Section 1	**Identification of the mixture and of the Company**	
1.1	Product identifier	
	Product Name	Loopex FC®
	Synonyms	N/A
1.2	Relevant identified uses of the mixture and uses advised against	
	Use of the product	Biological Insecticide
	Uses advised against	N/A
1.3	Details of the supplier of the Safety Data Sheet	
	Supplier	Sylvar Technologies Inc.
	Address	1350 Regent Street Fredericton, New Brunswick Canada E3C 2G6
	Phone	+1 (506) 444-5690
	E-mail	info@sylvar.ca
1.4	Emergency Telephone Number	
	Phone (medical)	1-888-870-6444

Section 2	**Hazards Identification**	
2.1	Classification of the mixture	
		Not Classified; No hazardous components
2.2	Label elements	
		IN THE CASE OF EYE CONTACT: Rinse cautiously with water for several minutes. Removing existing contact lenses if possible. Continue rinsing. Keep out of the reach of children. Store locked up. To avoid risks to human health and the environment, comply with the instructions for use. Contains *Autographa californica* nucleopolyhedrovirus. May produce an allergic reaction. Potential Sensitizer CAUTION – Eye irritant
2.3	Other hazards	
		This mixture does not contain any substances, which are persistent, bioaccumulative and toxic (PBT). This mixture does not contain any substance which are very persistent, and bioaccumulative (vPvB).

Section 3	**Composition/Information on Ingredients**	
3.1	Substances	
		This product is a mixture
3.2	Mixtures	
		Autographa californica nucleopolyhedrovirus No hazardous component.

Section 4	**First Aid Measures**	
4.1	Description of first aid measures	

	General Notes	Change any contaminated or wetted clothing at once. If poisoning occurs contact a doctor.
	Following Inhalation	Only possible by exposure to HOT product. Move to fresh air, rest, half upright position, loosen clothing. Oxygen or artificial respiration if there is difficulty in breathing. Seek medical advice after significant exposure. Treat symptomatically is advised.
	Following skin contact	Remove contaminated clothing. Seek medical advice if irritation develops. Wash clothes before reuse. After contact with skin, wash immediately with plenty of water.
	Following eye contact	Rinse thoroughly with plenty of water for several minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing.
	Following ingestion	No typical symptoms and affects known
	Advice to physician	Treat symptomatically
4.2	Most important symptoms and effect, both acute and delayed	
		No typical symptoms and effects known.
4.3	Indication of any immediate medical attention and special treatment needed.	
		None.

Section 5 Firefighting measures

5.1	Extinguishing media	
	Suitable extinguishing media	Water mist, alcohol resistant foam, carbon dioxide, dry powder
	Unsuitable extinguishing media	Water-jet, foam
5.2	Special hazards arising from the mixture	
		Vapors cause coughing At elevated temperatures (>200°C), there is a risk of exothermic polymerization. At temperatures, >280°C, acrolein may be formed.
5.3	Advice for firefighters	
		Avoid contact with oxidizing agents. Cool closed containers with water.

Section 6 Accidental release measures

6.1	Personal precautions, protective equipment and emergency procedures	
		Use protective clothing. Do not inhale.
6.2	Environmental precautions	
		Prevent entry into drains, waters, sewages, etc. of the product; contact immediately the municipal technical management if the product enters such bodies.
6.3	Methods and material for containment and cleaning up	
		Use absorbent material to collect spillage (eg. Sawdust, peat, chemical Binder). Place contaminated absorbent in closable containers. Use a damp cloth to clean floors and other objects after removal of contaminated absorbent. Also place used cleaning materials into closable receptacles.
6.4	Reference to other sections	
		See personal protective equipment under Section 8 of SDS.

Section 7 Handling and Storage

7.1	Precautions for safe handling	
		The usual precautions for handling chemicals should be observed.
7.2	Conditions for safe storage, including any incompatibilities	
		Store in original package only. Store in refrigerator (<5°C) for 15 months. Store at -18°C for 15 months without any loss of activity.
7.3	Specific end use(s)	
		Biological Insecticide.

Section 8 Exposure controls/personal protection

8.1	Control parameter	
		The usual precautionary measures for handling chemicals should be observed.
8.2	Exposure controls	
	Eye/Face Protection	Use goggles
	Skin Protection	Use Protective Clothing
	Respirator Protection	A NIOSH approved mist filtering mask or respirator with any N-95, P-95 or R-95 filter.
	Thermal Hazards	No specific recommendations
	Other information	None

