Safety Data Sheet

According to 29 CFR 1910.1200 App D

Version number: 1.0

Date of compilation2023-02-01

OROAGRI 333

SECTION 1: Identification

1.1 Product identifier

Product Trade Name	**OROBOOST®**
Product Code Number	097-F-3-A

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

Relevant identified uses	Adjuvant
Uses advised against	None Known

1.3 Details of the supplier of the safety data sheet

Oro Agri, Inc.
2788 S Maple Ave.
Fresno, CA 93725
United States
Telephone: +1(559) 442-4996
Email: SDS-NA@oroagri.com

1.4 Emergency telephone 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(s) identification

2.1 Classification of the substance or mixture

Classification according to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Hazard class and category

Hazard class.	Category
Acute toxicity (inhal.)	4
Serious eye damage/eye irritation	2A
Flammable liquid	3

2.2 Label elements

Labelling according to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

- Signal word **WARNING**

- Pictograms

Hazard statements

Flammable liquid and vapor. Causes serious eye irritation. Harmful if inhaled.

Precautionary statements - prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/eye protection/face protection. Avoid breathing fume/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling.

Precautionary statements - response.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a poison center/doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.

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 Other hazards

None known.

2.4 Supplemental information

None.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Alcohol Ethoxylate (CAS 68131-40-8) 10 -15%
Orange, sweet, ext. (CAS 8028-48-6) 5 - 10%
Proprietary mixture*

*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 first-aid measures

General notes

Take off all contaminated clothing immediately. If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

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

Following 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. If eye irritation persists: Get medical advice/attention.

Following ingestion

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

4.2 Most important symptoms and effects, both acute and delayed

Harmful if inhaled. Mild eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort.

4.3 Indication of any immediate medical attention and special treatment needed

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 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 Special hazards arising from the substance or mixture

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters

In case of fire and/or explosion, do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

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

5.4 General fire hazards

Flammable liquid and vapor.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

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 material for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a 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.

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. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures 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 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. 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).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of substance	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	Ceiling-C [ppm]	Source
United States	Proprietary component	TLV®			1,000		ACGIH® 2022
United States	Proprietary component	REL	1,000 (10 h)	1,900 (10 h)			NIOSH REL
United States	Proprietary component	PEL (CA)	1,000	1,900			Cal/OSHA PEL
United States	Proprietary component	PEL	1,000	1,900			29 CFR 1910.1000

Notation

Ceiling-C	Ceiling value is a limit value above which exposure should not occur
STEL	Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified

8.2 Exposure controls

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.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection. Use safety goggle with side protection.

Skin protection

- Hand protection

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

- Other protection measures

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 protective gloves against risks (heat and /or fire).

Environmental exposure controls

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

General hygiene considerations

When using do not smoke. 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Yellow/Orange.

Particle characteristics

Particle	Not relevant(liquid)

Odor / odor threshold

- Odor	Citrus
- Odor threshold	Not determined

Other safety parameters

pH (value)	6.8 - 7.8
Melting point/freezing point	Not determined
Initial boiling point and boiling range	Not determined
Flash point	40°C (104°F) - (Pensky-Martens closed cup)
Evaporation rate	Not determined
Flammability (solid, gas)	Not relevant(fluid)
Lower and upper explosion limit	No data available
Vapor pressure	Not determined
Density	0.98 - 1.15 g/cm³
Vapor density	This information is not available
Solubility(ies)	
Water solubility	Complete

Partition coefficient

n-octanol/water (log KOW)	This information is not available
Auto-ignition temperature	Not determined

Viscosity

- Dynamic viscosity	0 – 50 cP
- Kinematic viscosity	Not determined
Decomposition temperature	This information not available

9.2	**Other information**	There is no additional information

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

Stable under normal conditions of use.

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/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Thermal decomposition of this product can generate carbon monoxide and carbon dioxide. Sulphur oxides. Sodium oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Information on likely routes of exposure

Inhalation

Harmful if inhaled.

