



## SAFETY DATA SHEET

First release date: 08.11.2020

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### Tito Chocolate Flavor

#### 1. PRODUCT AND COMPANY IDENTIFICATION

##### 1.1 Product Identifier

**Product name:** Tito Chocolate Flavor

##### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Use of the Substance/Mixture :** Mixture of flavor materials

##### 1.3 Details of the supplier of the safety data sheet

<b>Supplier</b>	<b>Smart Kimya Tic. Dan. Ltd. Sti.</b>
<b>Address</b>	<b>10016 Sokak No:18 AOSB Cigli-Izmir / Turkey</b>
<b>Zip code</b>	<b>35620</b>
<b>Telephone number</b>	<b>+90 850 441 00 22</b>
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<b>e-mail address of person responsible for this SDS</b>	<b>sds@hammaddeler.com</b>
<b>Emergency telephone number (with hours of operation)</b>	<b>+90 850 441 00 22 Mon - Fri: 09:00-12:00 &amp; 13:00-18:00 Sat: 09:00-12:00 &amp; 13:00-16:00</b>

#### 2. HAZARDS IDENTIFICATION

##### 2.1. Classification of the substance or mixture

**Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:**

If brought into contact with the skin, the product may cause sensitisation of the skin.

Adverse physicochemical, human health and environmental effects: No other hazards

According to Regulation (EC) No 1272/2008 [CLP]

No need for classification according to GHS criteria for this product.

## 2.2. Label elements

Globally Harmonized System, EU (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

Regulation 67/548/CE Dir

### Vanilin

Description: Irritant

## 2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

See section 12 - Results of PBT and vPvB assessment.

## 3. PRODUCT INFORMATION

Chemical Name	Concentration (%)	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)
Propane-1,2-diol	75 %	CAS: 57-55-6 EC: 200-338-0	-	Classification according to GHS criteria is not required for this product.
Vanillin	1.75 - 2.5 %	CAS: 121-33-5 EC: 204-465-2	3.4.2/1 H317	May produce an allergic reaction.

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

Remove contaminated clothing.

#### General advice

No hazards which require special first aid measures. Never give anything by mouth to an unconscious person.

#### Inhalation

Remove casualty to fresh air and keep warm and at rest.

If the person cannot be removed, ventilate the premises. OBTAIN MEDICAL ATTENTION.

Loosen tight clothing such as collar, tie, belt or waistband.

**On skin contact**

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Immediately remove any contaminated clothing, shoes or stockings

**On contact with eyes:**

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

**On ingestion**

If a person vomits when lying on his back, place him in the recovery position.

Never give anything by mouth to an unconscious person.

Drink 200-300 ml of water as a precaution.

Do not induce vomiting. SEEK A MEDICAL EXAMINATION.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treatment: Symptomatic treatment (decontamination, vital functions).

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

**5. FIRE FIGHTING MEASURES**

**5.1. Extinguishing media**

**Suitable extinguishing media:**

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

**Extinguishing media which shall not be used for safety reasons:**

High volume water jet

**5.2. Special hazards arising from the substance or mixture**

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

**Specific hazards during firefighting:**

Do not use a solid water stream as it may scatter and spread fire.

Cool endangered containers with water-spray.

**5.3. Advice for firefighters**

**Special protective equipment for firefighters:**

In the event of fire, wear self-contained breathing apparatus and appropriate protective clothing

**Further information:**

In the event of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers.

Contaminated extinguishing water must be disposed of in accordance with official regulations.

Move undamaged containers from immediate hazard area if it can be done safely.

## **6. ACCIDENTAL RELEASE MEASURES**

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

#### **Personal precautions:**

Ensure adequate ventilation.

Keep people away from and upwind of spill/leak.

Handle in accordance with good industrial hygiene and safety practice.

Use a mask, protective,, safety glasses and protective clothing.

### **6.2 Environmental precautions**

#### **Environmental precautions :**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose of it following local legislation.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities if required.

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

#### **Methods for cleaning up**

**For large amounts:** Pump off product.

Sweep up or vacuum up spillage and collect in suitable container for disposal.

Wipe up with absorbent material (e.g. cloth, fleece).

