Safety data sheet

according to Regulation EC 1907/2006 (REACH) and subsequent amendment Regulation EU 830/2015

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name:	Flavorah Rainier Cherry

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

Description/Use	Flavouring		
Intended use:	Industrial	Professional	Consumer
Flavor concentrate		X	X

1.3. Details of the supplier of the Safety Data Sheet

Name:	Flavorah
Full address:	McKnight Standard LLC 17404 147th St. SE Ste. N Monroe, WA 98272
District and Country:	United States of America - 18443588273
E-mail address of the competent person responsible for the Safety Data Sheet:	service@flavorah.com

1.4. Emergency telephone number

For urgent inquiries refer to:	18443588273; service@flavorah.com; NHS 111

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a Safety Data Sheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flam. Liq. 3	H226	Flammable liquid and vapour

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements

Hazard pictograms:

Signal words: Warning	
Hazard statements:	
H226	Flammable liquid and vapour
Precautionary statements:	
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/lighting/ ...] equipment.
P242	Use non-sparking tools.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P370+P378	In case of fire: Use ... to extinguish.
P501	Dispose of contents/container in accordance with local regulations.

Contains: -

Product not intended for uses provided for by Dir.2004/42/CE.

2.3. Other hazards

On the basis fo available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Contains:

The full wording of hazard (H) phrases is given in section 16 of the sheet.

Identification	**%**	**Classification 1272/2008 (CLP)**
Benzaldehyde	10.68 < x < 13.35	Acute Tox. 4 H302
CAS: 100-52-7		
EC: 202-860-4		
INDEX: 605-012-00-5		
REACH: 01-2119455540-44-XXXX		

Identification	**%**	**Classification 1272/2008 (CLP)**
Isoamyl acetate	1.60 < x < 2.00	Flam. Liq. 3 H226
CAS: 123-92-2		

EC: 204-662-3		
INDEX: 607-130-00-2		
REACH: 01-2119548408-32-XXXX		
Identification	**%**	**Classification 1272/2008 (CLP)**
Ethyl butyrate	1.60 < x < 2.00	Skin Irrit. 2 H315; Eye Irrit. 2 H319; STOT SE 3 H335; Flam. Liq. 3 H226
CAS: 105-54-4		
EC: 203-306-4		
INDEX: -		
REACH: -		
Identification	**%**	**Classification 1272/2008 (CLP)**
Ethyl acetate	1.60 < x < 2.00	Eye Irrit. 2 H319; STOT SE 3 H336; Flam. Liq. 2 H225
CAS: 141-78-6		
EC: 205-500-4		
INDEX: 607-022-00-5		
REACH: 01-2119475103-46-XXXX		

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using again.

INHALATION: Remove to open air. If the subject stops breathing, administer artifical respiration. Get medical advice/attentionn immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorized by a doctor.

PROTECTION MEASURES FOR FIRST RESPONDERS: Concerning PPE suitable for first aid operations, please refer to section 8.2 of this safety data sheet.

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

Specific information on symptoms and effects caused by the product are unknown. For symptoms and effects caused by the contained substances, see chap. 11.

4.3. Indication of any immediate medical attention and special treatments needed

Information not available

SECTION 5. Firefighting measures

5.1. Exstinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use water jets. The water is not effective to extinguish a fire, however it can be used to cool the closed containers next to the flame and prevent explosion.

5.2. Special hazards arising from the sustance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breath combustion products

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of sustances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from drying into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL EQUIPMENTS FOR FIREFIGHTERS

Normal firefighting clothing i.e. fire kit (EN 469), gloves (EN 659) and boots (HO specification A29 and A30) in combination with self contained open circuit positive pressure compressed air breathing apparatus (EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the Safety Data Sheet) to prevent any contamination of a skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergecny procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or can into contact with surface water or ground water

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. If the product is flammable, use explosion-proof equipment. Evaluate the compatibility of the container to be used for, by checking Section 10. Absorb the reminder with inher absorbent material. Make sure the leakage site is well aired. Contaminated material should be disposed in compliance with the provisions set forth in point 13.

