

Safety Data Sheet

Product Code: TUSA-ZKL

Product Name: Zkittles

Issue date 19-Apr-2018 Revision date 19-Apr-2018 Version 2

1. Identification of the substance | preperation | company | undertaking

Product identifier

Product name Zkittles

Other means of identification TUSA-ZKL

Product code

UN/ID no N/A Synonyms N/A

Recommended use of the chemical and restrictions on use

Recommended Use Industry Use.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

3550 W. Liberty Ste 6 Ann Arbor, MI 48103 USA

Emergency telephone number

Company Phone Number Emergency telephone ${\it Chemtrec~1-800-424-9300~Use~CHEMTREC~instead~of~Emergency~Phone~Number}$

2. Hazard Identification

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1B
Aspiration toxicity	Category 1
Flammable liquids	Category 4

Label Elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements:

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

May be fatal if swallowed and enters airways

Flammable liquid and vapor



Appearance Clear Physical state Liquid Odor Characteristic Odor

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. Keep away from flames and hot surfaces. - No smoking. Wear protective gloves/eye protection/face protection.

Precautionary Statements - Response

Specific treatment (see .? on this label).

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water and soap. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

In case of fire: Use CO2, dry chemical, or foam to extinguish.

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

Other Information

- May be harmful if swallowed
- · May be harmful in contact with skin
- · Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

97.9715 % of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

* 100% of the composition has been withheld as a trade secret.

4. First Aid Measures

Description of first aid measures

Eye Contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water. Wash off immediately with plenty of water. Wash

contaminated clothing before reuse. Consult a physician if necessary.

Inhalation Remove to fresh air. If breathing is difficult, give oxygen. Move to fresh air in case of

accidental inhalation of vapors. If not breathing, give artificial respiration.

Ingestion Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth

to an unconscious person. Do not induce vomiting without medical advice. Consult a

physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-Fighting Measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media .

Specific hazards arising from the chemical

Combustible material.

Hazardous combustion products Irritating or toxic substances may be emitted upon burning, combustion, or decomposition.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Special protective actions for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and

inhalation of vapors. Wear protective gloves/protective clothing and eye/face protection.

Wash thoroughly after handling.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information. Do not flush into surface water or

sanitary sewer system. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation, especially in confined areas. Wash thoroughly after handling. When using do not eat, drink

or smoke.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight.

Keep locked up and out of reach of children.

Incompatible materialsNone known based on information supplied.

8. Exposure Controls/Personal Protection

Control parameters

Exposure guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
beta-Pinene 127-91-3	TWA: 20 ppm	-	-
alpha-Pinene 80-56-8	TWA: 20 ppm	-	-
Ethyl acetate 141-78-6	TWA: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m³ (vacated) TWA: 400 ppm (vacated) TWA: 1400 mg/m³	IDLH: 2000 ppm TWA: 400 ppm TWA: 1400 mg/m³
delta-3-Carene 13466-78-9	TWA: 20 ppm	-	-
Isoamyl alcohol 123-51-3	STEL: 125 ppm TWA: 100 ppm	TWA: 100 ppm TWA: 360 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m³ (vacated) STEL: 125 ppm (vacated) STEL: 450 mg/m³	IDLH: 500 ppm TWA: 100 ppm TWA: 360 mg/m³ STEL: 125 ppm STEL: 450 mg/m³

Appropriate engineering controls

Engineering controls Showers

> **Evewash stations** Ventilation systems.

Individual protection measures, such as personal protective equipment

Wear safety glasses with side shields (or goggles). Avoid contact with eyes. **Eye/Face Protection**

Avoid contact with skin. Wear protective gloves and protective clothing. **Skin and Body Protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved Respiratory protection

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Ensure adequate ventilation,

especially in confined areas.

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or General hygiene considerations

smoke when using this product. When using do not eat, drink or smoke. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended. Avoid breathing (dust, vapor, mist,

gas).

