SAFETY DATA SHEET

GLOBALIDE®

Version	Revision Date:	SDS Number:	Date of last issue: 04/05/2021
12.1	01/27/2022	106114	Date of first issue: 04/05/2021

SECTION 1. IDENTIFICATION

Product name : GLOBALIDE®

Product code : 106114

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

Emergency telephone : +1-800-535-5053 (ID# 101844) +1-352-323-3500 (Outside US)

Recommended use of the chemical and restrictions on use

Recommended use : Single Chemical

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements

Not a hazardous substance or mixture.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Substance

Substance name : Oxacyclohexadec-12-en-2-one, (12E)-

CAS-No. : 111879-80-2

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Show this material safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled	:	Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.
In case of skin contact	:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	:	Rinse mouth with water. Keep respiratory tract clear. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Most important symptoms and effects, both acute and delayed	:	First aider needs to protect himself.
Protection of first-aiders	:	First Aid responders should pay attention to self-protection and use the recommended protective clothing
Notes to physician	:	The first aid procedure should be established in consultation with the doctor responsible for industrial medicine. There is no specific antidote available.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	:	High volume water jet
Hazardous combustion products	:	No hazardous combustion products are known
Further information	:	In the event of fire and/or explosion do not breathe fumes. Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use a water spray to cool fully closed containers.
Special protective equipment	:	In the event of fire, wear self-contained breathing apparatus.

for fire-fighters

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions	:	Do not flush into surface water or sanitary sewer system. 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	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Avoid formation of aerosol. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.
Materials to avoid	:	No special restrictions on storage with other products.
Further information on storage stability	:	No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection	:	Not required; except in case of aerosol formation.

Hand protection

Remarks	:	Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Wear chemicals-resistant gloves, e.g. safety gloves of nitril (thickness 0.4mm) or of butyl rubber (thickness 0.7mm).
Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Hygiene measures	:	Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	clear liquid
Color	:	colorless to light yellow
Odor	:	characteristic
Odor Threshold	:	No data available
pH	:	Not applicable
Melting point/freezing point	:	-51 °F / -46 °C (1,013 hPa) Method: OECD Test Guideline 102 GLP: yes
Boiling point/boiling range	:	631 °F / 333 °C (1,013 hPa) Method: OECD Test Guideline 103 GLP: yes
Flash point	:	> 212 °F / > 100 °C
Evaporation rate	:	Lower than the evaporation rate of butyl acetate = 1
Self-ignition	:	486 - 500 °F / 252 - 260 °C 1,013 hPa Autoignition temperature Method: Directive 440/2008/EG, Annex , A.15. GLP: yes
Upper explosion limit / Upper	:	Vapors may form explosive mixtures with air.

flammability limit		
Lower explosion limit / Lower flammability limit	:	Vapors may form explosive mixtures with air.
Vapor pressure	:	0.00039 hPa / 0.000 mmHg (68 °F / 20 °C) Method: OECD Test Guideline 104 GLP: yes 0.00076 hPa / 0.001 mmHg (77 °F / 25 °C) Method: OECD Test Guideline 104 GLP: yes 0.016 hPa / 0.012 mmHg (122 °F / 50 °C) Method: OECD Test Guideline 104 GLP: yes
Relative vapor density	:	not determined
Relative density	:	0.9600 - 0.9690 (68 °F / 20 °C) relation to density of water at 4°C
Bulk density	:	Not applicable
Solubility(ies)		
Water solubility	:	0.969 mg/l immiscible (68 °F / 20 °C) pH: 7.01 Method: OECD Test Guideline 105 GLP: yes
Partition coefficient: n-octanol/water	:	log Pow: 5.45 (77 °F / 25 °C) pH: 6.9 Method: OECD 117 GLP: yes
Decomposition temperature	:	not determined
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	44.8 mm2/s (68 °F / 20 °C) GLP: no not determined
Explosive properties	:	Due to its structural properties, the product is not classified as explosive.
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Surface tension	:	64.1 mN/m, 68 °F / 20 °C, GLP: yes
Molecular weight	:	238.37 g/mol

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No decomposition if stored and applied as directed.
Chemical stability	:	No decomposition if stored and applied as directed.
Possibility of hazardous reactions	:	No decomposition if stored and applied as directed. Vapors may form explosive mixture with air.
Conditions to avoid	:	No data available
Incompatible materials	:	No data available
Hazardous decomposition products	:	No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity	:	LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD 423 GLP: yes
Acute dermal toxicity	:	LD50 (Rat, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402 GLP: yes

Skin corrosion/irritation

Not classified based on available information.

Product:

Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: Mild skin irritation
GLP: yes
Dose: 0,5 ml
Concentration: 100 %

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Species: Rabbit
Method: OECD Test Guideline 405
Result: No eye irritation
GLP: yes
Dose:0,1 ML
Concentration: 100 %

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Product:

Test Type: Maximization Test
Species: Guinea pig
Assessment: Does not cause skin sensitization.
Method: OECD Test Guideline 406
Result: No sensitizing effect.
GLP: yes
Concentration: 100 %

Test Type: HRIPT
Species: Humans
Result: No sensitizing effect.
Rate of positive effects: 0/104
Concentration: 15 %
solvents: Diethylphthalate

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro : Test Type: Ames test
Metabolic activation: with and without metabolic activation
Method: OECD 471
Result: negative
GLP: yes

Test Type: In vitro Mammalian Chromosome Aberration Test
Test system: Human lymphocytes
Metabolic activation: with and without metabolic activation
Method: OECD 473
Result: negative
GLP: yes

Test Type: In vitro Mammalian Cell Gene Mutation Test
Test system: mouse lymphoma L5178Y cells
Metabolic activation: with and without metabolic activation
Method: OECD 476
Result: negative

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 0.8 mg/l Exposure time: 96 h Test Type: flow-through test Method: OECD Test Guideline 203 GLP: yes Remarks: No effect in the area of water solubility of the substance
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 0.96 mg/l Exposure time: 48 h Test Type: semi-static test Method: OECD Test Guideline 202 GLP: yes Remarks: No effect in the area of water solubility of the substance
Toxicity to algae/aquatic plants	:	ErC50 (Desmodesmus subspicatus (green algae)): 5.17 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes Remarks: No toxicity at the limit of solubility.
Toxicity to fish (Chronic toxicity)	:	NOEC (Pimephales promelas (fathead minnow)): 0.027 mg/l Exposure time: 33 d Method: OECD 210 GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): >= 0.039 mg/l End point: Immobilization Exposure time: 21 d Test Type: semi-static test Method: OECD 211 GLP: yes
Toxicity to microorganisms	:	EC50 (Activated sludge): > 100 mg/l End point: Respiration inhibition

Exposure time: 3 h
Test Type: static test
Method: OECD 209
GLP: yes

Persistence and degradability

Product:

Biodegradability : Test Type: Manometric respiration test
Result: Readily biodegradable.
Biodegradation: 97 %
Exposure time: 28 d
Method: OECD 301F
GLP: yes

Bioaccumulative potential

No data available

Mobility in soil

Product:

Distribution among environmental compartments : Adsorption/Soil
log Koc: 4.65
Method: OECD 121

Other adverse effects

Product:

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 : Remarks: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.

Contaminated packaging : Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (OXACYCLOHEXADEC-12-EN-2-ONE, (12E)-)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger aircraft)	:	964
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (OXACYCLOHEXADEC-12-EN-2-ONE, (12E)-)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

Remarks	:	Shipment by ground under DOT is non-regulated; however it may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : No SARA Hazards

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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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.

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