Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 11/21/2017 Revision date: 11/21/2017 Version: 1.1

SECTION 1: Identification	
1.1. Identification	
Product form	: Mixture
Product name	: SNICKERDOODLE
CAS-No.	: N/A
1.2. Recommended use and restriction	s on use
No additional information available	
1.4. Emergency telephone number	
Emergency number	: Chemtrec - USA: 800-424-9300
SECTION 2: Hazard(s) identification 2.1. Classification of the substance or	
GHS-US classification	Combustible liquid
Flammable liquids Category 4 Serious eye damage/eye irritation Category 2	Combustible liquid Causes serious eye irritation
Skin sensitization, Category 1	May cause an allergic skin reaction
Carcinogenicity Category 1A	May cause cancer
2.2. GHS Label elements, including pre	ecautionary statements
GHS-US labeling	
Hazard pictograms (GHS-US)	
	GHS07 GHS08
Signal word (GHS-US)	: Danger
Hazard statements (GHS-US)	: Combustible liquid
	May cause an allergic skin reaction Causes serious eye irritation
	May cause cancer
Precautionary statements (GHS-US)	: Obtain special instructions before use.
	Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No
	smoking.
	Avoid breathing dust/fume/gas/mist/vapors/spray.
	Wash hands, forearms and face thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace
	Wear protective gloves/protective clothing/eye protection/face protection.
	If on skin: Wash with plenty of water
	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
	If exposed or concerned: Get medical advice/attention.
	Specific treatment (see supplemental first aid instruction on this label)
	If skin irritation or rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.
	Wash contaminated clothing before reuse.
	In case of fire: Use media other than water to extinguish. Store in a well-ventilated place. Keep cool.
	Store locked up.
04/02/2010	EN (English LIS) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
ETHYL VANILLIN	(CAS-No.) 121-32-4	10 - 25	Eye Irrit. 2B, H320
VANILLIN	(CAS-No.) 121-33-5	5 - 10	Eye Irrit. 2, H319
PIPERONAL	(CAS-No.) 120-57-0	1 - 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317
ETHYL MALTOL	(CAS-No.) 4940-11-8	1 - 5	Acute Tox. 4 (Oral), H302
BENZYL BENZOATE	(CAS-No.) 120-51-4	1 - 5	Acute Tox. 4 (Oral), H302
ETHYL ALCOHOL	(CAS-No.) 64-17-5	1 - 5	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 Carc. 1A, H350
DIACETYL	(CAS-No.) 431-03-8	0.1 - 1	Flam. Liq. 1, H224 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:vapour), H331 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures		
4.1. Description of first aid measures		
First-aid measures general	: IF exposed or concerned: Get medical advice/attention.	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.	
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.	
First-aid measures after eye contact	: 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.	
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell.	
4.2. Most important symptoms and effect	s (acute and delayed)	
Symptoms/effects after skin contact	: May cause an allergic skin reaction.	
Symptoms/effects after eye contact	: Eye irritation.	
4.3. Immediate medical attention and special treatment, if necessary		
Treat symptomatically.		
SECTION 5: Fire-fighting measures		
5.1. Suitable (and unsuitable) extinguishi	5.1. Suitable (and unsuitable) extinguishing media	
Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.	
5.2. Specific hazards arising from the chemical		
Fire hazard	: Combustible liquid.	
Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.	
5.3. Special protective equipment and precautions for fire-fighters		

Protection during firefighting

 Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ccording to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations		
SECTION 6: Accidental release measures		
6.1. Personal precautions, protective equipment and emergency procedures		
6.1.1. For non-emergency personnel		
Emergency procedures	: No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing dust/fume/gas/mist/vapors/spray.	
6.1.2. For emergency responders		
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".	
6.2. Environmental precautions		
Avoid release to the environment. Notify authoritie	es if product enters sewers or public waters.	
6.3. Methods and material for containment	nt and cleaning up	
Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.	
Other information	: Dispose of materials or solid residues at an authorized site.	
6.4. Reference to other sections		
For further information refer to section 13.		
SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	: Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide local exhaust or general room ventilation. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.	
Hygiene measures	: Separate working clothes from town clothes. Launder separately. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, includin		
Storage conditions	: Store in a well-ventilated place. Keep cool. Store locked up.	