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state Liquid

Appearance Clear Odor Characteristic Odor Color Colorless to Pale Yellow Odor threshold Not applicable

Property Values Remarks • Method

Not applicable Hq Melting point / freezing point Not applicable Boiling point / boiling range Flash Point

No data available 69.4 °C / 157 °F Not applicable **Evaporation Rate** Flammability (solid, gas) Not applicable

Flammability Limit in Air

Upper flammability limit: Not applicable Lower flammability limit: Not applicable Vapor pressure Not applicable Not applicable **Vapor Density** Specific gravity Not applicable Not applicable Water solubility Solubility in other solvents Not applicable Not applicable Partition coefficient **Autoignition Temperature** Not applicable Not applicable **Decomposition temperature** Kinematic viscosity No data available Dynamic viscosity Not applicable **Explosive properties** Not applicable Oxidizing properties Not applicable

Other Information

Softening point not applicable
Molecular weight Not applicable
VOC content (%) Not applicable
Density Not applicable
Bulk Density Not applicable

10. Stability and Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. Toxicological Information

Information on likely routes of exposure

Product Information

Inhalation Avoid breathing vapors or mists.

Eye Contact Avoid contact with eyes. Causes serious eye irritation.

Skin contact Avoid contact with skin. Causes skin irritation. May cause an allergic skin reaction. May be

harmful in contact with skin.

Ingestion May be harmful if swallowed. May be fatal if swallowed and enters airways.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.

Serious eye damage/eye irritation Causes serious eye irritation.

Sensitization May cause sensitization by skin contact.

Germ cell mutagenicity Not classified.

CarcinogenicityThe table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
d-Limonene		Group 2A		X
5989-27-5		Group 3		
Eugenol		Group 3		
97-53-0		•		

Legend

IARC (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans Group 3 - Not classifiable as a human carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicityThis product does not contain any known or suspected reproductive hazards above the

threshold value.

STOT - single exposure Not classified. STOT - repeated exposure Not classified.

Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown acute toxicity 97.9715 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document ...

12. Ecological Information

This product contains a chemical which is listed as a marine pollutant according to DOT.

Ecotoxicity

Toxic to aquatic life with long lasting effects

66.2289 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects No information available

13. Disposal Considerations

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and

regulations.

Contaminated packaging Do not reuse container.

14. Transport Information

DOT

UN/ID no 3082

Proper Shipping Name Environmentally Hazardous Substance, Liquid, n.o.s.

Hazard Class 9
Packing group II

Marine pollutant This product contains a chemical which is listed as a marine pollutant according to DOT.

Description (Limonene)

IATA

UN/ID no 3082

Proper Shipping Name Environmentally Hazardous Substance, liquid n.o.s.

Hazard Class 9
Packing group III

Description (Limonene)

IMDG

UN/ID no 3082

Proper Shipping Name Environmentally Hazardous Substance, liquid n.o.s.

Hazard Class 9
Packing group III

Marine pollutant This product contains a chemical which is listed as a marine pollutant according to

IMDG/IMO

Description (Limonene)

15. Regulatory Information

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health HazardYesChronic Health HazardNoFire HazardNoSudden release of pressure hazardNoReactive HazardNo

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ethyl acetate	5000 lb		RQ 5000 lb final RQ
141-78-6			RQ 2270 kg final RQ

US State Regulations

U.S. State Right-to-Know Regulations

This product contains substance(s) regulated by state right-to-know regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Rhode Island
Benzyl alcohol 100-51-6		Х	Х	
alpha-Pinene 80-56-8	X	Х	Х	
Borneol 507-70-0	X	Х	Х	
Ethyl butyrate 105-54-4	X	Х	X	
Ethyl acetate 141-78-6	X	Х	X	
Terpinolene 586-62-9	X			
Ethyl propionate 105-37-3	X	Х	Х	
Ethyl hexanoate 123-66-0		Х	Х	
Isoamyl alcohol 123-51-3	X	Х	Х	
para-Cymene 99-87-6		Х	Х	
cis-3-Hexenol 928-96-1			Х	

U.S. EPA Label information

EPA Pesticide registration number Not applicable

16. Other Information

Issue date19-Apr-2018Revision date19-Apr-2018

Revision note

No information available

Disclaimer

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. Classification and labeling according to the IFRA/IOFI Labeling Manual 2017.

End of Safety Data Sheet