SECTION 1. IDENTIFICATION

Identification of the company: Clariant Corporation
4000 Monroe Road
Charlotte, NC, 28205
Telephone No.: +1 704 331 7000

Information of the substance/preparation:
Product Stewardship, +1-704-331-7710

Emergency tel. number: +1 800-424-9300 CHEMTREC

Trade name: NIPAGIN M SODIUM
Material number: 171092
CAS number: 5026-62-0

Primary product use: Personal Care Preservatives

Chemical family: sodium methyl-4-hydroxybenzoate

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200
Skin irritation : Category 2
Serious eye damage : Category 1
Combustible dust

GHS label elements
Hazard pictograms :

Signal word : Danger
Hazard statements : H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements :
Prevention:
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
P280 Wear protective gloves.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P243 Take precautionary measures against static discharge.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

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

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance / Mixture</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance name</td>
<td>sodium methyl-4-hydroxybenzoate</td>
</tr>
<tr>
<td>CAS-No.</td>
<td>5026-62-0</td>
</tr>
</tbody>
</table>

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium 4-(methoxycarbonyl)phenolate</td>
<td>5026-62-0</td>
<td>90 - 100</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4. FIRST AID MEASURES

General advice: Get medical advice/attention if you feel unwell. Remove/Take off immediately all contaminated clothing.

If inhaled: Move the victim to fresh air. Give oxygen or artificial respiration if needed. Get immediate medical advice/attention. Never give anything by mouth to an unconscious person.

In case of skin contact: Wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention.

In case of eye contact: Immediately flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within 1 minute is essential to achieve maximum effectiveness. Seek medical attention immediately.

If swallowed: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
Most important symptoms and effects, both acute and delayed:
The possible symptoms known are those derived from the labelling (see section 2).
No additional symptoms are known.

Notes to physician:
None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media:
Water spray jet
Alcohol-resistant foam

Unsuitable extinguishing media:
Dry powder
Carbon dioxide (CO2)
High volume water jet

Specific hazards during firefighting:
In case of fires, hazardous combustion gases are formed:
Carbon monoxide (CO)
Carbon dioxide (CO2)

Emits toxic fumes under fire conditions. This product presents no unusual fire or explosion hazards while sealed in a shipping container. During usage, if a dust cloud is generated, organic powders have the potential to be explosive with static spark or flame initiation.

Further information:
Exercise caution when fighting any chemical fire. Use NIOSH approved self-contained breathing apparatus and full protective clothing.

Special protective equipment for firefighters:
Self-contained breathing apparatus
Full protective suit

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Wear suitable protective clothing.
Ensure adequate ventilation.
Avoid dust formation.
Avoid contact with skin and eyes.
Wear proper protective equipment. Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Do not discharge into storm drains or the aquatic environment.

Environmental precautions:
The product should not be allowed to enter drains, water courses or the soil.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
- Take up mechanically
- Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion:
- Keep away sources of ignition.
- Take measures to prevent the build up of electrostatic charge.
- Keep away from heat.
- Dust can form an explosive mixture in air.

Advice on safe handling:
- Store in a dry place.
- Keep only in the original container.
- Do not expose to temperatures exceeding 50 °C/ 122 °F.

Conditions for safe storage:
- Keep container tightly closed in a cool, well-ventilated place.
- Protect from moisture.

Technical measures/Precautions:
- Store in original container.
- Keep container closed.

Materials to avoid:
- not required

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Engineering measures:
- Use adequate exhaust ventilation and/or dust collection to keep dust levels below exposure limits.

Personal protective equipment:

Respiratory protection:
- Use NIOSH/MSHA approved respirators following manufacturer's recommendations where dust or fume may be generated.

Hand protection:
- Remarks: Butyl Rubber, PVC or Neoprene

Eye protection:
- In dusty conditions: dust tight goggles or full-face respirator is recommended.

Skin and body protection:
- Protective clothing to minimize skin contact should be worn. Chemically resistant safety shoes. Wash contaminated clothing with soap and water and dry before reuse. Safety showers and eyewash stations should be provided in all
areas where this material is handled.

Protective measures : Avoid contact with skin and eyes. Do not breathe dust.

