



## 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: Ecrotek Beekeeping Supplies  
15E Kerwyn Ave, East Tamaki 2013  
Auckland

Telephone: 0800 11 77 66

**Emergency Telephone: 0800 764 766 (National Poison Centre)**

Manufacturer: NOD Apiary Products Ltd.  
Address: P.O. Box 117, 2325 Frankford Road  
Frankford, Ontario Canada K0K 2C0  
Telephone: +1 613 398 8422

Date of SDS Preparation: 31 October 2019

### 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.	-

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Tel: (001) 613-398-8422 www.nodglobal.com

<b>Prevention Code</b>	<b>Prevention Statement</b>
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.

<b>Response Code</b>	<b>Response Statement</b>
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.

<b>Storage Code</b>	<b>Storage Statement</b>
P405	Store locked up.
P406	Store in corrosive resistant/... container with a resistant inner liner.

<b>Disposal Code</b>	<b>Disposal Statement</b>
P501	Dispose of according to Local Regulations or Authorities

### **Section 3. Composition / Information on Ingredients**

<b>Ingredients</b>	<b>Wt%</b>	<b>CAS NUMBER.</b>
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**

<b>Hazard Type</b>	Non-Flammable
<b>Hazards from combustion products</b>	If heated to decomposition, the following substances may be formed: carbon dioxide, carbon monoxide and smoke.
<b>Suitable Extinguishing media</b>	Dry Chemical, carbon dioxide, water spray, or alcohol resistant foam may be used on fires involving this product.
<b>Precautions for firefighters and special protective clothing</b>	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.
<b>HAZCHEM CODE</b>	<b>1X</b>

**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:**

- Store away from sulfuric acid, oxidizing agents, and sources of ignition.
- Store locked up.
- Store in original container (corrosive resistant) in a cool, dry, and well-ventilated area under 25°C.

**Section 8 Exposure Controls / Personal Protection**

**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA		STEL	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
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

<b>Eyes</b>	Wear goggles with side shields. Avoid wearing contact lenses.
<b>Hands and Skin</b>	Wear coveralls over a long-sleeved shirt, long pants, socks and shoes, acid resistant gloves (PVC, neoprene or nitrile).
<b>Respiratory</b>	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.
<b>General</b>	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

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

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Conditions to Avoid</b>	Heat, flame, other sources of ignition
<b>Incompatible Materials</b>	Reacts with amines, alkalis, oxidizing agents and sulfuric acid.
<b>Hazardous Decomposition Products</b>	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

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Oral Rat- LD<sub>50</sub>: 730 mg/kg  
Inhalation Rat LC<sub>50</sub>: 15 g/m<sup>3</sup>/15 min

**Acute Effects:**

<b>Swallowed</b>	Harmful if swallowed.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Harmful if inhaled.
<b>Eye</b>	Causes serious eye damage.
<b>Skin</b>	Causes severe skin burns and eye damage.

**Chronic Effects:**

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable.

**Section 12. Ecotoxicological Information**

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

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

**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:

	<b>Trigger Quantity</b>
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**

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	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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Please contact the New Zealand distributor, if further information is required.

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