DATE OF ISSUE: 21.01.2019 VERSION: 2

MATERIAL SAFETY DATA SHEET

In accordance with Regulation (EC) No. 1907/2006

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Product name: Mandarin essential oil

Product number: BIOP021

1.2. Purpose of use: Air freshening with an evaporator.

1.3. Supplier Information: ZIN d.o.o.

Gabrje pri Ilovi Gori 15 1290 Grosuplje, Slovenija.

Supplier telephone: +386 30 919 555 **Supplier email:** infozin@gmail.com

Supplier contact person:Peter NovšakMSDS responsible person:David Šućur

VARNOSTNI INSTITUT d.o.o.

Jamova cesta 42 1000 Ljubljana

ID za DDV: SI 40440583 Tel: +386 (0) 590 19 030 Fax: +386 (0) 590 19 031 Cell: +386 (0) 41 724 746

1.4. Emergency phone (Slovenia): <u>+386 (0) 30 919 555</u> Mon – Fri from 08:00 to 19:00.

<u>112</u> – 24 hours emergency phone

2. HAZARDS IDENTIFICATION

2.1. Product classification:

In accordance with Regulation (EC) No. 1272/2008 (EU-GHS/CLP)

Flam. Liq. 3

Asp. Tox. 1

Skin Irrit. 2

Skin Sens. 1

Aquatic Acute 1

Aquatic Chronic 1

2.2. Label elements, including precautionary statements:

In accordance with Regulation (EC) No. 1272/2008 (CLP)

DATE OF ISSUE: 21.01.2019 VERSION: 2



Signal word: DANGER

Hazard statement(s): H226 Flammable liquid and vapor

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s):

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P302+P352 IF ON SKIN: Wash with plenty of water.

P501 Dispose of contents / container to authorized disposal site.

Additional hazard statements:

No additional hazard statements.

2.3. Other hazards:

No other known hazards.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENT	CONCENTRATION	CAS NUMBER	Marked in accordance
			with EC
Mandarin Essential Oil	100 %	8008-31-9	284-521-0

Country of origin: Italy

4. FIRST AID MEASURES

4.1. Description of basic first-aid measures

General advice

Consult a physician. Show them this safety data sheet.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of eye contact

DATE OF ISSUE: 21.01.2019 VERSION: 2

Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician if irritation persists.

In case of skin contact

Remove contaminated clothing. Wash skin with soap and rinse with plenty of clean water. Consult a physician if irritation persists.

If swallowed

Rinse mouth with plenty of fresh water. DO NOT induce vomiting. Seek medical advice immediately and show the label / packaging / safety data sheet to the doctor.

Other

When assessing the measures follow the H and P statements.

4.2. Most important symptoms and consequences (acute and chronic)

Based on our knowledge, the chemical, physical and toxicological properties are not fully explored.

4.3. Indications for immediate medical attention and special treatment

No data available.

5. FIRE-FIGHTING MEASURES

5.1. Suitable extinguishing media (in order of suitability)

CO2 fire extinguisher (most suitable)

Dry powder fire extinguisher

Foam fire extinguisher

Water hydrant (the least suitable).

Warning: when extinguishing with water it is necessary to use personal protective equipment and fight fire remotely due to the possibility of a rapid rise in pressure or violent reactions.

5.2. Extinguishing method:

Extinguish flames at the bottom of the burning subject. Do not target direct jets of water at the burning liquid.

5.3. Protective Equipment for Firefighters

Protective clothing and self-contained breathing apparatus.

5.4. Additional information

Avoid inhalation of vapors.

Avoid the source of fire.

Do not smoke.

In sealed containers that are exposed to heat, pressure may rise. They need to be cooled with a water spray.

6. ACCIDENTAL RELEASE MEASURES

DATE OF ISSUE: 21.01.2019 VERSION: 2

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation and direct contact with eyes or skin.

Remove all sources of ignition.

Vapors can stay at the ground.

In the event of a significant release use personal protective equipment (goggles, waterproof footwear, protective clothing).

6.2. Environmental precautions

Keep away from drains, soil, surface water and groundwater.

6.3. Methods and materials for containment and cleaning up

Remove all possible sources of ignition.

Hold down the spilling.

Soak up with inert absorbent inorganic material, sweep and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Follow the national regulations regarding the disposal of hazardous substances.

7. HANDLING AND STORAGE

7.1. Handling

Provide adequate ventilation.

Maintain good personal hygiene.

Do not eat, drink or smoke during handling.

Keep in a safe place away from children.

7.2. Storage

Store in tightly closed original container in a cool, dry, well-ventilated place.

Keep away from heat sources and protected from direct sunlight.

Keep away from ignition sources and open flames.

7.3. Packaging suitability:

Glass	YES
Painted steel / steel	YES
Aluminum	YES
HPPE	NO
F / HDPE	YES
Other plastics	NO

7.4. Shelf life of the product:

If stored under appropriate conditions, the shelf life is up to 36 months.

