

### **Design Report of Safety Data Sheet**

	Clove Essential Oil
*Product Name:	Clove Essential Off
*Applicant:	Sophix Natural
Supplier:	Sophix Natural
*Composition of the product :	Clove Essential Oil (CAS: 84961-50-2 .: 100%
Warranty of Design:	Prepared according to American OSHA HazCom Standard (2012)
*Information materials:	HGBZ2309PQG《Application》、P108095《Declaration of consistency of components of the sample submitted for inspection》
	Sophix Natural & Agro Products Ltd.

Name: Sophix Natural & Agro Products Ltd.

Add: Plot 9, Zone A, Liguori Street Off New Ife Road National Bus Stop Ibadan.

Web: www.sophixnatural.com Tel: +234 706 1111 838 E-mail: sophixnatural@gmail.com

# Terms of the Using of the Report

1. According to the needs of issuing the report, the company requires the client to provide true and complete samples and data (see the report tape ★ for details). The Company will not bear any consequences caused by the wrong information provided by the Client. If the chemical information, authoritative database and relevant policy changes submitted by the client affect the conclusions of this report, this report will automatically become invalid. Unless otherwise specified, the data in this report are only responsible for the samples submitted for inspection, and the accuracy of sample composition information is the



responsibility of the client. The hazard characteristics, transportation information and emergency measures of samples need to focus on the corresponding parts of this report.

- 2. The data source of this report is based on the relevant materials and information submitted by the client, the test results of international authoritative databases, laboratories and the current relevant knowledge of the company. We try our best to ensure the correctness of all information during the audit. However, due to the diversity of information sources and the limitations of the Company's knowledge, users of this report should make further judgments on the reasonableness of relevant information based on the purpose of use.
- 3. This report will be effective only after it is signed by the inspector, approver and stamped by our company.
- 4. Our company guarantees the objectivity and fairness of this report, and carries out confidentiality obligations on business secrets such as business information, technical documents and so on.
- 5. This report does not consider the differences between countries and operators.
- 6. The partly duplicating of this report is prohibited without the written approver.
- 7. The report is invalid when anything of the following happens-illegal transfer, embezzlement, imposture, modification or tampering in any media form.
- 8. This report is valid before the implementation of the new version of the standard.

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### **Safety Data Sheet**

Clove Essential Oil

# \*Prepared according to American OSHA HazCom Standard (2012)

1	

Identification

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r rounct inclinier	
Product Name	
	Clove Essential Oil
CAS No.	84961-50-2
EC No.	N/A
Molecular Formula	C28H6oO4P2S4Zn

# Recommended use of the product and restrictions on use

Accommended use of the product and restrictions on use	
Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

# | Details of the supplier

2 ctails of the supplier	
Applicant Name	Sophix Natural
Applicant Address	Plot 9, Zone A, Liguori Street Off New Ife Road National Bus Stop Ibadan.
Applicant Post Code	
<b>Applicant Telephone</b>	+234 706 1111 838
Applicant Fax	
Applicant E-mail	sophixnatural@gmail.com
Supplier Name	Sophix Natural
Supplier Address	Plot 9, Zone A, Liguori Street Off New Ife Road National Bus Stop Ibadan.
Supplier Post Code	
Supplier Telephone	+234 706 1111 838
Supplier Fax	
Supplier E-mail	sophixnatural@gmail.com

Emergency phone number	
Emergency phone number	07061111838



Hazard identification

# Hazard classification according to GHS

According to OSHA HazCom regulations and its amendments, not classified as a hazardous

chemical. GHS Label elements		
Hazard pictograms	Not applicable	



Signal word	Not applicable
Hazard statements	
love Essential Oil	•
Hazard statements	Not applicable
Precautionary statements	
☐ Prevention	
Prevention	Not applicable
Response	
Response	Not applicable
□ Storage	
Storage	Not applicable
☐ Disposal	
Disposal	Not applicable
Physical and chemical hazards	No information available
☐ Health hazards	'
Inhaled	Inhalation of the product may produce adverse health effects or irritation of the respiratory tract following discomfort.
Ingestion	Accidental ingestion of the product may be harmful to the health of the individual.
Skin Contact	Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.
Eye	This product may cause temporary discomfort following direct contact with the eye.
Environmental hazards	
	Please refer to 12th chapter of SDS.
Composition/information on ingred	lients
Substance/mixture	Substance

Component	CAS No.	EC No.	Concentration (wt, %)
Clove Essential Oil	84961-50-2	232-293-8.	100

