

SECTION 1: IDENTIFICATION

1.1 Product identifier: **APPEAL®**

Other means of identification: Not applicable.

PCPA Reg No. : 35946

1.2 Recommended use of the chemical and restrictions on use:

Relevant identified uses: Insecticide and fungicide.

Uses advised against: None known.

1.3 Initial supplier identifier:

Manufacturer:

Oro Agri, Inc.
2788 S. Maple Ave.
Fresno, CA 93725
Telephone Number: +1(559) 442-4996
Email: global.product.safety@rovensa.com

Distributor:

1.4 Emergency phone number:

Incident, Spill, Leak, Fire, Exposure or Accident
Call CHEMTREC Day or Night
Within USA and Canada: +1(800) 424-9300
Outside USA: +1(703) 741-5970.

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture:

WHMIS 2015:

Classification of this product has been carried out in accordance with Part 2 of Hazardous Products Regulations (SOR/2015-17 amended by SOR/2022-272).

Flammable liquids, Category 3
Acute Toxicity (Inhalation), Category 4
Eye damage/irritation, Category 2A
Skin irritation, Category 2

2.2 Label elements:

WHMIS 2015:

Signal word: Warning



Hazard statements:

Flammable liquid and vapour. Causes serious eye irritation. Causes skin irritation. Harmful if inhaled.

Precautionary statements - Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing. Wear eye or face protection. Wash thoroughly after handling. Avoid breathing mist/vapours/spray. Use only outdoors or in a well-ventilated area.

Precautionary statements - Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use sand, carbon dioxide or powder to extinguish. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.

Precautionary statements - Storage:

Store in a well-ventilated place. Keep cool.

Precautionary statements - Disposal:

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

2.3 Health and physical hazards not otherwise classified (HHNOC - PHNOC):

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances:**

Non-applicable.

3.2 Mixtures:

Mixture description: In accordance with Schedule I of the Hazardous Products Regulations (SOR/2015-17):

Identification	Chemical name	% (w/w)
	Proprietary mixture*	90 – <100
CAS: 8028-48-6	Cold Pressed Orange Oil	5 - <10

Composition comments:

*Components, CAS numbers and/or concentrations not listed are either non-hazardous, below reporting limits or have been withheld as trade secrets.

SECTION 4: FIRST-AID MEASURES**4.1 Description of necessary measures:**

Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Wash contaminated clothing before reuse.

By inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTRE or doctor/physician if you feel unwell.

By skin contact:

Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

By eye contact:

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

By ingestion/aspiration:

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. In all cases of doubts, or when symptoms persist, seek medical advice.

4.2 Most important symptoms/effects, acute and delayed:

Serious eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

4.3 Indication of immediate medical attention and special treatment needed, if necessary:

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

SECTION 5: FIRE-FIGHTING MEASURES**5.1 Suitable (and unsuitable) extinguishing media:****Suitable extinguishing media:**

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media:

Do not use water jet as an extinguisher, as this will spread the fire.

5.2 Specific hazards arising from the chemical:

The product is combustible, and heating may generate vapours which may form explosive vapour/air mixtures.

5.3 Special protective equipment and precautions for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment/instructions:

In case of fire and/or explosion, do not breathe fumes. Move containers from fire area if you can do so without risk. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance.

Specific methods:

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards:

Flammable liquid and vapour. Material will burn in a fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapour. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Be aware of potential for surfaces to become slippery. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

For emergency responders:

Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions:

Avoid release to the environment. Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and materials for containment and cleaning up:

Large Spills: Stop the flow of material if this is without risk. Isolate or create barrier around the spilled material, where this is possible. Use non-combustible material like vermiculite, sand, or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

6.4 Reference to other sections:

See section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. DO NOT eat, drink or smoke/vape while using this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum/tobacco, smoking/vaping, or using the toilet. Explosion-proof general and local exhaust ventilation. Take action against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes. Avoid breathing mist/vapours/spray. Use only outdoors in a well-ventilated area. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities:

Keep away from heat, sparks, and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be assessed in the workplace:

Occupational Exposure Limit (OEL) values:

Country	Identifier	Permissible concentration
Canada	Proprietary component 1	Alberta OELs - TWA: 10 mg/m ³
	Proprietary component 2	Alberta OELs – Ceiling: 2 mg/m ³
	Proprietary component 1	British Columbia OELs - TWA: 2 mg/m ³
	Proprietary component 2	British Columbia OELs – Ceiling: 2 mg/m ³
	Proprietary component 1	Manitoba - TWA: 2 mg/m ³ (Inhalable fraction and vapour)
	Proprietary component 2	Manitoba - Ceiling: 2 mg/m ³