**For residues:** Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations.

**Additional advice :** Suppress (knock down) gases/vapours/mists with a water spray jet

### **6.4. Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

## **7. HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the containers. Contaminated clothing should be changed before entering eating areas. Do not eat or drink while working. Store in original container.

**Advice on safe handling:** Ensure thorough ventilation of stores and work areas. For personal protection see section 8.

**Advice on protection against fire and explosion:** Take precautionary measures against static discharges. When using do not smoke.

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

#### **Requirements for storage areas and containers :**

Store in original container. Keep container tightly closed and dry; store in a cool place. Protect from air.

Protect from atmospheric humidity. Protect contents from the effects of light.

To maintain product quality, do not store in heat or direct sunlight.



**Storage stability:**

Storage temperature:  $\leq 40$  °C

The stated storage temperature should be noted.

Protect from temperatures above: 40 °C

The packed product will be damaged by high temperatures.

**Advice on common storage :** No special restrictions on storage with other products.

**7.3. Specific end use(s)**

Flavor mix

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1. Control parameters**

Components with occupational exposure limits

57-55-6: Propane-1,2-diol

25265-71-8: Oxydipropanol

PNEC

freshwater: 260 mg/l

marine water: 26 mg/l

intermittent release: 183 mg/l

STP: 20000 mg/l

sediment (freshwater): 572 mg/kg

sediment (marine water): 57.2 mg/kg

soil: 50 mg/kg

DNEL

worker:

Long-term exposure- systemic effects, Inhalation: 168 mg/m<sup>3</sup>

worker:

Long-term exposure - local effects, Inhalation: 10 mg/m<sup>3</sup>

consumer:

Long-term exposure- systemic effects, dermal: 213 mg/kg bw/day

consumer:

Long-term exposure- systemic effects, Inhalation: 50 mg/m<sup>3</sup>

consumer:

Long-term exposure- systemic effects, oral: 85 mg/kg bw/day

consumer:

Long-term exposure - local effects, Inhalation: 10 mg/m<sup>3</sup>

**Occupational Exposure Limits (OEL)**

Components with workplace control parameters

<b>Components</b>	<b>CAS-No.</b>	<b>OEL Type</b>	<b>Long term ppm</b>
Acetic acid	64-19-7	ACGIH	10

## 8.2. Exposure controls

**Engineering measures:** none

### Personal protective equipment

#### Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2).

#### Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc. Manufacturer's directions for use should be observed because of great diversity of types.

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

#### Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166).

#### Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

#### General safety and hygiene measures:

Wash hands before breaks and immediately after handling the product.

Wearing of closed work clothing is required additionally to the stated personal protection equipment.

Handle in accordance with good industrial hygiene and safety practice.

#### Protective measures:

Avoid contact with skin.

When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Form</b>	Clear Liquid	
<b>Appearance</b>	Clear, Brown (Visual)	
<b>Odour:</b>	Characteristic (Organoleptic)	
<b>Odour threshold:</b>	Not relevant (Organoleptic)	
<b>pH value:</b>	4 - 7 (20 °C)	(internal method)
<b>Melting point:</b>	-59 °C (Literature data.)	(other)
<b>Boiling point:</b>	184 °C (1,003.2 hPa)	(Directive 92/69/EEC, A.2)
<b>Flash point:</b>	104 °C	(Directive 92/69/EEC, A.9, closed cup)