7.5. Fire protection

Follow protective measures to avoid static discharges in the work area.

Do not use an open flame in close proximity of working with the substance.

DATE OF ISSUE: 21.01.2019 VERSION: 2

8. PERSONAL PROTECTIVE EQUIPMENT

8.1. Respiratory Protection

Where the work process safety assessment so determines (higher volumes in the industry) use respiratory protection system - Full Face Masks with appropriate filters (filter type at least ABEK, or more powerful).

For normal household use respiratory protection is not required.

8.2. Hand Protection

Avoid any contact with skin.

Wear protective gloves. (Gloves must be designed for such use and meet the requirements of EN 374 standard)

8.3. Eye protection

Use protective glasses. (Goggles must comply with the requirements of EN 166 (EU) standards)

8.4. Body protection

In industry wear protective clothing and footwear. (Clothing must be antistatic and flame-resistant) For normal household use body protection is not required.

8.5. Workplace hygiene

After you stop handling the substance, wash hands with soap and water.

8.6. Ventilation

Ensure good ventilation at the workplace.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: Liquid

Color: Golden yellow to orange

Scent: Sweet citrus scent

pH: No data available

Melting / Freezing Point: No data available

Boiling point: 178°C **Flash point:** 56°C

Evaporation rate: No data available

Density: 0,840 to 0,855 g/ml at 20 °C

Solubility in water:InsolubleSolubility in alcohol:SolubleSolubility in plant oils:Soluble

9.2. Other safety information: No data available

DATE OF ISSUE: 21.01.2019 VERSION: 2

10. STABILITY AND REACTIVITY

10.1. Reactivity No data available

10.2. Chemical stability: No data available

10.3. Possibility of hazardous reactions: No data available

10.4. Conditions to be avoided: Heat, flames, sparks.

10.5. Incompatible materials: Strong oxidizing agents

10.6. Hazardous decomposition products: Upon combustion there may be smoke

and vapors produced: carbon monoxide, carbon dioxide and other organic compounds that

are not defined.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Skin irritation:

Serious eye damage / irritation:

Sensitization Respiratory / Skin:

Germ cell mutagenicity:

No data available

No data available

No data available

Carcinogenicity:

IARC: No part of this product has been identified by IARC as probable, possible

or proven as carcinogenic.

Reproductive toxicity:

Specific target organ Poisoning:

Aspiration hazard:

No data available

No data available

Possible undesirable health effects:

In case of inhalation: May be harmful. Can irritate the respiratory tract.

If ingested: Can be harmful.

Absorption through the skin: Can be harmful. May cause skin irritation.

Splash in the eyes: Can cause eye irritation.

Signs of exposure: Irritation, burning sensation on the skin (skin contact) or in eyes

(eye contact), shortness of breath, cough (inhalation of vapor).

12. ECOLOGICAL INFORMATION

12.1. Toxicity: No data available.

12.2. Persistence and degradability: No data available.

12.3. Bio accumulative potential: No data available.

DATE OF ISSUE: 21.01.2019 VERSION: 2

12.4. Transition through the ground: No data available.

12.5. Biodegradability: No data available.

12.6. Safety measures: Prevent contamination of soil, ground and surface

waters.

13. DISPOSAL CONSIDERATIONS

Do not discharge into drains or the environment.

Consider the environmental regulations for waste removal chemicals.

Empty containers can be returned to the supplier.

14. TRANSPORT INFORMATION:

Transport by land or by train

(ADR/RID): Class 3

Transport by ship

(IMDG): Class 3

Transport by air

(IATA): Class III

15. REGULATORY INFORMATION

Material Safety Data Sheet has been made in accordance with the requirements of the Regulation (EC) 1907/2006.

Classification and labeling is in accordance with the requirements of the CLP Regulation (Regulation (EC) no. 1272/2008).

15.1. Safety, health and environmental legislation

The Material safety data sheet has been created complied with the Slovenian Law on Safety and Health at Work (Ur. list RS št. 43/2011) - ZVZD-1.

16. OTHER INFORMATION

16.1. Additional information

Given that a user's working and other conditions are not known to us, the information in this Material safety data sheet are based on our current level of knowledge and on national and community regulations. The information contained in this document is provided without warranty, expresses or implied, regarding its correctness or accuracy.

DATE OF ISSUE: 21.01.2019 VERSION: 2

Product should not be used in any purposes other than those listed under point 1 of this Sheet without prior receipt of written handling instructions.

To take all necessary measures to comply with legal requirements and local regulations at all times is the sole responsibility of the user.

Information given in this Material safety data sheet must be regarded only as a description of the safety requirements relating to our product and not a guarantee of its properties. The producer shall not be held liable for any damage resulting from handling or from contact with the above product.