Ingestion

May cause discomfort if swallowed.

Information on toxicological effects

Acute toxicity

Not expected to be acutely toxic.

OROBOOST (CAS Mixture)

Exposure route	Endpoint	Value	Species	Method
Dermal	LD50	>2,000 $^{mg}/_{kg}$	Rat	OECD 402
Inhalation: dust/mist	LC50	>3.69 $^{mg}/_{l}$/4h	Rat	OECD 403
Oral	LD50	>2,000 $^{mg}/_{kg}$	Rat	OECD 423

Skin corrosion/irritation

Prolonged skin contact may cause temporary irritation.

OROBOOST

Skin contact

OECD 404

Result: Non-irritant

Species: Rabbit.

Serious eye damage/eye irritation

Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Exposed individuals may experience eye tearing, redness, and discomfort. Harmful if inhaled.

Eye contact

OROBOOST

OECD 405

Result: Mild Irritant – reversible within 14 days.

Species: Rabbit.

Respiratory sensitization

Not a respiratory sensitizer.

Skin sensitization

This product is not expected to cause skin sensitization.

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OECD 406

Result: Non-sensitizing

Species: Guinea pig.

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, ACGIH, NTP, or OSHA.

-IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

Name of substance	Classification	Date indication
Proprietary component	1	2012

Legend

1 Carcinogenic to humans

-NTP Report on Carcinogens

Not Listed.

-OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not Listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

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

May be harmful if absorbed through skin. Prolonged inhalation may be harmful.

SECTION 12: Ecological information

12.1 Toxicity

This product is not classified as environmentally hazardous under 29 CFR 1910.1200. 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

No data available for this product.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

Information on this property is 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 Waste treatment methods

Disposal instructions.

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 instructions).

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

14.1 DOT

Not regulated as dangerous goods. See additional information in this section.

14.2 IATA

Not regulated as dangerous goods. See additional information in this section.

14.3 IMDG

Not regulated as dangerous goods. See additional information in this section.

14.4 Transport in bulk according to Annex II of MARPOL 73/78 and IBC code

Not applicable.

14.5 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

National regulations (United States)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

None of the ingredients are listed.

- Specific Toxic Chemical Listings (EPCRA Section 313)

None of the ingredients are listed.

Clean Air Act

None of the ingredients are listed.

California Proposition 65

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

National inventories

Country	Inventory	On inventory (yes/no)*
AU	AIIC	Yes
CA	DSL	No
CN	IECSC	Yes
EU	ECSI	No
EU	REACH Reg.	No
JP	CSCL-ENCS	No
KR	KECI	Yes
NZ	NZIoC	Yes
PH	PICCS	Yes
US	TSCA	Yes

Legend

AIIC	Australian Inventory of Industrial Chemicals
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)

Legend

ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
KECI	Korea Existing Chemicals Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TSCA	Toxic Substance Control Act

SECTION 16: Other information, including date of preparation or last revision

Revision Date: 2023-02-01

Version number: 1.0

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits).
49 CFR US DOT	49 CFR U.S. Department of Transportation.
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Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs).
Ceiling-C	Ceiling value.
DGR	Dangerous Goods Regulations (see IATA/DGR).
EINECS	European Inventory of Existing Commercial Chemical Substances.
ELINCS	European List of Notified Chemical Substances.
IARC	International Agency for Research on Cancer.
IATA	International Air Transport Association.
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA).
IMDG	International Maritime Dangerous Goods Code.
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval.
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval.
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs).
NLP	No-Longer Polymer.
PBT	Persistent, Bioaccumulative and Toxic.
PEL	Permissible exposure limit.

Abbr.	Descriptions of used abbreviations
ppm	Parts per million.
STEL	Short-term exposure limit.
TLV®	Threshold Limit Values.
TWA	Time-weighted average.
vPvB	Very Persistent and very Bioaccumulative.

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200.

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Disclaimer

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End of SDS