<b>Evaporation rate:</b>	Value can be approximated from Henry's Law Constant or vapor pressure.	
<b>Flammability:</b>	not readily ignited	(derived from flash point)
<b>Lower explosion limit:</b>	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
<b>Upper explosion limit:</b>	For liquids not relevant for classification and labelling.	
<b>Ignition temperature:</b>	> 400 °C	(Directive 84/449/EEC, A.15)
<b>Vapour pressure:</b>	0.2 hPa (25 °C)	(Directive 92/69/EEC, A.4)
<b>Density:</b>	1.04 g/cm <sup>3</sup> (20 °C)	(Regulation 440/2008/EC, A.3) (OECD GUIDELINE 109)
<b>Relative density:</b>	1,04 at 20 °C (relation to density of water at 4°C)	(Directive 92/69/EEC, A.3)
<b>Relative vapour density (air):</b>	not applicable	
<b>Solubility in water:</b>	miscible (20 °C)	(Directive 92/69/EEC, A.6)
<b>Lipid solubility:</b>	Insoluble	(OECD GUIDELINE 105)
<b>Solubility (qualitative) solvent(s):</b>	polar solvents : soluble	
<b>Partitioning coefficient n-octanol/water (log Kow):</b>	-1.07 (20.5 °C; pH value: 6.2 - 6.4)	(Directive 92/69/EEC, A.8)
<b>Self ignition:</b>	Temperature: 20 °C not self-igniting	Test type: Spontaneous self-ignition at room-temperature.
<b>Thermal decomposition:</b>	No decomposition if correctly stored and handled.	
<b>Viscosity, dynamic:</b>	43.428 mPa.s (25 °C)	Literature data.
<b>Explosion hazard:</b>	not explosive	
<b>Fire promoting properties:</b>	not fire-propagating	
<b>Oxidizing properties:</b>	Not relevant	(Oxidizing Liquids Test Chamber)

## 9.2. Other information

<b>pKA:</b>	<b>The substance does not dissociate.</b>	
<b>Surface tension:</b>	<b>71.6 mN/m (21.5 °C; 1.01 g/l)</b>	<b>(Directive 92/69/EEC, A.5, OECD harmonized ring method)</b>
<b>Grain size distribution:</b>	<b>The substance / product is marketed or used in a non solid or granular form. Study scientifically not justified.</b>	
<b>Molar mass:</b>	<b>76.10 g/mol</b>	
<b>Substance group relevant properties:</b>	<b>Not relevant</b>	
<b>Conductivity:</b>	<b>Not relevant</b>	<b>(Conductivity meter)</b>

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

Stable under normal conditions.

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: No corrosive effect on metal.

Formation of flammable gases: Remarks: Forms no flammable gases in the presence of water., Study scientifically not justified.

### 10.2. Chemical stability

The product is stable under normal conditions if stored and handled as prescribed/indicated.

### 10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

No dangerous reaction known under conditions of normal use.

Burning produces carbon monoxide and/or carbon dioxide.

### 10.4. Conditions to avoid

Stable under normal conditions of temperature and pressure.

Avoid temperature higher than 40 degrees (> 40 °C)

Avoid humidity. Avoid daylight. Disregard of the conditions mentioned may result in undesirable decomposition reactions.

### 10.5. Incompatible materials

Substances to avoid:

zinc powder — zinc dust (pyrophoric), strong oxidizing agents, peroxides, acids, alkali metals.

### 10.6. Hazardous decomposition products

Possible decomposition products: carbonyl compounds, Dioxolan derivatives

Burning produces carbon monoxide and/or carbon dioxide.



## **11. TOXICOLOGICAL INFORMATION**

### **11.1. Information on toxicological effects**

#### **Toxicological information on main components of the mixture:**

##### **1,2-Propylene Glycol**

###### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. In animal studies the substance is virtually nontoxic after short-term inhalation.

Experimental/calculated data:

LD50 rat (oral): > 22,000 mg/kg

LC50 rabbit (by inhalation): > 317042 mg/m<sup>3</sup> 2 h

LD50 rabbit (dermal): > 2,000 mg/kg

No mortality was observed.

###### Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes. Aerosol exposure may cause temporary irritation of eyes, nose and throat.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

###### Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:

Guinea pig maximization test guinea pig: Non-sensitizing.

###### Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in studies with mammals.

###### Carcinogenicity

Assessment of carcinogenicity:

In long-term animal studies in which the substance was given in high doses by feed, a carcinogenic effect was not observed.

###### Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

###### Developmental toxicity

Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Repeated oral uptake of the substance did not cause substance-related effects.

Aspiration hazard

not applicable

Other relevant toxicity information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture. Results of the toxicological assessment:

Toxicological Information of the main substances in preparation

**Vanillin**

LD50 Oral Rat = 1580mg/kg

LD50 Skin Rabbit > 5010mg/kg

## **12. ECOLOGICAL INFORMATION**

### **12.1. Toxicity**

Adopt good working practices so that the product is not released into the environment.

