1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE        N0241
PRODUCT NAME        NATURAL METHYL ANTHRANILATE
SUPPLIER            Shanghai M & U International Trade Co., Ltd.
                     Rm 1717, No 598 North NuJiang Road
                     200333 Shanghai, China
                     +86-21-32515501 32515502
                     sales@mu-intel.com

FOR EMERGENCIES CALL CHEMTREC:  800-424-9300 (24-HOURS)

2. HAZARD IDENTIFICATION:

Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411
For the full text of the H-Statements mentioned in this Section, see Section 16

GHS Label elements, including precautionary statements

Pictogram
Signal word        Warning

Hazard statement(s)
H315                Causes skin irritation
H319                Causes serious eye irritation
H335                May cause respiratory irritation
H411                Toxic to aquatic life with long lasting effects

Precautionary statement(s)
P261                 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray
P264                 Wash skin thoroughly after handling
P271                 Use only outdoors or in a well-ventilated area
P273                 Avoid release to the environment
P280                 Wear protective gloves/ eye protection/ face protection
P302 + P352          IF ON SKIN: Wash with plenty of soap and water
P304 + P340  IF INHALED: Remove victim to fresh air and keep at rest in a position 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

P312  Call a POISON CENTER or doctor/physician if you feel unwell

P321  Specific treatment (see supplemental first aid instructions on this label)

P332 + P313  If skin irritation occurs: Get medical advice/attention

P337 + P313  If eye irritation persists: Get medical advice/attention

P362  Take off contaminated clothing and wash before reuse

P391  Collect spillage

P403 + P233  Store in a well-ventilated place; Keep container tightly closed

P405  Store locked up

P501  Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC) or not covered by GHS**

None

3. **COMPOSITION AND INFORMATION ON INGREDIENTS:**

<table>
<thead>
<tr>
<th>Synonyms</th>
<th>Methyl 2-aminobenzoate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Methyl anthranilate</td>
</tr>
<tr>
<td><strong>Formula</strong></td>
<td>C8 H9 NO2</td>
</tr>
<tr>
<td><strong>Molecular Weight</strong></td>
<td>151.16 g/mol</td>
</tr>
<tr>
<td><strong>CAS-No</strong></td>
<td>134-20-3</td>
</tr>
<tr>
<td><strong>EC-No</strong></td>
<td>205-132-4</td>
</tr>
</tbody>
</table>

**Hazardous Components**

<table>
<thead>
<tr>
<th>Component</th>
<th>Methyl anthranilate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification</strong></td>
<td>Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; Aquatic Acute 2; Aquatic Chronic 2; H315, H319, H335, H411</td>
</tr>
</tbody>
</table>

For the full text of the H-statements mentioned in this Section, see Section 16

4. **FIRST-AID GUIDE:**

**Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

**If inhaled**

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

**In case of skin contact**
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**
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 labeling (see section 2) and/or in section 11

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

5. **FIRE-FIGHTING GUIDE:**

**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)

**Advice for firefighters**
Wear self contained breathing apparatus for firefighting if necessary.

**Further information**
No data available

6. **ACCIDENTAL RELEASE GUIDE:**

**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 8

**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 13

7. HANDLING AND STORAGE:

Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection. For precautions see section 2

Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Light sensitive

Specific end use(s)
No other specific uses are stipulated

8. EXPOSURE AND PERSONAL PROTECTION:

Control parameters
Components with workplace control parameters
Contains no substances with occupational exposure limit values

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
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(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 hand
Body Protection
Impervious clothing, 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 multipurpose 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.

9. PHYSICAL AND CHEMICAL PROPERTIES:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Form: clear, liquid</td>
</tr>
<tr>
<td>Color</td>
<td>light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>no data available</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>pH</td>
<td>no data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Melting point-range: 24 °C (75 °F)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>256 °C (493 °F) - lit</td>
</tr>
<tr>
<td>Flash point</td>
<td>123 °C (253 °F) - closed cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>no data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>no data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>1 hPa (1 mmHg) at 20 °C (68 °F)</td>
</tr>
<tr>
<td>Vapor density</td>
<td>no data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.168 g/cm3 at 25 °C (77 °F)</td>
</tr>
<tr>
<td>Water solubility</td>
<td>no data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>no data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>no data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>no data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>no data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>no data available</td>
</tr>
</tbody>
</table>

Other safety information
No data available

10. 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**
Acids, Acid chlorides, Acid anhydrides, Chloroformates, Strong oxidizing agents, Strong bases

**Hazardous decomposition products**
Other decomposition products - no data available
In the event of fire: see section 5

**11. TOXICOLOGICAL INFORMATION:**

**Information on toxicological effects**

**Acute toxicity**
LD50 Oral - rat - 2,910 mg/kg
LD50 Dermal - rabbit - > 5,000 mg/kg
No data available

**Skin corrosion/irritation**
Skin - rabbit
Result: Skin irritation - 24 h

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitisation**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
IARC
No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

ACGIH
No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH

**NTP**
No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA**
No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

**Reproductive toxicity**
No data available
Reproductive toxicity - mouse - Oral
Effects on Fertility: Female fertility index (e.g., # females pregnant per # sperm positive females; # females pregnant per # females mated)
No data available

**Specific target organ toxicity - single exposure**
Inhalation - May cause respiratory irritation

**Specific target organ toxicity - repeated exposure**
No data available

**Aspiration hazard**
No data available

**Additional Information**
RTECS: CB3325000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated
Stomach - Irregularities - Based on Human Evidence

**12. ECOLOGICAL INFORMATION:**

**Toxicity**
Toxicity to fish LC50 - Lepomis macrochirus - 9.12 mg/l - 96 h
mortality NOEC - Oncorhynchus mykiss (rainbow trout) - 5 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates

**Persistence and degradability**
No data available

**Bioaccumulative potential**
No data available
Mobility in soil
No data available
EC50 - Daphnia magna (Water flea) - 18.2 mg/l - 48 h

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.
Toxic to aquatic life
No data available

13. DISPOSAL RECOMMENDATIONS:

Waste treatment methods
Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material

Contaminated packaging
Dispose of as unused product

14. TRANSPORTATION INFORMATION:

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

15. REGULATORY INFORMATION:

REACH No
A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

SARA 311/312 Hazards
Acute Health Hazard, Chronic Health Hazard

Massachusetts Right to Know Components
No components are subject to the Massachusetts Right to Know Act

Pennsylvania Right to Know Components
Methyl anthranilate CAS-No
134-20-3

New Jersey Right to Know Components
Methyl anthranilate CAS-No
134-20-3

California Prop 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm

16. OTHER INFORMATION:

Full text of H-Statements referred to under sections 2 and 3
Aquatic Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity
Eye Irrit. Eye irritation
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation
H401 Toxic to aquatic life
H411 Toxic to aquatic life with long lasting effects

HMIS Rating
Health hazard 2
Chronic Health Hazard *
Flammability 1
Physical Hazard 0

NFPA Rating
Health hazard 2
Fire Hazard 1
Reactivity Hazard 0

Further information
The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the product's improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.