	Proprietary component 1	Ontario - TWA: 2 mg/m ³ (Inhalable fraction and vapour)
	Proprietary component 2	Ontario - Ceiling: 2 mg/m ³
	Proprietary component 1	Quebec - TWA: 10 mg/m ³
	Proprietary component 2	Quebec - Ceiling: 2 mg/m ³
	Proprietary component 2	Saskatchewan - Ceiling: 2 mg/m ³

Notation:

1. TWA (Time Weighted Average): The average exposure to a hazardous substance over a standard 8-hour workday or 40-hour workweek.
2. STEL (Short-Term Exposure Limit): The allowable average exposure over a short period, typically 15 minutes.
3. Ceiling: The maximum airborne concentration of a substance that must not be exceeded at any time during occupational exposure.

8.2 Biological limit values:

No biological exposure limits noted for the ingredient(s).

8.3 Appropriate engineering controls:

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide easy access to water supply and eye wash facilities.

8.4 Individual protection measures, such as personal protective equipment:

Eye/face protection:

Wear safety glasses with side shields (or goggles) and a face shield. Wear a face shield if there is a risk of splashing.

Skin protection:

Hand protection:

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other:

Wear suitable protective clothing.

Respiratory protection:

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Selection and use of respiratory protective equipment should be in accordance with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

Thermal hazards:

Wear appropriate thermal protective clothing when necessary.

Environmental exposure controls:

Use appropriate container to avoid environmental contamination. Keep away from drains, surface, and ground water.

General hygiene considerations:

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state:	Liquid
Colour:	Green
Odour:	Citrus
Odour threshold:	Data not available

Volatility:

Boiling point at atmospheric pressure:	Data not available
Vapour pressure:	Data not available
Evaporation rate:	Data not available

Product description:

Density:	1.0 - 1.1 g/mL
Relative density:	Data not available
Dynamic viscosity:	80 – 150 cP
Kinematic viscosity:	Data not available
pH:	6.8 - 7.8

Vapour density:	Data not available
Partition coefficient n-octanol/water:	Data not available
Solubility in water:	Complete
Solubility properties:	Data not available
Decomposition temperature:	Data not available
Melting point/freezing point:	Data not available
Flammability:	
Flash Point:	51 °C (123.8 °F) - Pensky-Martens Closed Cup
Flammability (solid, gas):	Data not available
Autoignition temperature:	Data not available
Lower flammability limit:	Data not available
Upper flammability limit:	Data not available
Particle characteristics:	
Median equivalent diameter:	Data not available

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Data not available
Oxidizing properties:	Data not available
Corrosive to metals:	Data not available
Heat of combustion:	Data not available
Aerosols-total percentage (by mass) of flammable components:	Data not available

Other safety characteristics:

Surface tension:	Data not available
Refraction index:	Data not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

The product is stable and non-reactive under normal conditions of use, storage and transport.

If heated:

Risk of ignition.

10.2 Chemical stability:

Material is stable under normal conditions.

10.3 Possibility of hazardous reactions:

No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid:

Avoid heat, sparks, open flames, and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Hints to prevent fire or explosion:

Use explosion-proof electrical/ventilating/lightning/equipment. Use only non-sparking tools. Take action to prevent static discharges.

10.5 Incompatible materials:

Strong oxidizing agents.

10.6 Hazardous decomposition products:

Thermal decomposition of this product can generate carbon monoxide, carbon dioxide, sulfur oxides, and sodium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Information on likely routes of exposure:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

Ingestion (acute effect):

May cause discomfort if swallowed.

Inhalation (acute effect):

Harmful if inhaled.

Contact with the skin (acute effect):

Prolonged skin contact may be harmful.

Contact with the eyes (acute effect):

Causes serious eye irritation.

11.2 Symptoms related to the physical, chemical, and toxicological characteristics:

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects:**Acute toxicity:**

Not expected to be acutely toxic.

Product-specific toxicological information: APPEAL (CAS Mixture)

Exposure route	Endpoint	Value	Species	Method
<i>Acute toxicity</i>				
Oral	LD50	>2000 mg/kg	Rat	OECD 423
Dermal	LD50	>2000 mg/kg	Rat	OECD 402
Inhalation vapour	LC50	>2.13 mg/L	Rat	OECD 403

Skin corrosion/irritation:

Causes skin irritation.

Skin contact APPEAL

OECD 404

Result: Slight irritant

Species: Rabbit.

Eye damage/irritation:

Causes serious eye irritation.

Eye contact APPEAL

OECD 405

Result: Irritating

Severity: Mild

Species: Rabbit.

Skin sensitization:

This product is not expected to cause skin sensitization.