Eco-toxicity:

#### **List of Eco-Toxicological properties of the components**

##### **1,2-Propylene Glycol**

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Toxicity to fish:

LC50 (96 h) 40,613 mg/l, *Oncorhynchus mykiss* (Fish test acute, static)

Aquatic invertebrates:

EC50 (48 h) 18,800 mg/l, *Mysidopsis bahia*

Aquatic plants:

EC50 (72 h) 24,200 mg/l (growth rate), *Selenastrum capricornutum* (OECD Guideline 201)

Microorganisms/Effect on activated sludge:

EC0 (18 h) > 20,000 mg/l, *Pseudomonas putida* (aquatic)

Chronic toxicity to fish:  
Study scientifically not justified.

Chronic toxicity to aquatic invertebrates:  
No observed effect concentration (7 d) 13,020 mg/l, Ceriodaphnia sp.

Assessment of terrestrial toxicity:  
Study does not need to be conducted.

Soil living organisms:  
Study scientifically not justified.

Terrestrial plants:  
Study scientifically not justified.

Other terrestrial non-mammals:  
Study scientifically not justified.

### **12.2. Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):  
Readily biodegradable (according to OECD criteria).

Elimination information:  
81.7 % CO<sub>2</sub> formation relative to the theoretical value (28 d) (OECD Guideline 301 F) (aerobic, activated sludge, domestic)

90.6 % CO<sub>2</sub> formation relative to the theoretical value (64 d) (OECD Guideline 306) (aerobic, Seawater)

### **12.3. Bioaccumulative potential**

Assessment bioaccumulation potential:  
Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

### **12.4. Mobility in soil**

Assessment transport between environmental compartments:  
Adsorption in soil: Study scientifically not justified.

### **12.5. Results of PBT and vPvB assessment**

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative). Self classification.

### **12.6. Other adverse effects**

The substance is not listed in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

### **12.7. Additional information**

Other ecotoxicological advice:  
Do not release untreated into natural waters.

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

**Product:**

Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated packaging:**

Empty remaining contents. Dispose of as unused product.

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

## 14. TRANSPORT INFORMATION

### Land transport

**ADR**

Not classified as dangerous in the meaning of transport regulations.

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

**RID**

Not classified as dangerous in the meaning of transport regulations.

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

### Inland waterway transport

**ADN**

Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

### Transport in inland waterway vessel

Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable



**Sea transport**

**IMDG**

Not classified as a dangerous good under transport regulations.

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

**Air transport**

**IATA/ICAO**

Not classified as a dangerous good under transport regulations.

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

**14.1. UN number**

Not classified as dangerous in the meaning of transport regulations.

**14.2. UN proper shipping name**

Not classified as dangerous in the meaning of transport regulations.

**14.3. Transport hazard class(es)**

Not classified as dangerous in the meaning of transport regulations.

**14.4. Packing group**

Not classified as dangerous in the meaning of transport regulations.

**14.5. Environmental hazards**

Not classified as dangerous in the meaning of transport regulations.

**14.6. Special precautions for user**

Not classified as dangerous in the meaning of transport regulations.

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

Regulation: IBC

Shipment approved: 1

Pollution name: Propylene glycol

Pollution category: Z

Ship Type: not applicable

## **15. REGULATORY INFORMATION**

### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Dir. 67/548/EEC (Classification, packaging and labeling of dangerous substances). Dir. 99/45/EEC (Classification, packaging and labeling of dangerous preparations). Dir. 98/24/EC (Risks related to chemical agents at work). Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n. 1272/2008 (CLP), Regulation (CE) n.790/2009. Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

### **15.2. Chemical Safety Assessment**

Chemical Safety Assessment: No

Product is not classified as hazardous.

## **16. OTHER INFORMATION**

Full text of R-phrases referred to under sections 2 and 3:

R43: May cause sensitization by skin contact.

Full text of H-Statements referred to under sections 2 and 3.:

H317: May cause an allergic skin reaction.

### **Advice on training:**

The user should be trained to handle the mixture/ substances with respect to: Possible hazards. See section 2.

Appropriate personal protective clothing. See section 8.

Appropriate engineering controls including the use of extraction equipment. See section 8.

First aid measures, See section 4.

Fire-fighting measures. See section 5.

Handling spillages, See section 13.

### **Further information**

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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.