According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

050001 106594 ART BUTTERSCOTCH TOFFEE © Firmenich product

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

Ingredient for use in products that may be ingested. Not for personal use in this form or concentration. Intended to be used in the manufacture of products for consumers.

1.3 Details of the supplier of the safety data sheet

Mr. Thomas Sulich Firmenich Inc. P.O. Box 5880 Princeton - New Jersey 08543 - USA thomas.sulich@firmenich.com Tel.:+1.609.452.10.00 - Fax.:+1.609.275.72.38

1.4 Emergency telephone number

FOR INFORMATION OR IN AN EMERGENCY CALL CHEMTREC @ 1-800-424-9300 or 1-703-527-3887.

2 HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture
- 2.1.1 According to Regulation HCS 2012

Skin Sensitization - Cat. 1	H317
Eye Irritation - Cat.2A	H319
WARNING: CONTAINS VOLATILE FLAVORING CHEMICALS; BREATHING THESE CHEMICALS	USH99
IN THE WORKPLACE MAY LEAD TO SEVERE LUNG DAMAGE.	7

2.1.3 Additional information

Full text of listed statements : See section 16

2.2 Label elements

Hazard pictograms:

According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.



Signal Word: Warning

Hazard Statements:

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

Precautionary Statements:

······································	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	lenses, if present and easy to do. Continue rinsing.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.

2.3 Other hazards

WARNING: CONTAINS VOLATILE FLAVORING CHEMICALS; BREATHING THESE CHEMICALS IN THE WORKPLACE MAY LEAD TO SEVERE LUNG DAMAGE. No data available at this time.

<u>3 COMPOSITION/INFORMATION ON INGREDIENTS</u>

Mixture of aromatic substances.

Contains :

2.5 - 5.0%	Classification: Xi - R36
Benzaldehyde, 4-	GHS Classification:
Hydroxy-3-Methoxy-	Eye Irritation - Cat.2A [H319]
N° CAS : 0000121-33-5	
N° EINECS: 204-465-2	

1.0 - 2.5%	Classification: - Not Classified
Benzaldehyde, 3-Ethoxy-	GHS Classification:
4-Hydroxy-	Eye Irritation - Cat.2A [H319]
N° CAS : 0000121-32-4	
N° EINECS: 204-464-7	

According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

1.0 - 2.5% Ethyl Acetate N° CAS : 0000141-78-6 N° EINECS: 205-500-4	Classification: F Xi - R36,R67,R11 GHS Classification: Specific Target Organ Toxicity - Single Exposure - Cat. 3 Narcotic Effects [H336] Eye Irritation - Cat.2A [H319] Flammable Liquid - Cat. 2 [H225]
1.0 - 2.5% Ethyl Lactate N° CAS : 0000097-64-3 N° EINECS: 202-598-0	Classification: Xi - R37,R41,R10 GHS Classification: Eye Damage - Cat.1 [H318] Specific Target Organ Toxicity - Single Exposure - Cat. 3 Respiratory Irritation [H335] Flammable Liquid - Cat. 3 [H226]
0.1 - 0.5% 2-Butanone, 3-Hydroxy- N° CAS : 0000513-86-0 N° EINECS: 208-174-1	Classification: - R10 GHS Classification: Flammable Liquid - Cat. 3 [H226] WARNING: CONTAINS VOLATILE FLAVORING CHEMICALS; BREATHING THESE CHEMICALS IN THE WORKPLACE MAY LEAD TO SEVERE LUNG DAMAGE. [USH997]
0.1 - 0.5% Butanal, 3-Methyl- N° CAS : 0000590-86-3 N° EINECS: 209-691-5	Classification: F Xi - R36/37,R43,R11 GHS Classification: Skin Sensitization - Cat. 1 [H317] Specific Target Organ Toxicity - Single Exposure - Cat. 3 Respiratory Irritation [H335] Eye Irritation - Cat.2A [H319] Flammable Liquid - Cat. 2 [H225]
0.1 - 0.5% 2h-1-Benzopyran-2-One, 3,4-Dihydro- N° CAS : 0000119-84-6 N° EINECS: 204-354-9	Classification: Xn - R22,R43 GHS Classification: Skin Sensitization - Cat. 1B [H317] Acute Toxicity (oral) - Cat. 4 [H302]
0 - 0.1% 2-Propenal, 3-Phenyl- N° CAS : 0000104-55-2 N° EINECS: 203-213-9	Classification: Xn - R21,R38,R43 GHS Classification: Skin Sensitization - Cat. 1A [H317] Acute Toxicity (dermal) - Cat. 4 [H312] Skin Irritation - Cat. 2 [H315] Eye Irritation - Cat.2A [H319]

4 FIRST-AID MEASURES

4.1 Description of first aid measures

General information:

As in all cases of potential poisoning, Obtain medical advice immediately.

