Safety Data Sheet

SECTION 1. Identification of the substance / mixture and of the company / undertaking

1.1. Product identifier

Code: **276000**
Name **ADDISAN FOR EXTERNAL**

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

Description / Use **sanitizing and sanitizing additive for exteriors .**

1.3. Information on the supplier of the safety data sheet

Business name **Colorificio A. & B. Casati SpA Via**
Address **Valpantena 59 / B - Poiano**
Location and State **37142 VERONA (VR)**
ITALY
tel. 045 550 244
fax 045 550 414
e-mail of the competent person responsible for the safety data sheet **tintotec@casati.it**

1.4. Emergency telephone number

For urgent information contact **045550244**

SECTION 2. Hazards identification

2.1. Substance or mixture classification

The product is classified as dangerous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments). The product therefore requires a safety data sheet compliant with the provisions of Regulation (EC) 1907/2006 and subsequent amendments.
Any additional information regarding risks to health and / or the environment are given in sections. 11 and 12 of this sheet.

Hazard classification and indications:

Eye irritation, category 2 Skin sensitization, category 1A Hazardous to the aquatic environment, chronic toxicity, category 1	H319	Causes serious eye irritation.
	H317	May cause an allergic skin reaction.
	H410	Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Danger labeling pursuant to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments.

Hazard pictograms:

Warnings: Caution

Hazard statements:

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary advice:

P101	If you need to consult a doctor, have the container or the label of the product available. Keep out of reach of children.
P102	
P261	Avoid breathing dust / fume / gas / mist / vapors / spray. Wear protective gloves.
P280	

SECTION 2. Hazards identification... / >>

P333 + P313 If skin irritation or rash occurs: seek medical attention.
P501 Dispose of the product / container in collection points for hazardous or special waste.

Contains: 2-octyl-2H-isothiazol-3-one
Terbutrin
Zinc pyrithione

2.3. Other dangers

On the basis of available data, the product does not contain PBT or vPvB substances in percentage greater than 0.1%.

SECTION 3. Composition / information on ingredients

3.1. Substances

Not relevant information

3.2. Blends

Advanced microencapsulation technology: Algaecide / Fungicide based on the following substances:

Contains:

Identification		Conc.%	Classification 1272/2008 (CLP)
ZINC OXIDE			
CAS	*1314-13-2*	5	**Aquatic Acute 1 H400 M = 1, Aquatic Chronic 1 H410 M = 1**
THERE IS	*215-222-5*		
INDEX	*030-013-00-7*		
Reg. No.	*01-2119463881-32*		
Zinc pyrithione			
CAS	*13463-41-7*	0.9	**Acute Tox. 3 H301, Acute Tox. 4 H332, Eye Dam. 1 H318, Aquatic Acute 1 H400 M = 10, Aquatic Chronic 1 H410 M = 1**
THERE IS	*236-671-3*		
INDEX			
Terbutrin			
CAS	*886-50-0*	0.8	**Acute Tox. 4 H302, Skin Sens. 1 H317, Aquatic Acute 1 H400 M = 100, Aquatic Chronic 1 H410 M = 100**
THERE IS	*212-950-5*		
INDEX			
2-octyl-2H-isothiazol-3-one			
CAS	*26530-20-1*	0.45	**Acute Tox. 3 H311, Acute Tox. 3 H331, Acute Tox. 4 H302, Skin Corr. 1B H314, Skin Sens. 1A H317, Aquatic Acute 1 H400 M = 10, Aquatic Chronic 1 H410 M = 1**
THERE IS	*247-761-7*		
INDEX	*613-112-00-5*		

The full wording of the hazard statements (H) is given in section 16 of the sheet.

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove any contact lenses. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids well. Consult a physician if the problem persists.
SKIN: Take off contaminated clothing. Take a shower immediately. Call a doctor immediately. Wash the contaminated garments before reusing them.
INHALATION: Take the subject to fresh air. If breathing stops, give artificial respiration. Call a doctor immediately. INGESTION: Call a doctor immediately. Do not induce vomiting. Do not give anything that is not expressly authorized by your doctor.

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

Allergic manifestations.

SECTION 4. First aid measures... / >>

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

Treat skin and mucous membranes with antihistamines and corticosteroid preparations.

SECTION 5. Firefighting measures

5.1. Fire fighting

SUITABLE EXTINGUISHING MEDIA
The extinguishing media are the traditional ones: carbon dioxide, foam, powder and nebulized water.
UNSUITABLE EXTINGUISHING MEDIA
No one in particular.

5.2. Special hazards arising from the substance or mixture

In case of fire, toxic gases may be released, such as: Nitrogen oxides (NOx), Carbon monoxide (CO), Zincoxide, Sulfur dioxide.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Avoid
breathing combustion products.

