



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Formic Pro**
Item Code: Formic Pro
Product Use: Acaricide, Hive cleanser
Restriction of Use: Refer to Section 15

New Zealand Supplier: New Zealand Beeswax
44 Gladstone Street South RD22
Geraldine, NZ 7992
Telephone: +64 3-693 9189

Emergency Telephone: 0800 764 766 (National Poison Centre)

Manufacturer: NOD Apiary Products Ltd.
Address: 374 Sidney Street,
Trenton, Ontario Canada K8V 2V2
Telephone: +1 613 398 8422

Date of SDS Preparation: 16 October 2023

Section 2. Hazards Identification

This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

EPA Approval No: HSR100672

Pictograms



Toxic



Corrosive

Signal Word: DANGER

| HSNO Classification | Hazard Code | Hazard Statement | GHS Category |
|---------------------|-------------|--|--------------|
| 6.1D (oral) | H302 | Harmful if swallowed. | Category 4 |
| 6.1D (inhalation) | H332 | Harmful if inhaled. | Category 4 |
| 8.1A | H290 | May be corrosive to metals. | Category 1 |
| 8.2B | H314 | Causes severe skin burns and eye damage. | Category 1B |
| 8.3A | H318 | Causes serious eye damage. | Category 1 |
| 9.1D | H401 | Toxic to aquatic life. | Category 4 |
| 9.3C | H433 | Harmful to terrestrial vertebrates. | - |

Product Name: Formic Pro
Date of SDS: 16 October 2023

Issued by: NOD Apiary Products Ltd.
Tel: (001) 613-398-8422 www.nodglobal.com

| Prevention Code | Prevention Statement |
|------------------------|---|
| P102 | Keep out of reach of children. |
| P103 | Read label before use. |
| P234 | Keep only in original container. |
| P260 | Do not breathe fumes or vapours. |
| P264 | Wash hands thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective clothing. |

| Response Code | Response Statement |
|----------------------|--|
| P101 | If medical advice is needed, have product container or label at hand. |
| P310 | Immediately call a POISON CENTER or doctor/physician. |
| P363 | Wash contaminated clothing before reuse. |
| P390 | Absorb spillage to prevent material damage. |
| P301 + P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| P301 + P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. |
| P303 + P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304 + P340 | IF INHALED: Remove 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. |

| Storage Code | Storage Statement |
|---------------------|--|
| P405 | Store locked up. |
| P406 | Store in corrosive resistant/... container with a resistant inner liner. |

| Disposal Code | Disposal Statement |
|----------------------|--|
| P501 | Dispose of according to Local Regulations or Authorities |

Section 3. Composition / Information on Ingredients

| Ingredients | Wt% | CAS NUMBER. |
|--------------------|------------|--------------------|
| Formic Acid | 42.25 | 64-18-6 |
| Inert ingredients | 57.75 | Proprietary |

Section 4. First Aid Measures

Routes of Exposure:

- If in Eyes Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.
- If on Skin Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. Seek immediate medical attention.
- If Swallowed Rinse mouth. DO NOT induce vomiting. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Seek medical attention if you feel unwell.

If Inhaled Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult or if you feel unwell.

Section 5. Fire Fighting Measures

| | |
|---|---|
| Hazard Type | Non-Flammable |
| Hazards from combustion products | If heated to decomposition, the following substances may be formed: carbon dioxide, carbon monoxide and smoke. |
| Suitable Extinguishing media | Dry Chemical, carbon dioxide, water spray, or alcohol resistant foam may be used on fires involving this product. |
| Precautions for firefighters and special protective clothing | Wear self-contained breathing apparatus, pressure demand, MSHA/NIOSH approved (or equivalent) and full protective gear when fighting fires containing this product. Cool containers with water to prevent rupture. |
| HAZCHEM CODE | 1X |

Section 6. Accidental Release Measures

Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel.

Pick up any spilled product and place in a sealable High-Density Polyethylene (HDPE) container for disposal.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Keep only in original container.
- Do not breathe fumes or vapours.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.
- Wear protective clothing.
- Use caution when opening the container, especially in warm weather, i.e.: open outdoors and stay upwind.

Precautions for Storage:

Keep locked up. Store indoors, in original container, out of direct sunlight, in a cool, dry and well-ventilated area, away from sulphuric acid, oxidizing agents, and sources of ignition. Avoid heat, sparks, and open flames. Keep containers tightly closed.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

| Substance | TWA | | STEL | |
|-----------------------|-----|-------------------|------|-------------------|
| | ppm | mg/m ³ | ppm | mg/m ³ |
| Formic acid [64-18-6] | 5 | 9.4 | 10 | 19 |

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase

the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

Engineering Controls

Keep away from ignition sources. Keep water handy for eye wash and rinsing if skin contact occurs. Work outdoors upwind of the product or provide adequate ventilation. Product is highly corrosive to most metals, avoid contact with metals.

