H-Statement(s): **H331:** Toxic if inhaled

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H317: May cause an allergic skin reaction
H319: Causes serious eye irritation
H335: May cause respiratory irritation
H351: Suspected of causing cancer
H400: Very toxic to aquatic life
H410: Very toxic to aquatic life with long-lasting effects

P-Statement(s):

P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing
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.
P501: Dispose of content/container in accordance with local/ national regulations

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients	CAS Number	Concentration (g/L)	Signal word	H-Statement(s)
Azoxystrobin	131860-33-8	80	Danger	H331, H400, H410
Chlorothalonil	1897-45-6	400	Danger	H317, H318, H330, H335, H351, H400, H410
1,2 ethandiol	107-21-1	25-40	Warning	H302

SECTION 4: FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre and follow the advice given. Show this Safety Data Sheet to the doctor.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin contact: Wash with plenty of water. IF SKIN irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

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.

Ingestion: If swallowed seek medical advice immediately and show the container, label or this Data sheet, if possible. Provided the patient is conscious, wash out mouth with water.
Do not induce vomiting.

Medical Advice: Observe the patient and treat symptomatically. If gastric lavage is considered necessary, prevent aspiration of gastric material. Consider administration of activated charcoal and a laxative.

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SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media: Water spray. Keep unexposed containers cool with water spray.
Water jet is not recommended.

Specific Hazards from the product: Combustion products are toxic and/or irritant. May produce toxic gases: NOx, COx, CN.

Advice for fire fighters: Fire-fighters should wear full protective gear, including self-contained breathing apparatus. Use water spray to cool containers.

Bund area with sand or earth to prevent contamination of drains or waterways. Dispose of fire control water or other extinguishing agent and spillage safely.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Wear PPE as recommended in section 8. Avoid breathing, vapours, spray or gas. Ensure adequate ventilation. Avoid contact with spilled material or contaminated surfaces. Keep people and animals away and keep locked up.

Environmental precautions: Prevent product from entering drains or water courses. Do not flush into water sources, drains or sewage systems. If product enters sewage or contaminates water sources, inform the relevant authorities.

Clean-up methods: Contain spill and absorb with earth, sand, clay, or other absorbent material, collect and store in sealed drums for safe disposal. Decontaminate the area and equipment by washing areas with water. Keep in suitable, closed containers for disposal. Contaminated extinguishing water must be disposed of in accordance with official regulations.

SECTION 7: HANDLING AND STORAGE

Handling: Use PPE as outlined in section 8. Avoid contact with skin, eyes and clothing. May irritate skin. Avoid breathing vapour or spray. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

Storage: Keep out of sight and reach of children Store in the closed original container, in a cool, dry, well-ventilated area, away from direct sunlight and sources of ignition. Keep away from food, drink and animal feeds. Avoid storing at freezing temperatures.

Incompatibility: None known.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure limits:

Azoxystrobin	2 mg / m^3	8 hr TWA
Chlorothalonil	0.1 mg/ m^3	8 hr TWA

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Engineering controls:	Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below exposure limits.
Personal protective equipment:	Wear face shield or goggles. Wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and a washable hat, heavy-duty shoes or boots. Wear elbow length butyl rubber gloves. If working in a poorly ventilated area or if occupational exposure levels are likely to be exceeded, wear a respirator with filter for vapours. After each day's use, wash gloves, goggles or face shield, respirator if worn, and contaminated clothing.

Do not re-enter treated areas without protective clothing until spray residue has dried.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

a)	Appearance:	White to off white liquid suspension
b)	Odour:	Weak
c)	Odour threshold:	none set
d)	pH:	5 – 8 (1% solution)
e)	Melting point/freezing point:	not determined
f)	Boiling point/boiling range:	not determined
g)	Flash–point:	Does not flash
h)	Evaporation rate:	not determined
i)	Flammability (solid/gas):	Not flammable
j)	Upper/lower flammability or explosive limits:	n/a
k)	Vapour pressure:	not determined
l)	Vapour density:	not determined
m)	Relative density:	1.17-1.27 g /mL (20°C)
n)	Solubility:	6.7 mg/L (water, 20°C, azoxystrobin tech) 0.81 mg/L (water, 20°C, chlorothalonil tech)
o)	Partition coefficient:	Log P_{ow} 2.50 (azoxystrobin tech.) Log Pow 2.94 (chlorothalonil tech.)
p)	Auto-ignition temperature:	not determined
q)	Decomposition temperature:	not determined
r)	Viscosity:	not determined
s)	Explosive properties:	Not explosive
t)	Oxidising properties:	Not an oxidiser