5.3. Recommendations for firefighters

Wear self-contained breathing apparatus.

GENERAL INFORMATIONS
Cool the containers with jets of water to avoid product decomposition and the development of substances potentially hazardous to health. Always wear full fire protection equipment. Collect the extinguishing water which must not be discharged into the sewers. Dispose of the contaminated water used for extinguishing and the residue of the fire according to current regulations.

EQUIPMENT
Normal clothing for firefighting, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN469), flame retardant gloves (EN 659) and fire brigade boots (HO A29 or A30).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop the leak if there is no danger.
Wear suitable protective equipment (including personal protective equipment referred to in section 8 of the safety data sheet) to prevent contamination of skin, eyes and personal clothing. These indications are valid both for the workers and for emergency interventions.

6.2. Environmental precautions

Prevent the product from entering sewers, surface water, groundwater.

6.3. Methods and materials for containment and cleaning up

Suck up the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used with the product, checking section 10. Absorb the remainder with inert absorbent material. Provide sufficient ventilation of the place affected by the leak. The disposal of contaminated material must be carried out in accordance with the provisions of point 13.

6.4. Reference to other sections

Any information regarding personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for Safe Handling

Handle the product after consulting all the other sections of this safety data sheet. Avoid the dispersion of the product in the environment. Do not eat, drink or smoke during use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

SECTION 7. Handling and storage . . . / >>

Keep only in the original container. Keep the containers closed, in a well-ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, checking section 10.

7.3. Specific end uses

Information not available

SECTION 8. Exposure controls / personal protection

8.1. Control parameters

Normative requirements:

TLV-ACGIH ACGIH 2016

ZINC OXIDE

Threshold limit value

Guy	State	TWA / 8h		STEL / 15min
		mg / m3	ppm	mg / m3 ppm
TLV-ACGIH		2		10

Legend:
(C) = CEILING; INALAB = Inhalable Fraction; RESPIR = Breathing Fraction; TORAC = Thoracic Fraction.

8.2. Exposure controls

Considering that the use of adequate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local exhaust.
Provide an emergency shower with face and eye basin.
HAND PROTECTION
Protect hands with category III work gloves (ref. Standard EN 374).
For the final choice of the material of the work gloves it is necessary to consider: compatibility, degradation, breakage time and permeation.
In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is not foreseeable. Gloves have a wear time that depends on the duration and method of use.
SKIN PROTECTION
Wear category II professional long-sleeved work clothes and safety footwear (ref. Directive 89/686 / EEC and standard EN ISO 20344).
Wash with soap and water after removing protective clothing.
EYE PROTECTION
It is recommended to wear airtight protective goggles (ref. Standard EN 166). RESPIRATORY PROTECTION
In case of exceeding the threshold value (e.g. TLV-TWA) of the substance or of one or more of the substances present in the product, it is recommended to wear a face filter of type FFP2 or higher class if otherwise required by the risk assessment (ref. standard EN 149). The use of respiratory protection means is necessary if the technical measures adopted are not sufficient to limit the exposure of the worker to the threshold values taken into consideration. The protection offered by the masks is however limited.
In the event that the substance in question is odorless or its olfactory threshold is higher than the relative TLV-TWA and in the event of an emergency, wear an open-circuit compressed air breathing apparatus (ref. Standard EN 137) or a self-contained breathing apparatus. outdoor air (ref. EN 138 standard). For the correct choice of the respiratory protection device, refer to the EN 529 standard.
ENVIRONMENTAL EXPOSURE CONTROLS
Emissions from manufacturing processes, including those from ventilation equipment should be controlled for compliance with environmental protection legislation.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Color	White
Odor	mild
Odor threshold	Unavailable
pH	7-8
Melting or freezing point Initial	Unavailable
boiling point	Unavailable
Boiling range Flash	Unavailable
point Evaporation rate	> 60 ° C
	Unavailable
Flammability of solids and gases	Unavailable

SECTION 9. Physical and chemical properties... / >>

Lower flammability limit Upper	Unavailable
flammability limit Lower	Unavailable
explosive limit Upper explosive	Unavailable
limit Vapor pressure	Unavailable
	Unavailable
Vapor density	Unavailable
Relative density	1.09
Solubility	soluble in water
Partition coefficient: n-octanol / water: Auto-	Unavailable
ignition temperature	Unavailable
Decomposition temperature	Unavailable
Viscosity	Unavailable
Explosive properties	Unavailable
Oxidizing properties	Unavailable

9.2. Other information

VOC (Directive 2010/75 / EC):	0
VOC (volatile carbon):	0

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

In normal conditions of use and storage no dangerous reactions are foreseeable.