In case of eye contact:

According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

In the event of contact with the eyes, irrigate with water for at least 15 minutes; obtain medical advice if irritation persists.

In case of inhalation:

In the event of exposure to vapors, immediately remove from the area to a fresh air environment. Individuals showing evidence of inhalation exposure should be taken to an uncontaminated area. Obtain medical advice immediately.

In case of skin contact:

Remove contaminated clothes. Wash skin with large volumes of water. If irritation persists, or any sign of tissue damage is apparent, obtain medical advice immediately.

In case of ingestion:

In the event of accidental ingestion, rinse mouth with water. Give up to one tumbler (half pint) of milk or water. Obtain medical advise immediately.

Do not induce vomiting, obtain medical advise immediately.

- 4.2 Most important symptoms and effects, both acute and delayed No information available on the product itself.
- 4.3 Indication of immediate medical attention and special treatment needed None known.

5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

In the event of fire, adequate extinguishers should be used. Avoid inhalation of smoke and fumes. In case of insufficient ventilation, wear suitable respiratory equipment. Cool fire exposed containers with water spray. Extinguishing media: Foam, carbon dioxide or dry chemical.

- 5.2 Special hazard arising from the substance or mixture Closed containers may build up pressure if exposed to heat (fire).
- 5.3 Advice for fire-fighters No specific advice.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Adequate protective gloves should be worn when handling spillages. No smoking. Avoid naked flames or other potential sources of ignition (eg. electrical equipment).

Avoid skin contamination and inhalation of vapour.

Individual washing routines should be followed after any potential contact.

Ensure adequate ventilation in working areas following accidental releases.

For emergency personnel: Apply the same recommendations as section 6.1

6.2 Environmental precautions

According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

Do not discharge directly into drains, air, into soil or into the aquatic environment.

6.3 Methods and material for containment and cleaning up

For containment:

Small spills can be wiped up with a cloth or paper. Standard absorbents can be used (saw dust, sand, vermiculite). Wear rubber gloves. Avoid contact with skin. If skin contact occurs, wash liberally with soap and water.

For cleaning-up: Spillages should be disposed of in accordance with Governmental Regulations.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Wear adequate protective gloves protection and eye/face protection. No smoking. Avoid any sources of ignition. Avoid exposing to high temperature during processing. Do not ingest or apply to the skin as such. Good personal washing routines should be followed. Maintain adequate local and general ventilation where product is handled.

7.1.1 Protective measures

Keep strict control of dust accumulation to a minimum.Maintain adequate local and general ventilation where product is handled.Avoid any sources of ignition.

7.1.2 Advice on general occupational hygiene

Good personal washing routines should be followed.

7.2 Conditions for safe storage, including any incompatibilities

It is good general practice to store in closed, preferably full, containers away from heat sources, and protected from extremes of temperature. Do not re-use the empty container. Respect generals rules for compatibility storage.

7.3 Specific end use(s) Not available at this time.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

0000141-78-6 : ETHYL ACETATE (All forms) NIOSH Recommended Exposure Limits (1994-JUN) TWA (1994-JUN) : 400 ppm , 10 hours (All forms) TWA (1994-JUN) : 1400 mg/m3 , 10 hours (All forms)

0000141-78-6 : Ethyl acetate (All forms) ACGIH Threshold Limit Values (1996-MAY) TWA (1996-MAY) : 400 ppm , 8 hours (All forms) TWA (1996-MAY) : 1440 mg/m3 , 8 hours (All forms)

0000141-78-6 : Ethyl acetate (All forms)



According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

OSHA Permissible Exposure Limits (1989-MAR) TWA (1989-MAR) : 400 ppm , 8 hours (All forms) TWA (1989-MAR) : 1400 mg/m3 , 8 hours (All forms)

0000141-78-6 : Ethyl acetate (All forms)

OSHA Permissible Exposure Limits, Table Z-1 Limits for Air Contaminants (1993-JUN) TWA (1993-JUN) : 400 ppm , 8 hours (All forms) TWA (1993-JUN) : 1400 mg/m3 , 8 hours (All forms)

0000121-33-5 : Vanillin (All forms) AIHA Workplace Environmental Exposure Levels (2009-JAN) TWA (2009-JAN) : 10 mg/m3 , 8 hours (All forms)

8.2 Exposure controls

Avoid exposing to high temperature during processing. Maintain adequate local and general ventilation where product is handled.

8.2.1 Appropriate engineering controls

Maintain adequate local and general ventilation where product is handled and dispensed.

8.2.2 Environmental exposure controls

Not available at this time. Minimize release to the environment.

8.3 Personal protection

Respiratory protection: Breathing of the vapors or dust particles may be hazardous. In the absence of appropriate engineering controls such as spot ventilation, ventilated enclosures, etc., workers should avail themselves of the appropriate NIOSH approved respiratory protection.

Hand protection: Adequate Protective Gloves should be worn.

Eye protection: Adequate safety glasses should be used.