SECTION 8: Exposure controls/personal protection			
3.1. Control parameters			
ETHYL VANILLIN (121-32-4)	ETHYL VANILLIN (121-32-4)		
Not applicable			
VANILLIN (121-33-5)			
Not applicable			
ETHYL MALTOL (4940-11-8)			
Not applicable			
DIACETYL (431-03-8)			
ACGIH	ACGIH TWA (ppm)	0.01 ppm	
ACGIH	ACGIH STEL (ppm)	0.02 ppm	
ACGIH	Remark (ACGIH)	Lung dam	
ETHYL ALCOHOL (64-17-5)			
ACGIH	ACGIH STEL (ppm)	1000 ppm	
ACGIH	Remark (ACGIH)	URT irr	
OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m³	
OSHA	OSHA PEL (TWA) (ppm)	1000 ppm	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

BENZYL BENZOATE (120-51-4)	
Not applicable	
PIPERONAL (120-57-0)	
Not applicable	

Appropriate engineering controls 8.2.

Appropriate engineering controls Environmental exposure controls : Ensure good ventilation of the work station.

: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Wear respiratory protection.

SECTION 9: Physical and chemical	properties		
9.1. Information on basic physical and	9.1. Information on basic physical and chemical properties		
Physical state	: Liquid		
Color	: PALE YELLOW TO YELLOW		
Odor	: CHARACTERISTIC, MATCHING RETAINER SAMPLE		
Odor threshold	: No data available		
рН	: No data available		
Melting point	: No data available		
Freezing point	: No data available		
Boiling point	: No data available		
Flash point	: 74 °C		
Relative evaporation rate (butyl acetate=1)	: No data available		
Flammability (solid, gas)	: Not applicable.		
Vapor pressure	: No data available		
Relative vapor density at 20 °C	: No data available		
Relative density	: 0.983 (0.973 - 0.993)		
Solubility	: Insoluble.		
Log Pow	: No data available		
Auto-ignition temperature	: No data available		
Decomposition temperature	: No data available		
Viscosity, kinematic	: No data available		
Viscosity, dynamic	: No data available		
Explosion limits	: No data available		
Explosive properties	: No data available		
Oxidizing properties	: No data available		
9.2. Other information			
Refractive index	: 1.476 (1.466 - 1.486)		

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECT	ION 10: Stability and reactivity		
10.1.	Reactivity		
The pro	The product is non-reactive under normal conditions of use, storage and transport.		
10.2.	Chemical stability		
Stable ι	Stable under normal conditions.		
10.3.	Possibility of hazardous reactions		
No dan	No dangerous reactions known under normal conditions of use.		
10.4.	Conditions to avoid		
Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.			
10.5.	Incompatible materials		
No addi	No additional information available		

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECT	FION 11: Toxicological information	
44.4	Information on toxical arisal offects	

11.1. Information on toxicological effects

Acute toxicity

: Not classified

ETHYL VANILLIN (121-32-4)		
ATE US (oral)	3000 mg/kg body weight	
VANILLIN (121-33-5)		
LD50 oral rat	3300 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value, Oral, 14 day(s))	
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male/female, Experimental value, Dermal, 14 day(s))	
ATE US (oral)	3300 mg/kg body weight	
ETHYL MALTOL (4940-11-8)		
LD50 oral rat	1150 mg/kg (Rat, Oral)	
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)	
ATE US (oral)	1150 mg/kg body weight	
DIACETYL (431-03-8)		
ATE US (oral)	1580 mg/kg body weight	
ATE US (gases)	700 ppmV/4h	
ATE US (vapors)	3 mg/l/4h	
ATE US (dust, mist)	0.5 mg/l/4h	
ETHYL ALCOHOL (64-17-5)		
LD50 oral rat	10740 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male/female, Experimental value, Oral)	
LD50 dermal rabbit	> 16000 mg/kg (Rabbit, Literature study, Dermal)	
LC50 inhalation rat (mg/l)	117 - 125 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Experimental value, Inhalation)	
ATE US (oral)	10740 mg/kg body weight	
BENZYL BENZOATE (120-51-4)		
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male/female, Experimental value, Oral, 14 day(s))	
LD50 dermal rabbit	> 2 ml/kg (Modification of Draize 1959 method, 4 h, Rabbit, Experimental value, Dermal)	
ATE US (oral)	1500 mg/kg body weight	
ATE US (dermal)	4000 mg/kg body weight	
PIPERONAL (120-57-0)		
LD50 oral rat	2700 mg/kg (Rat, Oral)	
LD50 dermal rat	> 5000 mg/kg (Rat, Dermal)	
ATE US (oral)	2700 mg/kg body weight	

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.
ETHYL ALCOHOL (64-17-5)	

1 - Carcinogenic to humans
: Not classified
May cause an allergic skin reaction.Eye irritation.

