

According to the UN GHS revision 8

Version: 1.0 Creation Date: July 15, 2019 Revision Date: July 15, 2019

1.	Identification					
1.1	GHS Product identifier					
	Product name H	lispidulin 4'-O-beta-D-glucopyranoside				
.2	Other means of identification					
	Product number - Other names -					
.3	Recommended use of the chemical and restrictions on use					
		ndustrial and scientific research uses. o data available				
.4	Supplier's details					
	Address 3 Telephone ((	Yarget molecule Corp. 6 Washington Street, Wellesley Hills, MA 0 781) 999-4286 781)-999-5354	2481 USA			
.5	Emergency phone number					
		781)-999-5354 Aonday to Friday, 9am-5pm (Standard time	zone: UTC/GM	$\Gamma$ +8 hours).		
2.	Hazard identification					
.1	Classification of the substance	or mixture				
	no data available					
2.2	GHS label elements, including precautionary statements					
	Signal word n   Hazard statement(s) n   Precautionary statement(s) n   Prevention n   Response n   Storage n	o data available o data available				
2.3	Other hazards which do not result in classification no data available					
3.	Composition/information on ingredients					
3.1	Substances					
	Chemical name Hispidulin 4'-O-beta-D-glucopyranoside	Common names and synonyms Hispidulin 4'-O-beta-D-glucopyranoside	CAS number 244285-12-9	EC number no data available	Concentration 100%	
4.	First-aid measures					
4.1	Description of necessary first-aid measures General advice Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.					

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

## Following eye contact

Rinse with water. Consult a doctor immediately.

#### **Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison

Control Center immediately

#### 4.2 Most important symptoms/effects, acute and delayed

no data available

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

Wear personal protective equipment.

#### 5. Fire-fighting measures

#### 5.1 Extinguishing media

Use dry chemical, carbon dioxide or alcohol-resistant foam.

# 5.2 Specific hazards arising from the chemical

no data available

#### 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary

# 6. Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.3 Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use sparkproof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## 7. Handling and storage

#### 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

# 8. Exposure controls/personal protection

#### 8.1 Control parameters

#### **Occupational Exposure limit values**

no data available

#### 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the riskelimination area.

#### 8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection. Wear tightly fitting safety goggles with side-shields. Skin protection. Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. Respiratory protection. If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator. Thermal hazards. no data available

## 9. Physical and chemical properties

v 1 1	
Physical state	solid
Odour	no data available
Melting point/ freezing point	no data available
Boiling point or initial boiling point	no data available
and boiling range	
Flammability	no data available
Lower and upper explosion limit /	no data available
flammability limit	
Flash point	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
рН	no data available
Kinematic viscosity	no data available
Solubility	no data available
Partition coefficient n-octanol/water	no data available
Vapour pressure	no data available
	no data available
Density and/or relative density	
Relative vapour density	no data available

	Particle characteristics no data available
10.	Stability and reactivity
10.1	Reactivity
	no data available
10.2	Chemical stability
	Stable under proper conditions
10.3	Possibility of hazardous reactions
	no data available
10.4	Conditions to avoid
	no data available
10.5	Incompatible materials
	no data available
10.6	Hazardous decomposition products
	no data available
11.	Toxicological information
	Acute toxicity
	no data available
	Skin corrosion/irritation
	no data available
	Serious eye damage/irritation
	no data available
	Respiratory or skin sensitization
	no data available
	Germ cell mutagenicity
	no data available
	Carcinogenicity
	no data available
	Reproductive toxicity no data available
	STOT-single exposure
	no data available
	STOT-repeated exposure
	no data available
	Aspiration hazard
_	no data available
12.	Ecological information
12.1	Toxicity
	no data available
12.2	Persistence and degradability
	no data available
12.3	Bioaccumulative potential
	no data available
12.4	Mobility in soil

no data available

# 12.5 Other adverse effects

no data available

#### **Disposal considerations** 13.

#### **Disposal methods** 13.1

# Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing.

Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14.	Transport information					
14.1	UN Number					
	no data available					
14.2	UN Proper Shipping Name					
	no data available					
14.3	Transport hazard class(es)					
	no data available					
14.4	Packing group, if applicable	2				
	no data available					
14.5	Environmental hazards					
	ADR/RID: No	IMDG: No	IATA: No			
14.6	Special precautions for user					
	no data available					
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code					
	no data available					
15.	<b>Regulatory information</b>					
15.1	Safety, health and environmental regulations specific for the product in question					
	Not Listed.					
16.	Other information					
	Information on revision					
	Creation Date Revision Date	July 15, 2019 July 15, 2019				
	Abbreviations and acronyms	- /				

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail ٠
- IMDG: International Maritime Dangerous Goods ٠
- IATA: International Air Transportation Association •
- ٠
- TWA: Time Weighted Average STEL: Short term exposure limit •
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home HSDB -Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm IARC - International Agency for Research on Cancer, website: http://www.iarc.fi/ eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal/index?pageID=0&request\_locale=en CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp ERG -Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-4804.jsp ECHA - European Chemicals Agency, website: https://echa.europa.eu/

#### For Research Use Only

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. We as supplier shall not be held liable for any damage resulting from handling or from contact with the above product.