Skin protection: Wear protective clothing, overall if necessary to limit the odour contamination of personal clothing. Individual washing routines should be followed after any potential contact.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance : Colour : Odour :	LIQUID DARK BROWN Characteristic strong odour according to the commercial description of the substance.
pH : Melting point/range (°C) : Initial boiling point/range (°C) : Flash point (closed cup) : Evaporation rate : Flammability (solid/gas) : Upper/lower flammability or explosive limits :	Not available Not available Not available > 142 Fahrenheit (> 61 Centigrade) Not available Not available Not available

According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

Vapor pressure (At 20°C in mm Hg)	
Calculated vapor pressure (At 20°C	3.5
in mm Hg): Vapour density :	Not available
Relative density (d 20/20) :	1.026 - 1.074
Water solubility (20°C) :	Not applicable
Partition coef. (n-octanol/water) :	Not applicable
Auto-ignition temperature (°C):	Not available Not available
Decomposition temperature : Viscosity :	Not available
Explosive properties :	Not available
Oxidizing properties :	Not available
VOC Content less than:	8%

10 STABILITY AND REACTIVITY

10.1 Reactivity

No reaction known with water.

10.2 Chemical stability

Presents no significant reactivity hazard. Normally stable even at elevated temperatures and pressures. Avoid temperatures above or near to the flash point. Not pyrophoric nor reactive with water. Does not undergo explosive decomposition, is shock stable, and is not an oxygen donor. Does not form explosive mixtures with other organic materials. Will not undergo hazardous exothermic polymerization.

10.3 Possibility of hazardous reactions

Not known.

10.4 Conditions to avoid

Avoid temperatures above or at least 5 °C below flash point for any flammable liquids. Do not heat closed containers. Avoid contact with oxidizing agents.

10.5 Incompatible materials

Avoid strong oxidizing agents.

10.6 Hazardous decomposition products

Contact with water or storage under recommended conditions for one year should not produce dangerous decomposition products.

11 TOXICOLOGICAL INFORMATION

This mixture has not been subjected to toxicological testing as an entity. According to available data on the constituents the health classification criteria are met.

12 ECOLOGICAL INFORMATION

This mixture has not been subjected to ecotoxicological testing as an entity. According to available data on the constituents the environmental classification criteria are not met.



According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

13 DISPOSAL CONSIDERATIONS

Empty all containers using a two stage pumping system or draining until no free liquid remains Minimize release to the environment.

14 TRANSPORT INFORMATION

In case of accidental spillage or fire during transport, refer to instructions given under points 5, 6, 7 and 8 above.

14.1 UNO

UN-No: Proper Shipping Name:	Not regulated N/A
Class:	
Packing Group:	

14.2 Land transport (ADR/RID)

UN-No:	Not regulated
Proper Shipping Name:	N/A
Class:	
Packing group:	

14.3 Sea transport (IMDG-Code)

UN-No:	Not regulated
Proper Shipping Name:	N/A
Class:	
Packing group:	

14.4 Air transport (ICAO-IATA)

UN-No:	Not regulated
Proper Shipping Name:	N/A
Class:	
Packing group:	

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

NFPA Hazard Classification

Health:	2
Flammability:	2
Reactivity:	0

This mixture contains no toxic chemical or chemicals subject to reporting requirements of Section 313 of Title III of the Superfund Amendements and Reauthorization Act of 1986 and 29 CFR Part 1910.1200.

15.2 Chemical Safety Assessment

According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

No data available at this time.

16 OTHER INFORMATION

16.1 Revisions

01-Dec-2010: Version 6.1 - First version validated for publication 04-May-2012: Version 6.2 - Updates to sections 1, 2, 3, 8.3, 11, 12, 16. 20-Apr-2013: Version 6.3 - Updates to sections 1, 2, 3, 8.1, 14, 16. 07-July-2014: Version 6.4- Updates to section 2, 3, 14, 16.

16.2 Key literature references

RIFM database OECD SIDS EU IUCLID Supplier information

16.3 Full text of phrases used under section 2

H317 H319	May cause an allergic skin reaction. Causes serious eye irritation.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P337	If eye irritation persists:

16.4 Full text of phrases used under section 3

H335 H312 USH997	May cause respiratory irritation. Harmful in contact with skin. WARNING: CONTAINS VOLATILE FLAVORING CHEMICALS; BREATHING THESE CHEMICALS IN THE WORKPLACE MAY LEAD TO SEVERE LUNG DAMAGE.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H318	Causes serious eye damage.
H302	Harmful if swallowed.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
R10 R11	Flammable. Highly flammable.

According to Regulation HCS 2012

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

R36	Irritating to eyes.
R37	Irritating to respiratory system.
R41	Risk of serious damage to eyes.
R67	Vapours may cause drowsiness and dizziness.

We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Firmenich, it is the user's obligation to determine conditions of safe use of the product.

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