Pestell NUTRITION

SAFETY DATA SHEET

Version : 1
Revision date : May 13, 2021

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Product identifier

Product Identity	MICROVIT® A SUPRA RUMINANT
Alternate Names	ADI057, MICROVIT® A SUPRA RUMINANT

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use	See Technical Data Sheet.
Application Method	See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Supplier	Pestell Nutrition
Address	141 Hamilton Rd New Hamburg, Ontario Canada, N3A 2H1
Phone	519-662-2877
Email	qa@pestell.com
Emergency telephone number (24 hr)	Canada: CANUTEC 1 613-996-6666 US: CHEMTREC 1 703-527-3887

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Skin Irrit. 2;H315	Causes skin irritation.
Repr. 1B;H360	May damage fertility or the unborn child.
Combustible Dust	May form combustible dust concentrations in air.
Aquatic Chronic 2;H411	Toxic to aquatic life with long lasting effects.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Danger

H315 Causes skin irritation.

H360 May damage fertility or the unborn child.
May form combustible dust concentrations in air.

H411 Toxic to aquatic life with long lasting effects.

[Prevention]:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P308+313 IF exposed or concerned: Get medical advice / attention.

P321 Specific treatment (see information on this label).

P332+313 If skin irritation occurs: Get medical advice / attention.

P362 Take off contaminated clothing and wash before reuse.

P391 Collect spillage.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Retinol, acetate **CAS Number: 0000127-47-9**	**25 - 50**	**Repr. 1B;H360** **Aquatic Chronic 4;H413** **Skin Irrit. 2;H315**	**[1]**
Butylhydroxytoluene **CAS Number: 0000128-37-0**	**10 - 25**	**Aquatic Chronic 1;H410**	**[1][2]**

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.
[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit.
[3] PBT-substance or vPvB-substance.
*The full texts of the phrases are shown in Section 16.

4. FIRST AID MEASURES

4.1. Description of first aid measures

General SPECIAL NOTE FOR PHYSICIAN: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

Inhalation Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
Ingestion	If victim is conscious and alert, give 1-2 glasses of water to drink. Do not give anything by mouth to an unconscious person. Seek medical attention. Do not leave victim unattended.

4.2. Most important symptoms and effects, both acute and delayed

Overview	No specific symptom data available. See section 2 for further details.
Skin	Causes skin irritation.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Carbon dioxide (CO2), foam, dry chemical, water spray. Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: The thermal decomposition may release/form:
carbon monoxide (CO)
carbon dioxide (CO2)
Decomposition by heat can cause the release of irritant gases and fumes.
Keep away from heat / sparks / open flames / hot surfaces - No smoking.
Ground / bond container and receiving equipment.
Use explosion-proof electrical / ventilating / light / equipment.

5.3. Advice for fire-fighters

Firefighters should wear NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Cool containers exposed to fire with water.Closed containers may rupture due to buildup of pressure when exposed to extreme heat. Dust explosions are possible.

ERG Guide No. 171

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

6.3. Methods and material for containment and cleaning up

Absorb with an inert absorbent. Sweep up and place in an appropriate closed container. Clean up residual material by washing area with water. Collect washings for disposal. Do not flush to drain. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Always wash hands after handling.
Remove and wash contaminated clothing before re-using. Suitable ventilation and dust collection system is required on equipment.
The preparation can become electrostatically charged: always earth during decanting operations.
Fire prevention: Prevent access by unauthorized personnel.
Recommended equipment and procedures: For personal protection, see section 8.
Observe precautions stated on label and also industrial safety regulations.
Avoid exposure - obtain special instructions before use.
Prohibited equipment and procedures: No smoking, eating or drinking in areas where the mixture is used.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Store in a cool, dry and well-ventilated area. Protect from light.
Store at a temperature below 25°C.
Packaging: Always keep in packaging made of an identical material to the original.

