



Safety Data Sheet dated 24/01/2017, version 1

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Mixture identification: Tenet WP

Trade name:

Trade code: -

1.2 Relevant identified uses of the substance/mixture and uses advised against

Biological mycofungicide

No other use allowed

1.3 Details of the supplier of the safety data sheet

Company:

ISAGRO USA- 430 Davis Dr., Suite 240, Morrisville NC 27560

Subsidiary of: Isagro S.p.A. – Via Caldera, 21 – 20153 Milano, Italy

Emergency telephone numbers:

Isagro USA (919) 321-5200 / CHEMTREC (800) 424-9300

1.4 Emergency telephone number

QSE Department (office hours: 9.00-18.00) - Phone n.. ++39 02 40901276

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2 Label elements

S Phrases:

S13 Keep away from food, drink and animal feedingstuffs.

S2 Keep out of reach of children.

S20/21 When using do not eat, drink or smoke.

S24/25 Avoid contact with skin and eyes.

Contents:

Trichoderma asperellum strain

Trichoderma gamsii strain

Additional advice:

Do not contaminate water with the product or its container

2.3 Other hazards

VPVB substances: None

PBT substances: None

Other Hazards:

No other hazards

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

N.A.

3.2 Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

1% - 3% Trichoderma asperellum ICC012

Xi; R43



3.4.2/1 Skin Sens. 1 H317

1% - 3% Trichoderma gamsii ICC080

Xi; R43



3.4.2/1 Skin Sens. 1 H317

4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2 Most important symptoms and effects, both acute and delayed

None

4.3 Indication of any immediate medical attention and special treatment needed

Treatment:

None

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2 Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3 Advice for fire-fighters

Use suitable breathing apparatus. Self-contained breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3 Methods and material for containment and cleaning up

Wash with plenty of water.

6.4 Reference to other sections

See also section 8 and 13

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

- Avoid contact with skin and eyes, inhalation of vapours and mists.
- Don't use empty container before they have been cleaned.
- Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.
- Contaminated clothing should be changed before entering eating areas.
- Do not eat or drink while working.
- See also section 8 for recommended protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

- Store in a cool and dry place ($T < 25\text{ }^{\circ}\text{C}$). Avoid direct sunlight.
- Keep away from food, drink and feed.
- Incompatible materials:
None in particular.
- Instructions as regards storage premises:
Adequately ventilated premises.

7.3 Specific end use(s)

- None in particular

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

N.A.

8.2 Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

Environmental exposure controls:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|--|----------------------------|
| Odour: | Slight, characteristich |
| Odour threshold: | Not relevant |
| pH: | 4.38 (suspension in water) |
| Melting point / freezing point: | Not relevant |
| Initial boiling point and boiling range: | Not relevant |
| Solid/gas flammability: | Not relevant |
| Upper/lower flammability or explosive limits: | Not available |
| Vapour density: | Not relevant |
| Flash point: | Not relevant |
| Evaporation rate: | Not relevant |
| Vapour pressure: | Not relevant |

| | |
|---|---------------|
| Relative density: | Not relevant |
| Solubility in water: | 20 mg/ml |
| Lipid solubility: | Not available |
| Partition coefficient (n-octanol/water): | Not relevant |
| Auto-ignition temperature: | Not relevant |
| Decomposition temperature: | Not relevant |
| Viscosity: | |
| Explosive properties: | Not relevant |
| Oxidizing properties: | Not relevant |
| 9.2 Other information | |
| Miscibility: | Not relevant |
| Fat Solubility: | Not relevant |
| Conductivity: | Not relevant |
| Substance Groups relevant properties: | None |

10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid:

Stable under normal conditions. Avoid direct sunligh.

10.5 Incompatible materials:

None in particular.

10.6 Hazardous decomposition products:

None.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Data referred to the mixture:

Acute toxicity:

LD50 (oral): > 2000 mg/kg (rat)

LD50 (dermal): > 2000 mg/kg (rat)

LC50 (4h) (inhalation):

5.20 mg/l air (rat)

Irritating power:

Not irritant to skin and eyes

Sensitizing power:

Not sensitizing agent

Data referred to *Trichoderma asperellum* ICC012:

Skin corrosion/irritation;

Not available

Serious eye damage/irritation;

Not available

Respiratory or skin sensitisation:

Skin: it's supposed to be a sensitizing agent

Carcinogenic effects:

Not expected to be carcinogenic

Mutagenic effects:

Trichoderma is not known to be mutagenic

Teratogenic effect:

Not expected to be teratogenic

Reproductive toxicity:

Not expected to be toxic

Germ cell mutagenicity:

Not available

STOT-single exposure:

Not available

STOT-repeated exposure:

Not available

Aspiration hazard:

Not available

Data referred to *Trichoderma gamsii* ICC080:

Skin corrosion/irritation;

Not available

Serious eye damage/irritation;

Not available

Respiratory or skin sensitisation:

Skin: it's supposed to be a sensitizing agent

Carcinogenic effects:

Not expected to be carcinogenic

Mutagenic effects:

Trichoderma is not known to be mutagenic

Teratogenic effect:

Not expected to be teratogenic

Reproductive toxicity:

Not expected to be toxic

Germ cell mutagenicity:

Not available

STOT-single exposure:

Not available

STOT-repeated exposure:

Not available

Aspiration hazard:

Not available

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Adopt good working practices, so that the product is not released into the environment.

Data referred to the mixture:

Algae-

EC50 (48h): > 100 mg/l

EC100 (48h): > 100

12.2 Persistence and degradability

Persistence:

It's expected to be not persistent, due to trichoderma data known in bibliography

Degradability: not known

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

Mobility is expected low, due to trichoderma data known in bibliography

12.5 Results of PBT and vPvB assessment

VPVB content : None

PBT content : None

12.6 Other adverse effects

None

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. TRANSPORT INFORMATION

14.1 UN number:

None

14.2 UN proper shipping name:

Not applicable

14.3 Transport hazard class(es):

Not classified

14.4 Packing Group:

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special Precautions for User

Not applicable

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

Not applicable

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labelling of dangerous preparations). Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n. 1272/2008 (CLP), Regulation (CE) n. 790/2009 (1° ATP CLP), Regulation (EU) n. 453/2010 (Annex I).

Where applicable, refer to the following regulatory provisions :

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
Regulation (EC) nr 648/2004 (detergents).
1999/13/EC (VOC directive)

15.2 Chemical Safety Assessment
Not applicable

16. OTHER INFORMATION

USEPA Registration Number 80289-9
EPA Product label classification: CAUTION

R phrases in section 3:
R43 May cause sensitization by skin contact.

H statements in section 3:
H317 May cause an allergic skin reaction.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU. This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
CCNL - Appendix 1
Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CLP: Classification, Labeling, Packaging.
DNEL: Derived No Effect Level.
EINECS: European Inventory of Existing Commercial Chemical Substances.
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LTE: Long-term exposure.
PNEC: Predicted No Effect Concentration.
RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.
STE: Short-term exposure.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.
(ACGIH Standard).
WGK: German Water Hazard Class.