Hygiene measures : Use only in well-ventilated areas. Take off immediately all contaminated clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : crystalline

Colour : white

Odour : almost odourless

Odour Threshold : not tested.

pH : approx. 10 (20 °C) Concentration: 1 g/l

Melting point : 313 °C Decomposition: yes Method: OECD Test Guideline 102

Boiling point : Decomposition: yes Method: OECD Test Guideline 103 Decomposes below the boiling point.

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : not highly flammable Method: EC/440/2008, A.10

Self-ignition : Method: EC A.16 The substance or mixture is not classified as self heating.

Burning number : 2 Short flaring up without spreading

Upper explosion limit / upper flammability limit : Not applicable

Lower explosion limit / Lower flammability limit : Not applicable

Vapour pressure : not tested.

Relative vapour density : Not applicable

Density : not tested.
Bulk density : not tested.

Solubility(ies):
Water solubility : 418 g/l (20 °C)
Method: OECD Test Guideline 105

Solubility in other solvents : not tested.
Solvent: fat

Partition coefficient: n-octanol/water : log Pow: -0.63
Method: OECD Test Guideline 107

Auto-ignition temperature : Not applicable

Decomposition temperature : 274 °C
Heating rate: 3 K/min
No decomposition if used as directed.

Viscosity:
Viscosity, dynamic : Not applicable

Viscosity, kinematic : not tested.

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Dust deflagration index (Kst) : 171 m.b./s

Dust explosion class : ST1  Capable of dust explosion

Minimum ignition energy : 200 - 300 mJ (490 °C, 7.4 hPa)

Particle size :
< 1 µm
Method: ISO 13320-1

< 4 µm
Method: ISO 13320-1

< 10 µm
Method: ISO 13320-1

< 100 µm
Method: ISO 13320-1

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions: The product is not a dust explosion risk as supplied; however, the build-up of fine dust can lead to a risk of dust explosions.

Conditions to avoid: None known.

Incompatible materials: not known

Hazardous decomposition products: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Skin contact
Ingestion
Inhalation

Acute toxicity

Components:
Sodium 4-(methoxycarbonyl)phenolate:

Acute oral toxicity: LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity: Remarks: no data available

Acute dermal toxicity: Remarks: no data available

Skin corrosion/irritation

Product:
Species: EPISKIN Human Skin Model Test
Method: OECD Test Guideline 439
Result: irritating

Species: EPISKIN Human Skin Model Test
Method: OECD Test Guideline 431
Result: not corrosive

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Species: reconstructed human epidermis (RhE)
Method: Other
Result: Irritating to skin.

Serious eye damage/eye irritation

Product:
Result: Risk of serious damage to eyes.
Components:
Sodium 4-(methoxycarbonyl)phenolate:
Species: Rabbit
Result: Risk of serious damage to eyes.
Method: 16CFR1500.42

Respiratory or skin sensitisation

Product:
Result: Does not cause skin sensitisation.

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Test Type: Maurer optimisation test
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Not a skin sensitizer.
Remarks: By analogy with a product of similar composition

Assessment: Causes skin irritation., Causes serious eye damage.

Germ cell mutagenicity

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Genotoxicity in vitro:
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: Chinese hamster fibroblasts
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative

Genotoxicity in vivo:
Species: Rat (male)
Strain: Sprague-Dawley
Application Route: oral (gavage)
Dose: 5, 50, 500, 5000 mg/kg bw/d
Method: OECD Test Guideline 478
Result: negative
Remarks: By analogy with a product of similar composition

Germ cell mutagenicity:
Assessment: In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects
Carcinogenicity

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Remarks: Based on available data, the classification criteria are not met.

Carcinogenicity -
Assessment: Not classifiable as a human carcinogen.

IARC: Not listed
OSHA: Not listed
NTP: Not listed

Reproductive toxicity

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Effects on foetal development:
Test Type: Pre-natal
Species: Rabbit
Application Route: Oral
Dose: 3, 14, 65, 300 mg/kg bw/d
Developmental Toxicity: NOEL: 300 mg/kg body weight
Method: OECD Test Guideline 414
Remarks: By analogy with a product of similar composition

Reproductive toxicity -
Assessment: No toxicity to reproduction

STOT - single exposure

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Species: Rat, male and female
NOAEL: \geq 250\,\text{mg/kg bw/day}
Application Route: oral (gavage)
Exposure time: 28 d
Number of exposures: daily
Dose: 50, 250, 1000 mg/kg/day
Method: OECD Test Guideline 407
Remarks: By analogy with a product of similar composition

Repeated dose toxicity - Assessment:
Causes skin irritation., Causes serious eye damage.

