

## **SAFETY DATA SHEET**

Section 1. Identification of the material and the supplier

Product: FormicPro

Item Code:

Product Use: Acaricide, hive cleanser

Emergency Telephone: CANUTEC: 613-996-6666 Canada

CHEMTREC: 800-424-9300 United States

Supplier/Manufacturer: NOD Apiary Products Ltd.

Address: P.O. Box 117, 2325 Frankford Road

Frankford, Ontario Canada K0K 2C0

Telephone: 1-866-483-2929 or 1-613-398-8422

Date of SDS Preparation 09 March 2017

### Section 2. Hazards Identification

### **Pictograms**





Toxic

Corrosive

Signal Word: DANGER

Hazard Code	Hazard Statement	<b>GHS Category</b>
H302	Harmful if swallowed.	Category 4
H332	Harmful if inhaled.	Category 4
H290	May be corrosive to metals.	Category 1
H314	Causes severe skin burns and eye damage.	Category 1B
H318	Causes serious eye damage.	Category 1
H401	Toxic to aquatic life.	Category 4
H433	Harmful to terrestrial vertebrates.	-

<b>Prevention Code</b>	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.

Product Name: FormicPro Date of SDS: 09 March 2017 Issued by: NOD Apiary Products Ltd.

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 +	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P330+P331	
P303 +	IF ON SKIN (or hair): Remove/Take off immediately all contaminated
P361+P353	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 +	IF IN EYES: Rinse cautiously with water for several minutes. Remove
P351+P338	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	If heated to decomposition, the following substances may be formed:
combustion	carbon dioxide, carbon monoxide and smoke.

Product Name: FormicPro Issued by: NOD Apiary Products Ltd.

products	
Suitable	Dry Chemical, carbon dioxide, water spray, or alcohol resistant foam
Extinguishing	may be used on fires involving this product.
media	
Precautions for	Wear self-contained breathing apparatus, pressure demand,
firefighters and	MSHA/NIOSH approved (or equivalent) and full protective gear when
special protective	fighting fires containing this product.
clothing	Cool containers with water to prevent rupture.

# 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
Section 8	Exposure Controls / Personal Protection

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

Substance	TWA ppm mg/r	STEL 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 should skin contact occur. 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	Wear coveralls over a long-sleeved shirt, long pants, socks and shoes, acid
Skin	resistant gloves (PVC, neoprene or nitrile).

Product Name: FormicPro Issued by: NOD Apiary Products Ltd.

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 vapors. 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**

A	William to confirm only d
Appearance	White to yellow solid
Odor	Vapor has a pungent, penetrating odor.
Odor Threshold	Not applicable
pH	2
Boiling Point	Not applicable
Melting Point	Not applicable
Freezing Point	-17 <sup>0</sup> C
Flash Point	146°C
Flammability	Not applicable
Upper and Lower	Not applicable
<b>Exposure Limits</b>	
Vapor Pressure	> 44.80 mbarat 20°C (formic acid)
Vapor Density	Heavier than air.
Relative Density	Not applicable
Solubilities	Formic Acid miscible in water, other components non-soluble.
Partition Coefficient:	Not applicable
Auto-ignition	375°C
Temperature	
Decomposition	Not applicable
Temperature	
Kinematic Viscosity	Not applicable
<b>Particle Characteristics</b>	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	Not anticipated under normal or recommended handling and
Products	storage conditions Carbon dioxide and carbon monoxide may
	form when heated to decomposition.

# Section 11 Toxicological Information

**Acute toxicity: Formic Acid** Oral Rat-  $LD_{50}$ : 730 mg/kg Inhalation Rat  $LC_{50}$ : 15 g/m<sup>3</sup>/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.	

Product Name: FormicPro Issued by: NOD Apiary Products Ltd.

#### **Chronic Effects:**

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

### **Section 12. Ecological Information**

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**

Product meets the requirement for an exemption for Road transport under UN3244 "Limited Quantity". Product is classified as Dangerous Goods for Air and Marine transport.

Road and Rail Transport

UN No: Exempt

Class-primary Limited Quantity

**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**

Registered as a Pesticide in the United States under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) - US EPA Registration Number: 75710-3

# 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.

 $LD_{50}$  Lethal dose to kill 50% of test animals/organisms.

Product Name: FormicPro Issued by: NOD Apiary Products Ltd.

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

NOTICE: NOD APIARY PRODUCTS LTD. BELIEVES THAT THE ABOVE INFORMATION IS ACCURATE AND REPRESENTS THE BEST INFORMATION CURRENTLY AVALIABLE TO US. HOWEVER, WE MAKE NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, WITH RESPECT TO SUCH INFORMATION AND WE ASSUME NO LIABILITY RESULTING FROM ITS USE. USERS SHOULD MAKE THEIR OWN INVESTIGATION TO DETERMINE THE SUITABILITY OF THE INFORMATION FOR THEIR INTENDED PURPOSE.

Please contact NOD Apiary Products Ltd. should more information be required.

Issue Date: 09 March 2017 Review Date: 09 March 2022

Product Name: FormicPro Issued by: NOD Apiary Products Ltd.