Material Safety Data Sheet (MSDS)

Proclin

I. Company Identification:

Manufacturer Supplier: GeneTex Inc
2456 Alton Pkwy,
Irvine, CA92606, USA
(1.877.436.3839) Toll-free TEL
949.309.2888 Fax
Or
GeneTex International Corp.
6F.-2, No.89, Dongmei Rd., East Dist.
Hsinchu City 30070, Taiwan (R.O.C.)
886.3.6208988 TEL
886.3.6208989 Fax
www.genetex.com

II. Hazard Identification:

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Skin corrosion (Category 1B), H314
Skin sensitisation (Category 1), H317
Acute aquatic toxicity (Category 1), H400
Chronic aquatic toxicity (Category 1), H410

Precautionary statement(s)
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER or doctor/ physician.
P501 Dispose of contents/ container to an approved waste disposal plant.

III. Composition/Information on Ingredients:

Mixtures
Hazardous ingredients according to Regulation (EC) No 1272/2008
Hazardous ingredients according to Directive 1999/45/EC

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified alkyl carboxylate</td>
<td>Aquatic Chronic 4; H413</td>
<td>&lt; 10 %</td>
</tr>
<tr>
<td>Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one (3:1)</td>
<td>Acute Tox. 3; Skin Corr. 1B; Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 1; H301 + H311 + H331, H314, H317, H410</td>
<td>3-5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Index-No.</th>
<th>Description of first aid measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>55965-84-9</td>
<td>613-167-00-5</td>
<td>General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.</td>
</tr>
<tr>
<td>T, N, R23/24/25</td>
<td>R34 - R43 - R50/53</td>
<td>Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</td>
</tr>
<tr>
<td>T, N, R23/24/25</td>
<td>R34 - R43 - R50/53</td>
<td>Special hazards arising from the substance or mixture</td>
</tr>
<tr>
<td>T, N, R23/24/25</td>
<td>R34 - R43 - R50/53</td>
<td>Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas</td>
</tr>
<tr>
<td>T, N, R23/24/25</td>
<td>R34 - R43 - R50/53</td>
<td>Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas</td>
</tr>
<tr>
<td>T, N, R23/24/25</td>
<td>R34 - R43 - R50/53</td>
<td>Advice for firefighters</td>
</tr>
<tr>
<td>T, N, R23/24/25</td>
<td>R34 - R43 - R50/53</td>
<td>Wear self contained breathing apparatus for fire fighting if necessary.</td>
</tr>
</tbody>
</table>

**IV. First Aid Measures:**

**Description of first aid measures**

*General advice:* Consult a physician. Show this safety data sheet to the doctor in attendance.

*If inhaled:*

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

*In case of skin contact:*

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

*In case of eye contact:*

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

*If swallowed:*

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section II) and/or in section XI

**Indication of any immediate medical attention and special treatment needed no data available**

**V. Fire Fighting Measures:**

**Description of first aid**

Extinguishing media

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas

**Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

No data available

**VI. Accidental Release Measures:**

**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid breathing vapors, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section VIII.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste.
Keep in suitable, closed containers for disposal.

Reference to other sections
For disposal see section XIII

VII. Handling And Storage:

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and
well-ventilated place. Containers which are opened must be carefully
resealed and kept upright to prevent leakage.

Specific end use(s)
Apart from the uses mentioned in section I no other specific uses are
stipulated

VIII. Exposure Controls/Personal:

Control parameters
Components with workplace control parameters
Exposure controls
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice.
Wash hands before breaks and at the end of workday.

Personal protective equipment
Eye/face protection
Tightly fitting safety goggles. Faceshield (8-inch minimum). Use
equipment for eye protection tested and approved under appropriate
government standards such as NIOSH (US) or EN166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper
glove removal technique (without touching glove's outer surface) to avoid
skin contact with this product. Dispose of contaminated gloves after use
in accordance with applicable laws and good laboratory practices.
Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU

Body Protection
Complete suit protecting against chemicals. The type of protective
equipment must be selected according to the concentration and amount
of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate
use a full-face respirator with multi-purpose combination (US) or type
ABEK (EN 14387) respirator cartridges as a backup to engineering
controls. If the respirator is the sole means of protection, use a full-face
supplied air respirator. Use respirators and components tested and
approved under appropriate government standards such as NIOSH (US)
or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product
enter drains. Discharge into the environment must be avoided.

IX. Physical And Chemical Properties:

Information on basic physical and chemical properties
a) Appearance Form: liquid
b) Odour: no data available
c) Odour Threshold: no data available
d) pH: 4.1 at 100 g/l
e) Melting point/freezing point: -40 °C
f) Initial boiling point and boiling range : 189 °C
g) Flash point: 118 °C- closed cup
h) Evaporation rate: no data available
i) Flammability (solid, gas): no data available
j) Upper/lower flammability or explosive limits: no data available
k) Vapour pressure: no data available
l) Vapour density: no data available
m) Relative density: 1.03 g/cm3
n) Water solubility: soluble
o) Partition coefficient n-octanol/water: no data available
p) Auto-ignition temperature: no data available
q) Decomposition temperature: no data available
r) Viscosity: no data available
s) Explosive properties: no data available
t) Oxidizing properties: no data available

Other safety information: no data available
X. Stability and Reactivity:
Reactivity: no data available
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: no data available
Conditions to avoid: no data available
Incompatible materials: Strong oxidizing agents, Reducing agents, Amines, Mercaptans
Hazardous decomposition products:
Other decomposition products - no data available
In the event of fire: see section V

XI. Toxicological Information:
Information on toxicological effects
Acute toxicity: no data available
LD50 Dermal - rabbit - 2.800 mg/kg
Skin corrosion/irritation:
Skin - rabbit
Result: Corrosive
Serious eye damage/eye irritation
Eyes - rabbit
Result: Corrosive to eyes
Respiratory or skin sensitisation
no data available
Germ cell mutagenicity: no data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity: no data available
Specific target organ toxicity - single exposure: no data available
Specific target organ toxicity - repeated exposure: no data available
Aspiration hazard: no data available
Additional Information
RTECS: Not available
burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

XII: Ecological Information:
Toxicity: no data available
Persistence and degradability: no data available
Bioaccumulative potential: no data available
Mobility in soil: no data available
Results of PBT and vPvB assessment:
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Other adverse effects:
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

XIII: Disposal Considerations:
Waste treatment methods
Product: Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging: Dispose of as unused product.

XIV: Transport Information:
UN number:
ADR/RID: 3265  IMDG: 3265  IATA: 3265
UN proper shipping name
ADR/RID: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1))
IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1))
IATA: Corrosive liquid, acidic, organic, n.o.s. (Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H-isothiazol-3-one (3:1))
14.3 Transport hazard class (es):
ADR/RID: 8  IMDG: 8  IATA: 8
Packaging group:
ADR/RID: II  IMDG: II  IATA: II
Environmental hazards:
ADR/RID: yes  IMDG Marine pollutant: yes  IATA: no
Special precautions for user: no data available
XV. Regulatory Information:
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available
Chemical Safety Assessment: For this product a chemical safety assessment was not carried out

XVI. Other Information:
This compound is sold only for research use by personnel familiar with chemicals and who are well trained in good laboratory habits, such as avoiding spills, keeping hands clean at all times and not rubbing eyes with hands while working in the laboratory.
This solution is sold only in microliter quantities for use in life sciences research. No other use is intended, and any other use may involve substantive hazards.
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide for experienced personnel. GeneTex International Corp. shall not be held liable for any damage resulting from the handling of or from contact with the above product. The burden of safe use of this material rests entirely with the user.