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions of use. Will not polymerise.
Chemical stability	The product is stable if stored and handled as prescribed /indicated.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to instructions.
Conditions to avoid	Sources of ignition and extreme heat.
Incompatible materials	Strong oxidisers, alkalis.

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Hazardous decomposition Products: Does not decompose at ambient temperature. Combustion or thermal decomposition will evolve toxic and irritant vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

Oral toxicity: LD_{50} rat: >2000 - 5000 mg/kg, GHS cat 5
Dermal toxicity: LD_{50} rat: >2000 – 5000 mg/kg, GHS cat 5

Inhalation toxicity: LC_{50} rat 4 h 0.08 mg/L
Skin irritation: Not irritating
Eye irritation: Causes serious eye irritation
Skin sensitisation: May cause an allergic sin reaction

Long-Term Toxicity:
(based on components) Chlorothalonil causes kidney tumours in rats via a non-genotoxic mode of action secondary to target organ toxicity. Not mutagenic or teratogenic and show no reproductive toxicity in animal experiments.
Azoxystrobin is not mutagenic nor carcinogenic and shows no reproductive toxicity in animal experiments.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity (derived from components)

Very toxic to aquatic organisms

Fish toxicity: LC_{50} 96 h rainbow trout 0.08 mg/L
***Daphnia* toxicity:** EC_{50} 48 h *Daphnia magna* 0.10 mg/L
Algal toxicity: EbC_{50} 120 h Green algae 0.4 mg/L

Virtually non-toxic to bees.

Environmental fate

Bioaccumulation: Azoxystrobin has medium potential for bioaccumulation. Chlorothalonil has low potential for bioaccumulation.

Stability in water: Azoxystrobin is moderately persistent in soil. Chlorothalonil is not persistent in soil.

Mobility: Azoxystrobin has moderate ability in soil. Chlorothalonil has low to slight mobility.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product: Dispose of waste product through an official waste contractor.
Obtain advice from local waste regulation authority.

Contaminated packaging: Triple- or pressure-rinse containers before disposal. Add rinsings to spray tank.
Do not dispose of undiluted chemicals on-site.

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Do not burn empty containers. Recycle, or return to supplier through local schemes if applicable. Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORTATION INFORMATION

UN number:	3082		
UN Proper Shipping Name:	Environmentally hazardous substance, liquid, N.O.S. (contains azoxystrobin and chlorothalonil)		
Transport hazard class:	ADR/RID: 9	IMDG: 9	IATA: 9
Packaging group:	ADR/RID: III	IMDG: III	IATA: III
Environmental hazard:	ADR/RID: Yes	IMDG: Marine pollutant: Yes	IATA: Yes

SECTION 15: REGULATORY INFORMATION

No additional regulatory information required for this product

SECTION 16: OTHER INFORMATION

Full H-Statements:

H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H330	Fatal if inhaled
H331	Toxic if inhaled
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long-lasting effects

TWA: Time weighted average: average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

No liability is accepted for any injury, loss, damage or cost arising directly or indirectly from the use of the product or from the use of information contained within the safety data sheet since the customer's handling of the product is necessarily beyond our control. The supplied data are based on current knowledge and experience. This safety data sheet is intended to describe our product in terms of safety requirements. The customer should determine by appropriate trials that the product is suitable for his intended use.

Sections 9, 11 and 12 based on available EU and Almandine SA Corporation data
Self-classification of mixture (studies)
Supersedes SDS issued: 29.04.2019
Changes to section 1, 2, 4, 5, 6, 7, 11, 16