Personal Protection

| | |
|-----------------------|--|
| Eyes | Wear goggles with side shields. Avoid wearing contact lenses. |
| Hands and Skin | Wear coveralls over a long-sleeved shirt, long pants, socks and shoes, acid resistant gloves (PVC, neoprene or nitrile). |
| Respiratory | If working indoors wear a respirator with an organic-vapor removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE pre-filter. |
| General | Avoid contact with eyes, skin and clothing. Do not wear contact lenses. Avoid breathing vapours. Do not swallow. Wash thoroughly after handling and before eating, drinking or smoking. Avoid contamination of food, beverages, or smoking materials. Remove contaminated clothing promptly and clean thoroughly before reuse. |

Section 9 Physical and Chemical Properties

| | |
|--|--|
| Appearance | Brown to dark brown solid |
| Odour | Vapour has a pungent, penetrating odor. |
| Odour Threshold | Not applicable |
| pH | 2 |
| Boiling Point | Not applicable |
| Melting Point | Not applicable |
| Freezing Point | -17°C |
| Flash Point | 138°C |
| Flammability | Not applicable |
| Upper and Lower Exposure Limits | Not applicable |
| Vapour Pressure | > 44.80 mbarat 20°C (formic acid) |
| Vapour Density | Heavier than air. |
| Relative Density | Not applicable |
| Solubilities | Formic Acid miscible in water, other components non soluble. |
| Partition Coefficient: | Not applicable |
| Auto-ignition Temperature | 349°C |
| Decomposition Temperature | Not applicable |
| Kinematic Viscosity | Not applicable |
| Particle Characteristics | Not applicable |

Section 10. Stability and Reactivity

| | |
|---|---|
| Stability of Substance | This product is stable under normal conditions. |
| Conditions to Avoid | Heat, flame, other sources of ignition |
| Incompatible Materials | Reacts with amines, alkalis, oxidizing agents and sulfuric acid. |
| Hazardous Decomposition Products | Not anticipated under normal or recommended handling and storage conditions Carbon dioxide and carbon monoxide may form when heated to decomposition. |

Section 11 Toxicological Information

Acute toxicity: Formic Acid
Oral Rat- LD₅₀: 730 mg/kg
Inhalation Rat LC₅₀: 15 g/m³/15 min

Acute Effects:

| | |
|-------------------|--|
| Swallowed | Harmful if swallowed. |
| Dermal | Not applicable. |
| Inhalation | Harmful if inhaled. |
| Eye | Causes serious eye damage. |
| Skin | Causes severe skin burns and eye damage. |

Chronic Effects:

| | |
|-------------------------------|-----------------|
| Carcinogenicity | Not applicable. |
| Reproductive Toxicity | Not applicable. |
| Germ Cell Mutagenicity | Not applicable. |
| Aspiration | Not applicable. |
| STOT/SE | Not applicable. |
| STOT/RE | Not applicable. |

Section 12. Ecotoxicological Information

HSNO Classes: 9.1D = Toxic to aquatic life.
9.3C = Harmful to terrestrial vertebrates.

| | |
|--------------------------------------|-----------------------------------|
| Persistence and degradability | All components are biodegradable. |
| Bioaccumulation | Components do not bio-accumulate. |
| Mobility in Soil | No data available |
| Other adverse effects | No data available |

Section 13. Disposal Considerations

Disposal Method: Dispose of according to Local Regulations.

Disposal methods to avoid: Do not allow to enter waterways.

Section 14 Transport Information

This product is classified as a Dangerous Good for Rail and Air transport in NZ; NZS 5433:2012

Product meets the requirement for an exemption for Road transport under UN3244 Special Provision 218

Road and Rail Transport

UN No: Exempt
Class-primary
Packing Group
Proper Shipping Name:

Air Transport

UN No: 3244
Class-primary: 8
Packing Group: II
Proper Shipping Name: SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S

Marine Transport

UN No: 3244
Class-primary 8
Packing Group II
Proper Shipping Name: SOLIDS CONTAINING CORROSIVE LIQUID, N.O.S

Section 15 Regulatory Information

EPA Approval Code: HSR100672

HSNO Classification: 6.1D (oral, inh), 8.1A, 8.2B, 8.3A, 9.1D, 9.3C

HSNO Controls:
Trigger quantities for this substance:

| | Trigger Quantity |
|-----------------------------|--|
| Approved Handler | Not required |
| Location Certificate | Not required |
| Tracking Trigger Quantities | Not required |
| Signage Trigger Quantities | 250L(8.2B) |
| Emergency Response Plan | 1000L(8.2B) |
| Secondary Containment | 1000L (8.2B) |
| Restriction of Use | Shall not be applied onto or into water. |

Section 16 Other Information

Glossary

EC₅₀ Median effective concentration.
EEL Environmental Exposure Limit.
EPA Environmental Protection Authority
HSNO Hazardous Substances and New Organisms.
LC₅₀ Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD₅₀ Lethal dose to kill 50% of test animals/organisms.
LEL Lower explosive level.
OSHA American Occupational Safety and Health Administration.
TEL Tolerable Exposure Limit.
TLV Threshold Limit Value-an exposure limit set by responsible authority.
UEL Upper Explosive Level
WES Workplace Exposure Limit

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.
Disclaimer

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