SECTION 1. IDENTIFICATION

Product name	:	MACROLIDE® SUPRA 000000000000660539
Product code	:	660539

Manufacturer or supplier's details

Company name of supplier	:	Symrise , Inc.
Address	:	300 North Street Teterboro NJ 07608
Telephone	:	(201) 288-3200
Telefax	:	(201) 288-0843
E-mail address	:	msds-us@symrise.com
Emergency telephone number	:	+1-800-535-5053 (ID# 101844) +1-352-323-3500 (Outside US)

Recommended use of the chemical and restrictions on use

Recommended use	:	Flavours Fragrances
Restrictions on use	:	Food additive

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin sensitisation	:	Sub-category 1B

GHS label elements

Hazard pictograms :

Signal word	:	Warning
Hazard statements	:	H317 May cause an allergic skin reaction.
Precautionary statements	:	**Prevention:** P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves. **Response:** P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P363 Wash contaminated clothing before reuse. **Disposal:** P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards Not Otherwise Classified (HNOC)

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	:	Oxacyclohexadecan-2-one
Synonyms	:	Pentadecan-15-olide
Chemical Family	:	Lactones
CAS-No.	:	106-02-5
Molecular formula	:	C15-H28-O2
FEMA Number	:	2840

SECTION 4. FIRST AID MEASURES

General advice	:	Do not leave the victim unattended. Move out of dangerous area. Show this safety data sheet to the doctor in attendance.
If inhaled	:	If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	If on skin, rinse well with water.
In case of eye contact	:	Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Do not give milk or alcoholic beverages. If symptoms persist, call a physician.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Specific hazards during firefighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Specific extinguishing methods	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid breathing dust. Avoid dust formation.
Environmental precautions	:	Try to prevent the material from entering drains or water courses. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Clean up promptly by sweeping or vacuum.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling	:	Use only with adequate ventilation. Do not breathe vapours/dust. For industrial use only. Keep all heated processes at the lowest necessary temperature in order to minimize emissions of volatile chemicals into the air. Take care to avoid waste and spillage when weighing, loading and mixing the product.
Conditions for safe storage	:	Keep containers tightly closed in a dry, cool and well-ventilated place.
Packaging material	:	Unsuitable material: no plastic PE

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

We are not aware of any national exposure limit.

Personal protective equipment

Respiratory protection	:	In the absence of adequate ventilation, a dust mask or a respirator, appropriate for the specific workplace conditions, is recommended.
Eye protection	:	Wear chemical resistant goggles and/or face shield.
Skin and body protection	:	Wear suitable gloves.

Protective measures	:	Engineering controls providing adequate ventilation (such as hoods, point source or whole room ventilation systems for liquids and dust collection systems for dusts) are recommended as the primary method to minimize workplace exposure. When adequate ventilation cannot be achieved, the use of an appropriate respiratory protection device is recommended. Established TLV/ TWA or PEL values should be used when possible.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	solid
Colour	:	pale white to white
Odour	:	characteristic
Melting point/range	:	ca. 35 °C Method: OECD Test Guideline 102 GLP: yes
Boiling point/boiling range	:	325 °C (1,015 hPa) Method: OECD Test Guideline 103 GLP: yes
Flash point	:	320 °F / 160 °C
Vapour pressure	:	0.000 hPa (20 °C) / 0.000 mmHg (20 °C)
Relative density	:	0.99 (20 °C) Method: OECD 109 GLP: yes
Solubility(ies)		
Water solubility	:	0.0003 g/l immiscible (20 °C) pH: 6.3 - 6.8 Method: OECD Test Guideline 105 GLP: yes
Partition coefficient: n-octanol/water	:	log Pow: 5.79 (25 °C) Method: OECD Test Guideline 123 GLP: yes
Molecular weight	:	240.43 g/mol

SECTION 10. STABILITY AND REACTIVITY

Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	Stable under recommended storage conditions.
		None known.
Conditions to avoid	:	No data available

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Ingestion
Inhalation
Eye contact
Skin contact

Acute toxicity
No data available

Skin corrosion/irritation

Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: Mild skin irritation
Concentration: 100 %
GLP: yes

Serious eye damage/eye irritation

Species: Rabbit
Result: Mild eye irritation
Concentration: 100 %
Method: OECD Test Guideline 405
GLP: yes
Remarks: Information given is based on data obtained from similar substances.

