

MATERIAL SAFETY DATA SHEET

TECRA[®] LISTERIA SELECTIVE SUPPLEMENT

COMPANY DETAILS

Company: TECRA INTERNATIONAL Pty Ltd
ABN 71 007 414 360
Address: 13 Rodborough Road
FRENCHS FOREST NSW 2086 AUSTRALIA
Telephone Number: +61 2 8977 3000 Business hours (8.30am – 6.00pm EST)
+61 2 0416 181 101 After hours
Facsimile: +61 2 9453 3422
Website: www.tecra.net
E-mail: enquiries@tecra.net

1. CHEMICAL IDENTIFICATION

Product Name: TECRA Listeria Selective Supplement
Product Code: TLE SUP 010
Use: This supplement is to be rehydrated with sterile distilled water then used as the selective component within a microbiological growth medium.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	CAS Number:	EC No	Proportion:
Acriflavin hydrochloride	8063-24-9	unknown	10 - 30%
Nalidixic acid	389-08-2	206-864-7	>60%

3. HAZARDS IDENTIFICATION

Label Precautionary Statements

HAZARDOUS

May cause cancer

May cause heritable genetic damage.

Irritating to eyes, respiratory system and skin.

Target Organs:

Blood, central nervous system and eyes.

4. FIRST-AID MEASURES

Swallowed:	Provided person is conscious, wash out mouth with water, call a doctor.
Eye:	Flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelid with clean fingers. Call a doctor.
Skin:	Flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a doctor.
Inhaled:	Remove to fresh air. If breathing becomes difficult, call a doctor.
First Aid Facilities:	Safety shower and eye bath

5. FIRE FIGHTING MEASURES

Extinguishing Media

Water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special Firefighting Procedures

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual Fire and Explosion Hazards

Emits toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Evacuate the area. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill area after material pick up is complete.

7. HANDLING AND STORAGE

Keep tightly closed. Store in a cool dry place. Protect from light, heat and moisture.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling.

Engineering Controls: Use only in a chemical fume hood

Personal Protection: Wear suitable protective clothing, gloves and eye/face protection. Do not breathe dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	A yellow anhydrous powder.
Boiling Point/Melting Point:	228 – 260 degrees Celsius
Vapour Pressure:	no information
Specific Gravity:	no information
Flashpoint:	no information
Flammability Limits:	no information
Solubility:	Soluble in water.

10. STABILITY AND REACTIVITY

Stability:	Stable
Conditions to avoid:	Protect from light, moisture and heat.
Hazardous combustion or decomposition products:	Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides. Hydrogen chloride gas.
Hazardous polymerisation:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Health Effects

Acute: Exposure to acriflavine hydrochloride may cause hyperglycaemia, exacerbation of epilepsy and photosensitive reactions of the skin and eyes. Possible skin reactions may include hyperpigmentation, swelling, redness and blistering. Possible eye changes may include keratoconjunctivitis or corneal and lens opacities.

Exposure to acriflavine hydrochloride can cause nausea, dizziness and headache, stomach pains, vomiting, diarrhoea, drowsiness, confusion and weakness.

Swallowed: Nalidixic acid is harmful if swallowed.

Eye: Nalidixic acid and/or acriflavine hydrochloride can cause eye irritation.

Skin: Nalidixic acid and/or acriflavine hydrochloride can cause skin irritation. Nalidixic acid is harmful if absorbed through the skin.

Inhaled: Nalidixic acid is irritating to the mucous membranes and upper respiratory tract. Nalidixic acid is harmful if inhaled.

Chronic: Nalidixic acid is a carcinogen that may alter genetic material. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

Acriflavine hydrochloride is, or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP or EPA classification. Acriflavine hydrochloride may cause

congenital malformation in the fetus. The target organs are the blood, the central nervous system and the eyes.

12. ECOLOGICAL INFORMATION

Data not yet available.

13. DISPOSAL CONSIDERATIONS

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all Federal, State and Local environmental regulations.

14. TRANSPORT INFORMATION

Each fibreboard outer package contains 10 glass vials held within a plastic inner receptacle. Each vial contains less than 0.5g of Class 6.1 solid material. This may provide exemption from dangerous good regulations. Carriers must check with local regulations to ensure that they comply.

15. REGULATORY INFORMATION

European Information:

Nalidixic Acid

HARMFUL

Possible risk of harm to the unborn child	R63
May cause sensitisation by inhalation and skin contact	R42/43
Possible risk of irreversible effects	R40
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice	S26
Wear suitable protective clothing	S36

Acriflavine hydrochloride

CAUTION: Acriflavine hydrochloride is not yet fully tested.

TOXIC

May cause cancer	R45
May cause heritable genetic damage	R46
Irritating to eyes, respiratory system and skin	R36/37/38
In case of accident, or if you feel unwell, seek medical advice immediately, (show the label where possible)	S45
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice	S26
Wear suitable protective clothing, gloves and eye face protection	S36/37/39
Do not breathe dust	S22

Reviews, Standards and Regulations

Nalidixic Acid

OEL = MAK

NOES 1983: HZD X3708; NIS 1; TNF 348; NOS 7; TNE 6188; TFE 4169

EPA GENETOX PROGRAM 1988, POSITIVE: B SUBTILIS REC ASSAY; E COLI POLA WITHOUT S9

EPA GENETOX PROGRAM 1988, POSITIVE: D MELANOGASTER SEX-LINKED LETHAL

NTP CARCINOGENESIS STUDIES (FEED); CLEAR EVIDENCE: RAT NTPTR* NTP-TR-368, 1989

NTP CARCINOGENESIS STUDIES (FEED); EQUIVOCAL EVIDENCE: MOUSE NTPTR* NTP-TR-368, 1989

Acriflavine hydrochloride

OEL = MAK

IARC CANCER REVIEW: ANIMAL INADEQUATE EVIDENCE IMEMDT 13, 31, 1977

IARC CANCER REVIEW: HUMAN NO ADEQUATE DATA IMEMDT 13, 31, 1977

IARC CANCER REVIEW: GROUP 3 IMSUDL 7, 56, 1987

NOES 1983: HZD X1531; NIS 1; TNF 10; NOS 1; TNE 40; TFE 10

EPA GENETOX PROGRAM 1988, POSITIVE: ASPERGILLUS FORWARD MUTATION

EPA GENETOX PROGRAM 1988, POSITIVE: IN VITRO MAMALIAN NONHUMAN MICRONUCLEUS

EPA GENETOX PROGRAM 1988, POSITIVE: SPERM MORPHOLOGY-MOUSE; S CEREVISIAE-HOMOZYGOSIS

EPA GENETOX PROGRAM 1988, NEGATIVE: IN VIVO CYTOGENETICS-MAMALIAN OOCYTE; HOST-MEDIATED ASSAY

EPA GENETOX PROGRAM 1988, INCONCLUSIVE: MAMMALIAN MICRONUCLEUS; S CEREVISIAE GENE CONVERSION

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. TECRA® International shall not be held liable for any damage resulting from handling or from contact with the above product. See TECRA® International Standard Terms and Conditions of Sale for additional information.

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CONTACT POINT

Product Manager, Technical: Telephone: +61 2 8977 3027
Facsimile: +61 2 9453 3422
E mail: enquiries@tecra.net