6.4. References to other sections

Any information on personal portection and disposal in given in Sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material Safety Data Sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage including any incompatibility

Store only in the original container. Store the containers sealed, in a well ventilaed place, away from direct sunlight. Keep containers away from any incompatible material, see Section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Substance name: **Ethanol**

CAS: 64-17-5

DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available

PNEC (Predicted No-effect Concentration): Not available

WORKPLACE EXPOSURE LIMIT (WEL)

Country: GB (EH40/2005)

Route of exposure: -

8 h [mg/m^3]: 1920

8 h [ppm]: 1000

Short term (15 minutes) [mg/m^3]: -

Short term (15 minutes) [ppm]: -

Substance name: **Ethyl acetate**

CAS: 141-78-6

DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available

PNEC (Predicted No-effect Concentration): Not available

WORKPLACE EXPOSURE LIMIT (WEL)

Country: GB (EH40/2005)

Route of exposure: -

8 h [mg/m^3]: -

8 h [ppm]: 200

Short term (15 minutes) [mg/m^3]: -

Short term (15 minutes) [ppm]: 400

OCCUPATIONAL EXPOSURE LIMIT (OEL)/ INDICATIVE OEL (IOELV)

Country: EU (Directive 2006/15/EC and subsequent amendments)

Route of exposure: -
8 h [mg/m^3]: 734
8 h [ppm]: 200
Short term (15 minutes) [mg/m^3]: 1468
Short term (15 minutes) [ppm]: 400
Substance name: **Isoamyl acetate**
CAS: 123-92-2
DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available
PNEC (Predicted No-effect Concentration): Not available
OCCUPATIONAL EXPOSURE LIMIT (OEL)/ INDICATIVE OEL (IOELV)
Country: EU (Directive 2006/15/EC and subsequent amendments)
Route of exposure: -
8 h [mg/m^3]: 270
8 h [ppm]: 50
Short term (15 minutes) [mg/m^3]: 540
Short term (15 minutes) [ppm]: 100
Substance name: **Propylene glycol**
CAS: 57-55-6
DNEL/DMEL (Derived No-effect level/Derived minimal effect level): Not available
PNEC (Predicted No-effect Concentration): Not available
WORKPLACE EXPOSURE LIMIT (WEL)
Country: GB (EH40/2005)
Route of exposure: -
8 h [mg/m^3]: total vapour and particulates 474; particulates 10
8 h [ppm]: total vapour and particulates 150; particulates -
Short term (15 minutes) [mg/m^3]: total vapour and particulates -; particulates -
Short term (15 minutes) [ppm]: total vapour and particulates -; particulates -

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration. Personal protective equipment must be CE marked, showing that it complies with applicable standards.

HAND PROTECTION
Protect hands with category III work gloves (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category I professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).
In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, a mask which class must be chosen according to the limit of use concentrations. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Various
Odour:	Characteristic
Odour threshold :	Not available
pH:	3.00 – 6.00
Melting point / freezing point:	Not available
Initial boiling point:	Not available
Boiling range:	Not available
Flash point:	38.78 °C
Evaporation rate:	Not available
Flammability (solid, gas):	Not applicable
Lower inflammability limit:	Not available
Upper inflammability limit:	Not available
Lower explosive limit:	Not available
Upper explosive limit:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	1.0 – 1.15 g/cm3
Solubility:	Not available
Partitiion coefficient: n-octano/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

Explosive properties:	Not available
Oxidising properties:	Not available

9.2. Other information

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reactions with other substances in normal conditions of use

10.2. Chemical stability

The produc is stable in normal conditions of use ad storage

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeabe in normal conditions of use and storage

10.4. Condition to avoid

None in particular. However, the usual precautions used for chemical products should be respected

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Information not available

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification. It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Acute toxicity

