Printing date 06/03/2015 Reviewed on 06/03/2015

## 1 Identification

· Product i dentifier

. Trade name: CHOCOLATE FLAVOR N&A TYPE

· Article number: 3226715121

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

No further relevant information available.

· Application of the substance / the mixture Flavoring a gent

· Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Frutarom USA Inc.

10139 Commerce Park Drive

Cincinnati, OH 45246

· Information department: Quality Assurance Department

· Emergency telephone number:

In Case Of Emergency In USA Contact CHEMTRAK 001-800-424-9300

Dial 1-800-424-9300 1-702-648-5887

Medical Emergency: 1-800-526-7147/513-870-4900 General Information: 1-800-526-7147/513-870-4900

In Case of Emergency In USA Contact CHEMTREK: 1-800-424-9300

### 2 Haz ard(s) i dentification

· Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

· **Storage:** Cool and dry in well-closed original packaging

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Irritating to eyes.



Highly flammable

Highly flammable.

Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of international guidelines.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- · Label elements
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

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# Safety Data Sheet acc. to OSHA HCS

Printing date 06/03/2015 Reviewed on 06/03/2015

#### Trade name: CHOCOLATE FLAVOR N&A TYPE

· Hazard pictograms





GHS02

GHS07

- · Signal word Danger
- · Hazard statements

Highly flammable liquid and vapor.

Causes serious eve irritation.

Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

*Use explosion-proof electrical/ventilating/lighting/equipment.* 

Wear protective gloves / eye protection / face protection.

*Wear eye protection / face protection.* 

Ground/bond container and receiving equipment.

Keep container tightly closed.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash thoroughly after handling.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

In case of fire: Use for extinction: CO2, powder or water spray.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
- · NFPA ratings (scale 0 4)



Health = 1Fire = 3Reactivity = 0

. HMIS-ratings (scale 0 - 4)



Health = 1Fire = 3

Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- . **PBT**: Not applicable.
- · vPvB: Not applicable.



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Trade name: CHOCOLATE FLAVOR N&A TYPE

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### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

. Dangerou	s components:	
64-17-5	Eth anol	25-50%
100-51-6	Benzyl Alcohol	2.5-10%
57-55-6	Propylene Glycol	2.5-10%

### 4 First-aid measures

- · Description of first aid measures
- · After inhalation: Remove to fresh air. If experiencing breathing difficulty, seek medical attention.
- After skin contact: Wash exposed area with a mild soap and water. If irritation occurs, seek medical attention.
- · After eve contact:
- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- . Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

### 5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
  - CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

#### 6 Acci dental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

USA



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Trade name: CHOCOLATE FLAVOR N&A TYPE

(Contd. of page 3)

## 7 Handling and storage

- · Handling:
- Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · Conditions for safe storage, including any incompatibilities
- . Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Keep receptade tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

### 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters

Componen ts					

### 64-17-5 Eth anol

PEL	Long-term value: 1900 mg/m³, 1000 ppm
REL	Long-term value: 1900 mg/m³, 1000 ppm
TLV	Short-term value: 1880 mg/m³, 1000 ppm

#### 100-51-6 Benzyl Alcohol

WEEL Long-term value: 10 ppm

### 57-55-6 Propylene Glycol

WEEL Long-term value: 10 mg/m³

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Use of dust-mask recommended when handling open packaging

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# Safety Data Sheet acc. to OSHA HCS

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#### Trade name: CHOCOLATE FLAVOR N&A TYPE

· Protection of hands:



Protecti ve gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

Information on basic physical and	chemical properties
General Information	1 1
Appearance:	
Form:	Liquid
Color:	Amber to Brown
Odor:	Characteri stic
Odour th reshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	78 °C (172 °F)
Flash point:	18 °C (64 °F)
Flamma bility (solid, gaseous):	Not applicable.
Ignition temperature:	425 °C (797 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vap mixtures are possible.

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### Trade name: CHOCOLATE FLAVOR N&A TYPE

	(Contd. of page 5
· Explosion limits: Lower: Upper:	1.3 Vol % 15.0 Vol %
· Vapor pressure at 20 °C (68 °F):	59 hPa (44 mm Hg)
· Density at 20°C (68°F): · Relative density · Vapour density · Evaporation rate	0.956 g/cm³ (7.978 lbs/gal) Not determined. Not determined. Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
. Viscosity: Dynamic: Kinematic:	Not determined. Not determined.
· Solvent content: Organic solvents: VOC content:	43.5 % 43.5 % 416.0 g/l / 3.47 lb/gl
Solids content: Other information	65.7 % No further relevant information available.

## 10 Stability and reactivity

- Reactivity
- . Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

# 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

#### . LD/LC 50 values that are relevant for classification:

### ATE (A cute Toxicity E stimates)

Oral	LD50	12300 mg/kg (Rat)
Derma l	LD50	14286 mg/kg (Rabbit)
Inhalative	L C50/4 h	110 mg/l

- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: Irritating effect.

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#### Trade name: CHOCOLATE FLAVOR N&A TYPE

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- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

- · Carcino genic categories
- · IARC (International Agency for Research on Cancer)

64-17-5 Ethanol

1

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

## 12 Ecological information

- . Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environm ental systems:
- · Bioaccum ulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- . General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### 13 Di sposal considerations

- · Waste treatment methods
- . Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agent: Water, if necessary with deansing agents.

### 14 Transport information

· DOT, IMDG	UN1197
<ul><li>UN proper shipping name</li><li>DOT</li><li>ADR</li></ul>	Extracts, flavoring, liquid 1197 Extracts, flavoring, liquid

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Trade name: CHOCOLATE FLAVOR N&A TYPE

(Contd. of page 7) · IMDG, IATA EXTRACTS, FLAVOURING, LIQUID Transport hazard class(es) DOT, IMDG, IATA 3 Flamma ble liquids Class . Packing group DOT, IMDG, IATA  $I\!\!I$ · Environmental hazards: · Marine pollutant: No · Special precautions for user Warning: Flammable liquids Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable. . UN "Model Regulation": UN1197, Extracts, flavoring, liquid, 3, II

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

- · TSCA (Toxic Substances Control Act):
  - 64-17-5 Ethanol
  - 100-51-6 Benzyl Alcohol
  - 57-55-6 Propylene Glycol
- · Proposition 65
- . Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

. Chemicals known to cause developmental toxicity:

64-17-5 Ethanol

- · Carcino genic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

. TLV (Threshold Limit Value established by ACGIH)

64-17-5 Ethanol

A3

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Trade name: CHOCOLATE FLAVOR N&A TYPE

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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

### 16 Oth er in formation

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Contact: Quality Assurance Department
- · Date of preparation / last revision 06/03/2015 / -
- · Abbreviations and acronyms:

ADR: Acc ord européen sur le transport des marchandises dangereuses par Route (Europe an Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

I ATA: International Air Transport Association

A CGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFP A: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Let hal concentration, 50 percent

LD50: Lethal dose, 50 percent

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

USA