Sensitization APPEAL

OECD 406

Result: Non-sensitizing

Species: Guinea pig.

Respiratory sensitization:

Not a respiratory sensitizer.

Germ cell mutagenicity:

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity:

This product is not considered to be a carcinogen by IARC, NTP, or OSHA.

- **International Agency for Research on Cancer (IARC) Monographs on the Evaluation of Carcinogenic Risks to Humans**
Not listed.

- **National Toxicology Program (NTP) Report on Carcinogens**
Not listed.

- **OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**
Not listed.

Reproductive toxicity:

Data not available.

Specific target organ toxicity (STOT):

- **Specific target organ toxicity - single exposure:**
Not classified.

-Specific target organ toxicity - repeated exposure:
Not classified.

Aspiration hazard:
Not an aspiration hazard.

Chronic effects:
Prolonged inhalation may be harmful.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

This product is not classified as environmentally hazardous under Hazardous Product Act (SOR/2022-272). However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.2 Persistence and degradability:

No data is available on the degradability of this product.

12.3 Bioaccumulative potential:

Data not available.

12.4 Mobility in soil:

Data not available.

12.5 Results of PBT and vPvB assessment:

Data not available.

12.6 Endocrine disrupting properties:

Data not available.

12.7 Other adverse effects:

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways, or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations:

Dispose in accordance with all applicable regulations.

Hazardous waste code:

The waste code should be assigned in discussion between the user, the producer, and the waste disposal company.

Waste from residues/unused products:

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see Disposal methods).

Contaminated packaging:

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to Transportation of Dangerous Goods Regulations (SOR/2001-286) including Amendments:



- | | |
|--|--|
| 14.1 UN number: | UN1993 |
| 14.2 United Nations proper shipping name: | FLAMMABLE LIQUID, N.O.S. (Orange, sweet, ext.) |
| 14.3 Transport hazard class(es): | 3 |
| Labels: | 3 |
| 14.4 Packing group: | III |
| 14.5 Environmental hazard: | No |
| 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises | |
| Physico-Chemical properties: | see section 9 |
| 14.7 | Not relevant |

Transport in bulk (according to Annex II of MARPOL 73/78)

Transport of dangerous goods by sea:

With regard to IMDG 42-24:



- | | |
|--|--|
| 14.1 UN number: | UN1993 |
| 14.2 United Nations proper shipping name: | FLAMMABLE LIQUID, N.O.S. (Orange, sweet, ext.) |
| 14.3 Transport hazard class(es): | 3 |
| Labels: | 3 |
| 14.4 Packing group: | III |
| 14.5 Marine pollutant: | No |
| 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises | |
| Special regulations: | 274, 223, 955 |
| EmS Codes: | F-E, S-E |
| Physico-Chemical properties: | see section 9 |
| Limited quantities: | 5 L |
| Segregation group: | Not relevant |
| 14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): | Not relevant |

Transport of dangerous goods by air:

With regard to IATA/ICAO 2025:



- | | |
|--|--|
| 14.1 UN number: | UN1993 |
| 14.2 United Nations proper shipping name: | FLAMMABLE LIQUID, N.O.S. (Orange, sweet, ext.) |
| 14.3 Transport hazard class(es): | 3 |
| Labels: | 3 |
| 14.4 Packing group: | III |
| 14.5 Environmental hazard: | No |
| 14.6 Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises | |
| Physico-Chemical properties: | see section 9 |
| 14.7 Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): | Not relevant |

Additional information:

Test results from Sustained Combustion testing (L.2 of Part 3 section 32 of UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria) indicate that this material does not sustain combustion. At the discretion of the shipper, this material does not need to be considered a Dangerous Good when offered for transport by ground in the U.S. according to 49 CFR 173.120(b)(3), by air according to IATA DGR section 3.3.1.3(a), or by sea according to IMDG Code chapter 2.3.1.3.1.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information provided in this safety data sheet as a foundation for conducting workplace-specific risk assessments. These assessments will help establish the appropriate risk prevention measures for handling, using, storing, and disposing of this product.

Other legislation:

Canadian Environmental Protection Act, 1999.

U.S. California Proposition 65:

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

SECTION 16: OTHER INFORMATION

Revision Date: 2026-05-19

Version Number: 1

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with Part 4 and Schedule I of the Hazardous Products Regulations (SOR/2015-17), amended by SOR/2020-38 and SOR/2022-272.

Texts of the legislative phrases mentioned in section 2:

H226: Flammable liquid and vapour.
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

<http://whmis.org/>

Abbreviations and acronyms:

IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor LD50: Lethal Dose 50 CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon
IARC: International Agency for Research on Cancer

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End of SDS