Respiratory or skin sensitisation

Test Type: HRIPT
Species: Humans
Result: No sensitizing effect.
Concentration: 10 %

Test Type: Local Lymph Node Assay
Species: Mouse
Method: OECD 429
Result: Sensitizing effect.
Concentration: 25.5 %
GLP: yes

Germ cell mutagenicity

Genotoxicity in vitro	:	Test Type: Ames test Metabolic activation: with and without metabolic activation

Method: OECD 471
Result: negative
GLP: yes

Carcinogenicity

IARC	Not listed
OSHA	Not listed
NTP	Not listed

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 0.17 mg/l Exposure time: 48 h Test Type: semi-static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes Remarks: No effect in the area of water solubility of the substance
Toxicity to algae	:	ErC10 (Desmodesmus subspicatus (green algae)): 0.421 mg/l End point: Growth rate Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: Directive 67/548/EEC, Annex V, C.3. GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.068 mg/l Exposure time: 21 d End point: Reproduction rate Test Type: semi-static test Analytical monitoring: yes Method: OECD 211 GLP: yes
Toxicity to bacteria	:	EC50 (Activated sludge): > 10,000 mg/l End point: Respiration inhibition Exposure time: 30 min Test Type: Respiration inhibition Analytical monitoring: no Method: OECD 209 GLP: yes

Persistence and degradability

Biodegradability	:	Test Type: Manometric Respirometry Test Result: Readily biodegradable. Biodegradation: 90 % Exposure time: 28 d Method: OECD 301F GLP: yes

Bioaccumulative potential

No data available

Mobility in soil

Distribution among environmental compartments	:	log Koc: 4.65 Method: OECD 121

Other adverse effects

Results of PBT and vPvB assessment	:	This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).
Additional ecological information	:	Toxic to aquatic life with long lasting effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues	:	Dispose of in accordance with local regulations. Observe, local, state and federal regulations. Do not dispose of waste into sewer. Discharge into the environment must be avoided. Send to a licensed waste management company.
Contaminated packaging	:	Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Where possible recycling is preferred to disposal or incineration.

SECTION 14. TRANSPORT INFORMATION

49CFR Road 0 – 25 kg	Not classified as dangerous in the meaning of transport regulations.
49CFR Road 25 – 400 kg	Not classified as dangerous in the meaning of transport regulations.
49CFR Road > 400 kg	Not classified as dangerous in the meaning of transport regulations.

IMDG

UN Number	:	3077
Description of the goods	:	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PENTADECAN-15-OLIDE) MP,9,PGIII
Class	:	9
Packaging group	:	III
ADR/RID-Labels	:	9
EmS Number 1	:	F-A
EmS Number 2	:	S-F
Marine pollutant	:	yes

IATA-DGR

UN Number	:	3077
Description of the goods	:	Environmentally hazardous substance, solid, n.o.s. (PENTADECAN-15-OLIDE)
Class	:	9
Packaging group	:	III
Cargo \ Packing Instruction	:	956
Qty / Pkg.		400.00 KG
Passenger\Packing Instruction Qty / Pkg.	:	956
		400.00 KG

SECTION 15. REGULATORY INFORMATION

TSCA list

TSCA - 12(b) Export Notification List of Chemicals	:	Not listed
TSCA - 5(a) Significant New Use Rule List of Chemicals	:	Not listed

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	:	Acute Health Hazard
SARA 302	:	This material does not contain any components with a SARA 302 RQ.
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

New Jersey Right To Know

Not listed

California Prop 65

Not listed

SECTION 16. OTHER INFORMATION

Revision Date : 02/15/2019

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.