10.4. Conditions to avoid

None in particular. However, follow the usual precautions towards chemicals.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

11.1. Information on toxicological effects

Metabolism, kinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects and chronic effects from short and long term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture: > 20 mg / l

SECTION 11. Toxicological information... / >>

LD50 (Oral) of the mixture: LD50	> 2000 mg / kg
(Dermal) of the mixture:	> 2000 mg / kg

Zinc pyrithione

LC50 (Inhalation)	0.15 mg / l

SKIN CORROSION / SKIN IRRITATION

It does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / EYE IRRITATION

Causes serious eye irritation

RESPIRATORY OR SKIN SENSITIZATION

Skin sensitizer

MUTAGENICITY ON GERMINAL CELLS

It does not meet the classification criteria for this hazard class

CARCINOGENICITY

It does not meet the classification criteria for this hazard class

REPRODUCTION TOXICITY

It does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

It does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

It does not meet the classification criteria for this hazard class

DANGER IN CASE OF SUCTION

It does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

The product is to be considered as dangerous for the environment and has a high toxicity to aquatic organisms with long-term negative effects for the aquatic environment.

12.1. Toxicity

2-octyl-2H-isothiazol-3-one

LC50 - Fish	0.036 mg / l / 96h Oncorhynchus mykiss
EC50 - Crustaceans	0.42 mg / l / 48h Daphnia magna
EC50 - Algae / Aquatic Plants	0.084 mg / l / 72h Scenedesmus subspicatus
NOEC Chronic Fish	0.022 mg / l Oncorhynchus mykiss (28 d)
Chronic NOEC Crustaceans	0.002 mg / l Daphnia magna (21 d)
Chronic NOEC for Algae / Aquatic Plants	0.004 mg / l Algae (72 h)

Terbutrin

LC50 - Pisces	1.8 mg / l / 96h
EC50 - Crustaceans	7.1 mg / l / 48h
EC50 - Algae / Aquatic Plants	> 0.104 mg / l / 72h

ZINC OXIDE

LC50 - Pisces	0.14 mg / l / 96h Oncorhynchus mykiss
EC50 - Crustaceans	0.413 mg / l / 48h Daphnia magna
EC50 - Algae / Aquatic Plants	0.14 mg / l / 72h Pseudokirchnerella subcapitata 0.53
NOEC Chronic Fish	mg / l

SECTION 12. Ecological information... / >>

Chronic NOEC for Algae / Aquatic Plants	0.024 mg / l

Zinc pyrithione

LC50 - Pisces	0.0104 mg / l / 96h Brachydanio rerio
EC50 - Crustaceans	0.051 mg / l / 48h Daphnia magna
EC50 - Algae / Aquatic Plants	0.051 mg / l / 72h Psudokirchneriella subcapitata
NOEC Chronic Fish	0.00125 mg / l Brachydanio rerio (28 d) 0.00213
Chronic NOEC Crustaceans	mg / l Daphnia magna (21 d)
Chronic NOEC for Algae / Aquatic Plants	0.0149 mg / l Pseudokirchneriella subcapitata (72 h)

12.2. Persistence and degradability

2-octyl-2H-isothiazol-3-one Rapidly degradable

Terbutrin
NOT rapidly degradable

ZINC OXIDE

Solubility in water	2.9 mg / l
Solubility in water	0.1 - 100 mg / l

Degradability: data not available
NOT rapidly degradable

Zinc pyrithione
Quickly degradable

12.3. Bioaccumulation potential

2-octyl-2H-isothiazol-3-one

Partition coefficient: n-octanol / water	2.92 (OECD 117)

Terbutrin

Partition coefficient: n-octanol / water BCF	3.19 103

ZINC OXIDE

BCF	> 175

Zinc pyrithione

Partition coefficient: n-octanol / water	1.21

12.4. Mobility in soil

2-octyl-2H-isothiazol-3-one Partition coefficient: soil / water	2120

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain PBT or vPvB substances in percentage greater than 0.1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

Reuse if possible. Product residues are to be considered special hazardous waste. The dangerousness of the waste that partially contains this product must be assessed on the basis of the laws in force.
Disposal must be entrusted to an authorized waste management company, in compliance with national and possibly local regulations.
The transport of waste may be subject to ADR.
CONTAMINATED PACKAGING
Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 13. Disposal considerations

. . . / >>

13.1. Waste treatment methods

Reuse if possible. Product residues are to be considered special hazardous waste. The dangerousness of the waste that partially contains this product must be assessed on the basis of the laws in force.
Disposal must be entrusted to an authorized waste management company, in compliance with national and possibly local regulations.
The transport of waste may be subject to ADR.
CONTAMINATED PACKAGING
Contaminated packaging must be sent for recovery or disposal in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, IATA: 3082

ADR / RID: If transported in simple or internal packaging with a capacity of ≤ 5Kg or 5L, the product is not subject to the ADR / RID provisions, as required by Special Provision 375.