4 First-aid measures



Description of first aid measures	RC-1615/42		
Eye contact  Eye contact  Example of water for at least 15 minutes and consult a physician if feel uncomfortable.  No harm in general situation. First aid is not needed.  Never give anything by mouth to an unconscious person. Call a physician immediately.  Protecting of first-aiders  Protecting of first-aiders  Bourse that melical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.  Most important symptoms/effects, acute and delayed    Please see section 11.	Description of first aid measures		
Ingestion Inhalation Protecting of first-aiders  Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.  Most important symptoms/effects, acute and delayed    Please see section 11.	General advice		
Ingestion  Never give anything by mouth to an unconscious person. Call a physician immediately.  Inhalation  Protecting of first-aiders  Easure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.  Most important symptoms/effects, acute and delayed    Please see section 11.	Eye contact		
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Bost important symptoms/effects, acute and delayed   Please see section 11.	Ingestion	Never give anything by mouth to an unconscious person. Call a physician immediately.	
themselves and prevent spread of contamination.    Most important symptoms/effects, acute and delayed	Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen and consult a physician immediately.	
Indication of any immediate medical attention and special treatment needed  Treat symptomatically.  Symptoms may be delayed.  Extinguishing measures  Extinguishing media Suitable extinguishing media Use extinguishing media suitable for surrounding area.  Unsuitable extinguishing media There is no restriction on the type of extinguisher which may be used.  Specific hazards arising from the substance or mixture  Development of hazardous combustion gases or vapor possible in the event of fire.  Not considered a significant fire risk, however containers may burn.  Special protective equipment and precautions for fire-fighters  As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.  Fight fire from a safe distance, with adequate cover.  Prevent fire extinguishing water from contaminating surface water or the ground water system.  Accidental release measures  Personal precautions, protective equipment and emergency procedures  Use personal protective equipment, do not breathe gas/mist/vapour/spray.  Ensure adequate ventilation. Remove all sources of ignition.	Protecting of first-aiders		
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Ensure adequate ventilation. Remove all sources of ignition.			
Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.			



   E	RC-1615/42
1	ronmental precautions Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.
Meth	hods and materials for containment and cleaning up
1	Cut off the source of the leak as much as possible.
2	Keep leaks in a ventilated place.
3	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
4	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
5	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container.
7	Handling and storage
Prec	eautions for safe handling
1	Handling is performed in a well ventilated place.
2	Avoid contact with eyes.
Clove I	Essential Oil
3	Keep away from heat/sparks/open flames/ hot surfaces.
1 2 3	ditions for safe storage, including any incompatibilities  Keep containers tightly closed.  Keep containers in a dry, cool and well-ventilated place.  Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.
8	Exposure controls/personal protection
Cont	Occupational Exposure limit values  No relevant regulations
	Biological limit values  Biological limit values   No relevant regulations
	Monitoring methods
1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 300 series standard Determination of toxic substances in workplace air.
Engi	incering controls  Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.



3	Set up emergency exit a	nd necessary ris	k-elimination area.
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4 Handle in accordance with good industrial hygiene and safety practice.

Personal protection equipment	
General requirement	No special requirements, please see the description below.
Eye protection	In general situation, eye protection is not needed. In the production process, when contacting with vapour or dust, tightly fitting safety goggles.
Hand protection	In general situation, hand protection is not needed.
Respiratory protection	In general situation, respiratory protection is not needed. If exposure limits are exceeded or if irritation or other symptoms are experienced, wear dust proof mask or gas defence mask.
Skin and body protection	In general situation, skin and body protection are not needed.

9

Physical and chemical properties and safety characteristics

Physical and chemical properties		
Appearance	Transparent liquid to Yellowish	
Odor	Characteristic odor of Clove	
Odor threshold	No information available	
рН	No information available	
Melting point/freezing point(°C)	No information available	
Initial boiling point and boiling	N/A	
range(°C)		
Flash point(Closed cup,°C)	No information available	
Evaporation rate	No information available	
Flammability	Not flammable	
Upper/lower explosive limits[%(v/v)]	Upper limit:No information available;Lower limit:No information available	
Vapor pressure	No information available	
Vapor density(Air = 1)	No information available	
Relative density(Water=1)	No information available	
Solubility	No information available	
n-octanol/water partition coefficient	No information available	
Auto-ignition temperature(°C)	No information available	
Decomposition temperature(°C)	No information available	
Viscosity	No information available	