SECTION 12: Ecological information	1
12.1. Toxicity	
Ecology - general	 The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

VANILLIN (121-33-5)	
LC50 fish 1	57 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 Daphnia 1	36.79 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	120 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)

ETHYL ALCOHOL (64-17-5)	
LC50 fish 1	14200 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
BENZYL BENZOATE (120-51-4)	
LC50 fish 1	2.32 mg/l (EU Method C.1, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	3.09 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)

12.2. Persistence and degradability

VANILLIN (121-33-5)	
Persistence and degradability	Readily biodegradable in water.
ETHYL MALTOL (4940-11-8)	
Persistence and degradability	Biodegradability in water: no data available.
ETHYL ALCOHOL (64-17-5)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.8 - 0.967 g O ₂ /g substance
Chemical oxygen demand (COD)	1.7 g O ₂ /g substance
ThOD	2.1 g O ₂ /g substance
BOD (% of ThOD)	0.43
BENZYL BENZOATE (120-51-4)	
Persistence and degradability	Readily biodegradable in water.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

PIPERONAL (120-57-0)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
ThOD	1.71 g O ₂ /g substance

12.3. Bioaccumulative potential

VANILLIN (121-33-5)	
Log Pow	1.17 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
ETHYL MALTOL (4940-11-8)	
Bioaccumulative potential	No bioaccumulation data available.
ETHYL ALCOHOL (64-17-5)	
BCF fish 1	1 (Other, 72 h, Cyprinus carpio, Static system, Fresh water, Read-across)
Log Pow	-0.31 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.
BENZYL BENZOATE (120-51-4)	
BCF fish 1	2.286 (BCFBAF v3.00, Pisces, QSAR)
Log Pow	3.97 (Experimental value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
PIPERONAL (120-57-0)	
Log Pow	1.05
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

VANILLIN (121-33-5)	
Log Koc	3.438 (log Koc, Experimental value)
Ecology - soil	Low potential for mobility in soil.
ETHYL ALCOHOL (64-17-5)	
Surface tension	0.022 N/m (20 °C)
Ecology - soil	Highly mobile in soil.
BENZYL BENZOATE (120-51-4)	
Surface tension	0.027 N/m (210 °C)
Log Koc	3.8 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value)
Ecology - soil	Low potential for mobility in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations 13.1. Disposal methods Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT Not regulated

Transportation of Dangerous Goods

Not applicable

Transport by sea

Not applicable

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

ETHYL VANILLIN (121-32-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
VANILLIN (121-33-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
ETHYL MALTOL (4940-11-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
DIACETYL (431-03-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
ETHYL ALCOHOL (64-17-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
BENZYL BENZOATE (120-51-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
PIPERONAL (120-57-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

ETHYL VANILLIN (121-32-4)
Listed on the Canadian DSL (Domestic Substances List)
VANILLIN (121-33-5)
Listed on the Canadian DSL (Domestic Substances List)
ETHYL MALTOL (4940-11-8)
Listed on the Canadian DSL (Domestic Substances List)
DIACETYL (431-03-8)
Listed on the Canadian DSL (Domestic Substances List)
ETHYL ALCOHOL (64-17-5)
Listed on the Canadian DSL (Domestic Substances List)
BENZYL BENZOATE (120-51-4)
Listed on the Canadian DSL (Domestic Substances List)
PIPERONAL (120-57-0)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations No additional information available

National regulations

ETHYL ALCOHOL (64-17-5)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DIACETYL (431-03-8)	
U.S New Jersey - Right to Know Hazardous Substance List	
ETHYL ALCOHOL (64-17-5)	
U.S New Jersey - Right to Know Hazardous Substance List	

SECTION 16: Other information

Revision date

: 11/21/2017

Full text of H-phrases:

H224	Extremely flammable liquid and vapour
H225	Highly flammable liquid and vapour
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H331	Toxic if inhaled
H350	May cause cancer
H373	May cause damage to organs through prolonged or repeated exposure

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product