Section 9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties	
Physical State	Liquid (20°C)
Color	Grey-brown
Odor	Odorless
Odor Threshold	Not determined
pH	6-7
Melting point/freezing point	Not determine (not freezing at -18°C)
Initial boiling point and boiling range	103-290°C
Flash Point	Not determined up to 101°C
Evaporation Rate	Not determined
Flammability	Not flammable
Upper/Lower flammability or explosive limits	Not flammable
Vapor Pressure	Not determined
Vapor Density	Not relevant
Relative Density	1.16 g/mL
Solubility(ies)	Soluble in water
Partition coefficient: n-cotanol/water	Not determined
Auto-ignition temperature	Not determined
Decomposition temperature	>200°C
Viscosity	12.64 cSt at 20°C
Explosive Properties	Non explosive
Oxidising properties	Not oxidizing

9.2	Other Information	
		None

Section 10	**Stability and Reactivity**	
10.1	Reactivity	
		Not reactive
10.2	Chemical stability	
		No decomposition if stored and handled properly
10.3	Possibility of hazardous reactions	
		None relevant
10.4	Conditions to avoid	
		Temperature >200°C (polymerization, decomposition)
10.5	Incompatible materials	
		Avoid contact with oxidizing agents
10.6	Hazardous decomposition products	
		Acrolein (>280°C)

Section 11	**Toxicological Information**	
11.1	Information of toxicological effects	
	Acute toxicity	Rat, oral, $5x10^9$ granules/kg BW (AcNPV), no adverse effects
	Skin corrosion/irritation	Rabbit, contact, 0.5mL/animal ($2.2x10^{13}$ granula of CpGV/L) for 4 hours, no adverse effect
	Serious eye damage/irritation	Rabbit, contact, 0.1mL/eye ($2.2x10^{13}$ granula of CpGV/L) for 24 hours, non-irritating
	Respiratory or skin sensitization	Guinea pig, inhalation, 35 mg CpGV ($7x10^8$ granules) per m^3 for 15 mins, no adverse effects
	Germ cell mutagenicity	Not determined
	Carcinogenicity	Not classified
	Reproductive toxicity	Not classified
	STOT-single exposure	Not existing
	STOT-repeated exposure	Not existing
	Aspiration hazard	Not relevant

Section 12	**Ecological Information**	
12.1	Toxicity	
	Acute (short-term) toxicity	
	Fish	*Oncorhynchus mykiss*, 96 hours LC_{50} > 100mg/L = $2.0x10^9$ CpGV/L)
	Crustacea	*Daphnia magna*, 48 hours LC_{50} > 100mg/L = $2.0x10^9$ CpGv/L
	Algae/aquatic plants	*Scenedesmus subspicatus*, 72 hours EC_{50} > 100mg/L = $2.0x10^9$ CpGV/L
	Other organisms	*Lemna gibba*, 7 day EC_{50} >100mg/L = $3.1x10^9$ CpGV/L
	Chronic (long-term) toxicity	
	Fish	No data available
	Crustacea	No data available
	Algae/aquatic plants	No data available
	Other organisms	No data available
12.2	Persistence and degradability	

	Abiotic Degradation	pH
	Physical and photo-chemical elimination	UV light
	Biodegradation	Soil microflora
12.3	Bioaccumulative potential	
	Octanol/water partition coefficient (Kow)	Not determined
	Bioconcentration factor (BCF)	Not determined
12.4	Mobility in Soil	
	Known or predicted distribution to environmental compartments	AcMNPV persists in the soil for a fairly long period in the immobilized state and does not accumulate.
	Surface tension	Not determined
	Absorption/desorption	Not determined
12.5	Results of PBT and vPvB assessment	
		This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
12.6	Other adverse effects	
		None
12.7	Additional information	
		None

Section 13	**Disposal considerations**	
13.1	Waste treatment methods	
	Product/Packaging disposal	Triple-or pressure rinse the empty container. Add the rinsings to the spray mixture in the tank. Follow provincial instructions for any required additional cleaning of the container prior to its disposal. Make the empty container unsuitable for use. Dispose of the container in accordance with provincial regulations. For information on disposal of unused, unwanted product, contact the supplier or the provincial regulatory agency. Contact the supplier or the provincial regulatory agency in cause of a spill, and for clean-up of spills.
	Waste codes/waste designations according to LoW	Not applicable
	Waste treatment-relevant information	None
	Sewage disposal-relevant information	Waste should not be disposed of by release to sewers
	Other disposal Recommendations	None

Section 14	**Transport Information**	
	Inland Transportation	Not restricted
	Sea Transportation	Not restricted

	Air Transportation	Not restricted

Section 15	**Regulatory Information**	
15.1	Safety, health and environmental regulations/legislation specific for the mixture	
	Authorizations	Not relevant
	Restrictions on use	Not relevant
15.2	Chemical Safety Assessment	
		No Chemical Safety Assessment has been carried out for this mixture by the supplier.

Section 16	**Other Information**	
		This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for their special use of this product.
	Indication of Changes	
	Date of Review	January 22, 2018
	Composed by	Laura Forbes, Regulatory Affairs Manager Sylvar Technologies Inc.