IMDG: If transported in simple or internal packaging with a capacity of ≤ 5Kg or 5L, the product is not subject to the provisions of the IMDG Code, as required by Section 2.10.2.7.

IATA: If transported in simple or internal packaging with a capacity of ≤ 5Kg or 5L, the product is not subject to the other IATA provisions, as required by Special Provision A197.

14.2. UN proper shipping name

ADR / RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (ZINC OXIDE; Zinc pyrithione)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (ZINC OXIDE; Zinc pyrithione)
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS (Zinc pyrithione);

14.3. Transport hazard classes

ADR / RID: Class: 9 Label: 9

IMDG: Class: 9 Label: 9

IATA: Class: 9 Label: 9

14.4. Packing group

ADR / RID, IMDG, IATA: III

14.5. Dangers for the environment

ADR / RID: Dangerous for the environment

IMDG: Marine Pollutant

IATA: Dangerous for the environment

SECTION 14. Transport information... / >>

14.6. Special precautions for users

ADR / RID:	HIN - Kemler: 90 Special provision: - EMS: FA, SF	Limited Quantity: 5 L	Tunnel restriction code: (-)
IMDG:		Limited quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 450 L	Packing instructions: 964
	Pass .:	Maximum quantity: 450 L	Packing instructions: 964
	Special instructions:	A97, A158, A197	

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

Not relevant information

SECTION 15. Regulatory information

15.1. Health, safety and environmental legislation and regulations specific to the substance or mixture

Seveso Category - Directive 2012/18 / EC: E1

Restrictions relating to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006
Product
Point 3

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain SVHC substances in percentage greater than 0.1%.

Substances subject to authorization (Annex XIV REACH)
None

Substances subject to export notification obligation Reg. (EC) 649/2012:
None

Substances subject to the Rotterdam Convention:
None

Substances subject to the Stockholm Convention:
None

Sanitary checks
Workers exposed to this chemical agent dangerous to health must be subjected to health surveillance carried out in accordance with the provisions of art. 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the safety and health of the worker has been assessed as irrelevant, in accordance with the provisions of art. 224 paragraph 2.

15.2. Chemical safety assessment

A chemical safety assessment has not been developed for the mixture and the substances it contains.

SECTION 16. Other information

Text of hazard (H) indications mentioned in sections 2-3 of the sheet:

Acute Tox. 3	Acute toxicity, category 3 Acute toxicity,
Acute Tox. 4	category 4 Skin corrosion, category 1B
Skin Corr. 1B	Serious eye damage, category 1 Eye
Eye Dam. 1	irritation, category 2 Skin sensitization,
Eye Irrit. 2	category 1 Skin sensitization, category
Skin Sens. 1	1A
Skin Sens. 1A	
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
H301	Toxic if swallowed.
H311	Toxic in contact with the skin.
H331	Toxic if inhaled.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H314	It causes serious skin burns and serious eye injuries.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

SECTION 16. Other information... / >>

H317	May cause an allergic skin reaction. Very toxic
H400	to aquatic organisms.
H410	Very toxic to aquatic life with long lasting effects.

LEGEND:
- ADR: European agreement for the transport of dangerous goods by road
- CAS NUMBER: Number of the Chemical Abstract Service
- EC50: Concentration that gives effect to 50% of the population subject to testing
- CE NUMBER: Identification number in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived no effect level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System for Classification and Labeling of Chemicals
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Concentration of immobilization of 50% of the population subject to testing
- IMDG: International maritime code for the transport of dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in Annex VI of the CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulating and toxic according to REACH
- PEC: Predicted environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predicted No Effect Concentration
- REACH: EC Regulation 1907/2006
- RID: Regulations for the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration which must not be exceeded during any moment of occupational exposure.
- TWA STEL: Short term exposure limit
- TWA: Weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulating according to REACH
- WGK: Water hazard class (Germany).

GENERAL BIBLIOGRAPHY:
1. Regulation (EU) 1907/2006 of the European Parliament (REACH)
2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
3. Regulation (EU) 790/2009 of the European Parliament (I Atp. CLP)
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- NI Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA Agency website
- Database of SDS models of chemical substances - Ministry of Health and National Institute of Health

Note for the user:
The information contained in this sheet is based on the knowledge available to us at the date of the latest version. The user must ensure the suitability and completeness of the information in relation to the specific use of the product.
This document should not be construed as a guarantee of any specific property of the product.
Since the use of the product does not fall under our direct control, the user is obliged to observe the laws and regulations in force on hygiene and safety under his own responsibility. No responsibility is assumed for improper use.
Provide adequate training to personnel assigned to the use of chemical products.

SECTION 16. Other information... / >>

Changes from the previous revision Changes have been made to the following sections: 02/08/12/13.