10 Stability and reactivity



# | Stability and reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions	No information available.
Conditions to avoid	Incompatible materials, heat, flame and spark.
Incompatible materials	No information available.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# 11 Toxicological information

# | Acute toxicity

Acute toxicity No information available

# Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP
Clove Essential Oil ext.	Not Listed	Not Listed

### Others

Clove Essential Oil , ext.(Component)				
Skin corrosion/irritation	Based on available data, the classification criteria are not met			
Serious eye damage/irritation	Based on available data, the classification criteria are not met			
Skin sensitization	Based on available data, the classification criteria are not met			
Respiratory sensitization	Based on available data, the classification criteria are not met			
Reproductive toxicity	Based on available data, the classification criteria are not met			
STOT-single exposure	Based on available data, the classification criteria are not met			



STOT-repeated exposure **Aspiration hazard** Germ cell mutagenicity Reproductive toxicity(additional)

Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met

**Ecological information** 

Acute aquatic toxicity	
Acute aquatic toxicity	No information available
Chronic aquatic toxicity	
Chronic aquatic toxicity	No information available
11 112	
Persistence and degradability	
Persistence and degradability	No information available
Bioaccumulative potential	
Bioaccumulative potential	No information available
Mobility in soil	
Mobility in soil	No information available

## Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]		
Clove Essential Oil , ext	Not available		

# Disposal considerations Disposal considerations Waste chemicals Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal. Contaminated packaging Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible. **Disposal recommendations** Refer to section waste chemicals and contaminated packaging.

Transport informa	ıtior

Label	
Transporting Label	Not applicable

#### IMDG-CODE



IMDG-CODE | NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

| ICAO/IATA-DGR

IATA-DGR NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

UN-ADR

UN-ADR | NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

**15** 

Regulatory information

#### | International chemical inventory

Component	EC	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AIICS	ENCS
	inventory								
Clove Essential Oil , ext.	×	×	×	×	×	×	×	×	×

[EC inventory] European Inventory of Existing Commercial Chemical Substances

[TSCA] United States Toxic Substances Control Act Inventory

[DSL] Canadian Domestic Substances List

[IECSC] China Inventory of Existing Chemical Substances

[NZIoC] New Zealand Inventory of Chemicals

[PICCS] Philippines Inventory of Chemicals and Chemical Substances

[KECI] Korea Existing Chemicals Inventory

[AIICS] Australian. Inventory of Industrial Chemical (AIICS)
[ENCS] Japan Inventory of Existing & New Chemical Substances

Note:

"\" Indicates that the substance included in the regulations. "\" No data or not included in the regulations.

Other information



#### Reference

- $[1] \qquad IPCS: The \ International \ Chemical \ Safety \ Cards \ (ICSC), \ website: \ http://www.ilo.org/dyn/icsc/showcard.home_{\circ}$
- [2] IARC, website: http://www.iarc.fr/。
- [3] OECD: The Global Portal to Information on Chemical Substances, website: https://www.echemportal.org/echemportal/substancesearch/index.action。
- [4] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple.
- [5] NLM: ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.
- [6] EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/ $_{\circ}$



[7] U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg。 [8] on hazard substance, website: http://gestis-en.itrust.de/。

Germany GESTIS-database

### | Abbreviations and acronyms

CAS PC-STEL PC	Chemical Abstracts Service Short 2-term exposure limit	UN OECD	The United Nations Organization for Economic Co-operation and Development
TWA	Time Weighted Average	IMDGCODI IARC	E International Maritime Dangerous Goods CODE
MAC DNEL PNEC NOEC $LC_{50}$ $LD_{50}$ $EC_{50}$ $EC_{x}$ POW BCF ED	Maximum Allowable Concentration Derived No Effect Level Predicted No Effect Concentration No Observed Effect Concentration Lethal Concentration 50% Lethal Dose 50% Effective Concentration 50% Effective Concentration X% Partition coefficient Octanol: Water	ICAO IATA ACGIH NFPA NTP PBT vPvB CMR RPE	International Agency for Research on Cancer International Civil Aviation Organization International Air Transportation Association American Conference of Governmental Industrial Hygienists National Fire Protection Association National Toxicology Program Persistent, Bioaccumulative, Toxic very Persistent, very Bioaccumulative Carcinogens, mutagens or substances toxic to reproduction Respiratory Protective Equipment
	Bioconcentration factor Endocrine disruptor		Respiratory Protective Equipment

#### Disclaimer

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