Incompatible materials: Strong oxidizing agents, strong acids

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000127-47-9	Retinol, acetate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0000128-37-0	Butylhydroxytoluene	OSHA	No Established Limit
		ACGIH	TWA: 2 mg/m3
		NIOSH	TWA 10 mg/m3
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000127-47-9	Retinol, acetate	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000128-37-0	Butylhydroxytoluene	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;

8.2. Exposure controls

Respiratory	When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with regulatory standards and/or industrial recommendations. Air-purifying (half-mask/full-face) respirator with cartridges/canister approved for use against organic vapors is recommended.
Eyes	A minimum of safety glasses with side shields is recommended.
Skin	Skin contact should be minimized through the use of chemical-resistant gloves and boots, and suitable protective clothing.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	The following general measures should be taken when working or handling this material: 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet. 3) Wash exposed skin promptly to remove accidental splashes of contact with this material.

See section 2 for further details. - [Prevention]:

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Brownie-red with white dots. Very fluid powder with spherical particles. Solid
Odor	Mild
Odor threshold	Not determined
pH	Not relevant
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	Not Measured
Flash Point	Not relevant
Evaporation rate (Ether = 1)	Not Measured
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	**Lower Explosive Limit:** Not Measured **Upper Explosive Limit:** Not Measured
Vapor pressure (Pa)	Not relevant
Vapor Density	Not Measured
Specific Gravity	< 1
Solubility in Water	Insoluble
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Percent Volatile (by volume)	< 5% (105°C - 4h)
Density	0.65 g/cm3 (loose packed) - 0.70 g/cm3 (packed).
Oxidizing Properties	In a test according to Regulation (EC) No 440/2008 (A.17. Oxidising properties - solids), the product was found not to be oxidizing.

9.2. Other information

No other relevant information.

10. STABILITY AND REACTIVITY

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Avoid: - formation of dusts. Dusts can form an explosive mixture with air.

10.5. Incompatible materials

Strong oxidizing agents, strong acids

10.6. Hazardous decomposition products

The thermal decomposition may release/form:
- carbon monoxide (CO)
- carbon dioxide (CO2)

Decomposition by heat can cause the release of irritant gases and fumes.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Retinol, acetate - (127-47-9)	No data available	No data available	No data available	No data available	No data available
Butylhydroxytoluene - (128-37-0)	No data available	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes skin irritation.
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	1B	May damage fertility or the unborn child.
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Retinol, acetate - (127-47-9)	Not Available	Not Available	Not Available
Butylhydroxytoluene - (128-37-0)	0.1-1	0.01-0.1	0.1-1

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential

BCF>=500

12.4. Mobility in soil

Product barely soluble, settles easily.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. TRANSPORT INFORMATION

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	UN3077	UN3077	UN3077
14.2. UN proper shipping name	UN3077, Environmentally hazardous substances, solid, n.o.s., ((2,6-di-tert-butyl-p-cresol)), 9, III	Environmentally hazardous substances, solid, n.o.s., ((2,6-di-tert-butyl-p-cresol))	Environmentally hazardous substances, solid, n.o.s., ((2,6-di-tert-butyl-p-cresol))
14.3. Transport hazard class(es)	**DOT Hazard Class:** 9	**IMDG:** 9 **Sub Class:** Not Applicable	**Air Class:** 9
14.4. Packing group	III	III	III

14.5. Environmental hazards

IMDG Marine Pollutant: Yes; (Butylhydroxytoluene)

14.6. Special precautions for user

No further information

15. REGULATORY INFORMATION

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification D2A

US EPA Tier II Hazards

Fire: No

Sudden Release of Pressure: No

Reactive: No

Immediate (Acute): Yes

Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Butylhydroxytoluene

Pennsylvania RTK Substances (>1%):

Butylhydroxytoluene

16. OTHER INFORMATION

The full text of the phrases appearing in section 3 is:

H315 Causes skin irritation.

H360 May damage fertility or the unborn child.

H410 Very toxic to aquatic life with long lasting effects.

H413 May cause long lasting harmful effects to aquatic life.

Disclaimer

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Pestell Nutrition and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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