Aspiration toxicity

Components:
Sodium 4-(methoxycarbonyl)phenolate:
no data available

Experience with human exposure

Product:
General Information: The possible symptoms known are those derived from the labelling (see section 2).

Further information

Product:
Remarks: Inhalation of dust causes slight irritation of the respiratory tract.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:
Toxicity to microorganisms: Remarks: not tested.

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Toxicity to fish: LC50 (Oryzias latipes (Orange-red killifish)): 59.5 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD Test Guideline 203
Remarks: By analogy with a product of similar composition

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 11.2 mg/l
Exposure time: 48 h
Test Type: static test
Method: ISO 6341
Remarks: By analogy with a product of similar composition

Toxicity to algae: EC50 (Pseudokirchneriella subcapitata (algae)): 91 mg/l
End point: Growth rate
Exposure time: 72 h  
Test Type: static test  
Method: ISO 8692  
Remarks: By analogy with a product of similar composition

Toxicity to fish (Chronic toxicity): Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC (Daphnia magna (Water flea)): 0.2 mg/l  
End point: Reproduction rate  
Exposure time: 21 d  
Test Type: semi-static test  
Method: OECD Test Guideline 211  
Remarks: By analogy with a product of similar composition

Ecotoxicology Assessment
Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

Persistence and degradability

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Biodegradability: Inoculum: activated sludge, domestic, non-adapted  
Carbon dioxide (CO2)  
Result: Readily biodegradable.  
Biodegradation: 89%  
Exposure time: 28 d  
Method: OECD Test Guideline 301B  
Remarks: By analogy with a product of similar composition

Bioaccumulative potential
Components:
Sodium 4-(methoxycarbonyl)phenolate:
Bioaccumulation: Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Partition coefficient: n-octanol/water: log Pow: -0.63 (20 °C)  
pH: 10  
Method: OECD Test Guideline 107

Mobility in soil
Product:
Distribution among environmental compartments: Remarks: Based upon the calculated log Koc, adsorption to the soil phase is not expected.

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Distribution among environmental compartments: Koc: 280
Method: estimated
Remarks: By analogy with a product of similar composition

Other adverse effects

Product:
Environmental fate and pathways: Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.

Additional ecological information: The product should not be allowed to enter drains, water courses or the soil.

Components:
Sodium 4-(methoxycarbonyl)phenolate:
Results of PBT and vPvB assessment: The substance is not identified as a PBT or as a vPvB substance.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
RCRA - Resource Conservation and Recovery Authorization Act: This product, if discarded as sold, is not a Federal RCRA hazardous waste.
Waste Code: NONE
Waste from residues: Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.
Contaminated packaging: Regulations concerning reuse or disposal of used packaging materials must be observed.

SECTION 14. TRANSPORT INFORMATION

DOT not restricted
IATA not restricted
IMDG not restricted

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act
CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.
SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity
This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards
Skin corrosion or irritation
Serious eye damage or eye irritation
Combustible dust

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.

Clean Water Act
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

The components of this product are reported in the following inventories:
TSCA
This product is not listed on the Toxic Substances Control Act (TSCA) Inventory. It can not be used for any commercial purposes except as a bonafide cosmetic or cosmetic adjuvant, additive, or ingredient; or for use in research and development under the supervision of a technically qualified individual to understand its potential hazards.

SECTION 16. OTHER INFORMATION

Further information
NFPA:

Full text of other abbreviations
AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS -
Observe national and local legal requirements
This product is not listed on the Toxic Substances Control Act (TSCA) Inventory. It can not be used for any commercial purposes except as a bonafide cosmetic or cosmetic adjuvant, additive, or ingredient; or for use in research and development under the supervision of a technically qualified individual to understand its potential hazards.
Observe all necessary precautions for handling powders as fine powder. May present dust explosion hazard.

Revision Date : 04/18/2018
with applicable law. You should obtain and review the applicable Material Safety Data Sheet information before handling any of these products. For additional information, please contact Clariant.

US / EN