Does not meet the classification criteria for this hazard class

ATE_{mix} (Inhalation - vapours): not classified (no significant component)
ATE_{mix} (Inhalation - mists / powders) of the mixtures: not classified (no significant component)
ATE_{mix} (Oral): 7488.38 mg/kg
ATE_{mix} (Dermal) of the mixtures: not classified (no significant component)

Benzaldehyde
LD50 Oral 1000 mg/kgbw (Guinea pig)
LD50 Ip 1020 mg/kg bw (Mouse)
LD50 Dermal >1250 mg/kg bw (Rabbit)
LD50 Sc 5000 mg/kg bw (Rabbit)

Isoamyl acetate
LD50 Skin >5000 mg/kg bw (Rabbit)
LD50 ip 819 mg/kg bw (Rat)

Ethyl acetate
LD50 Oral 1150 mg/kg bw (Rat)

Skin corrosion / Skin irritation

Does not meet the classification criteria for this hazard class

Serious eye damage / Irritation

Does not meet the classification criteria for this hazard class

Respiratory or skin sensitisation

Does not meet the classification criteria for this hazard class

Germ cell mutagenicity

Does not meet the classification criteria for this hazard class

Carcinogenity

Does not meet the classification criteria for this hazard class

Reproductive toxicity

Does not meet the classification criteria for this hazard class

STOT – Single exposure

Does not meet the classification criteria for this hazard class

STOT – Repeated exposure

Does not meet the classification criteria for this hazard class

Aspiration toxicity

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

Not being data available, use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Not determined

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Not determined

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0.1%

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1 UN number

ADR-RID-ADN-IMDG-IATA/IACAO: UN 1197

14. 2 UN proper shipping name

ADR-RID-ADN-IMDG-IATA/IACAO: EXTRACTS, FLAVOURING, LIQUID

14.3 Transport hazard class(es)

ADR-RID-ADN-IMDG-IATA/IACAO: 3 (Flammable liquids)

14.4 Packing group

ADR-RID-ADN-IMDG-IATA/IACAO: III

14.5 Environmental hazards

ADR-RID-ADN-IMDG-IATA/IACAO: NO

14.6 Special precautions for user

The transport of dangerous goods, including loading and unloading, must be carried out by persons who have received the necessary training as provided for in modal regulations.

If any substances have leaked and been spilled in a vehicle or container, it may not be reused until after it has been thoroughly cleaned and, if necessary, disinfected or decontaminated. Any other goods and articles carried in the same vehicle or container shall be examined for possible contamination.

When these goods are loaded in close proximity to packages which are known to contain foodstuffs, other objects of consumption or animal food, it must be separated from these latter.

During the carriage of these substances, stops for service requirements shall as far as possible not be made near inhabited places or frequented places. A longer stop near such places is permissible only with the consent of the competent authorities.

The transport of dangerous goods, including loading and unloading, must be carried out by persons who have received the necessary training as provided for in modal regulations.

The load compartment of closed vehicles carrying liquids having a flash-point of not more than 60 °C, shall not be entered by persons carrying portable lighting apparatus other than those so designed and constructed that they cannot ignite any flammable vapours may have penetrated into the interior of the vehicle.

The provisions of Chapter 8.4 concerning the supervision of vehicles shall apply when the total mass or volume of these substances in the vehicle exceeds 10 000 kg as packaged goods or 3 000 litres in tanks.

ADR / RID:	Hazard identification number: 30	Limited Quantities: 5 litres	Tunnel restriction code: (D/E)
IMDG:	EmS: F-E, S-D	Limited Quantities: 5 litres	Stowage category: A
IATA:		Limited Quantities: 1 L	Packing instruction: Y341
	Passenger:	Total net quantity per package: 5 L	Packing instruction: 353
	Cargo:	Total net quantity per package: 60 L	Packing instruction: 364

14.7 Transport in bulk according to Annx II of MARPOL and the IBC Code

Information not relevant

SECTION 15. Regulatory information

15.1. Safety, health and environmental regulatios/legislation specific for the substance or mixture

Seveso Category - Directive 2012/18/EC:

P5c FLAMMABLE LIQUIDS Flammable liquids, Categories 2 or 3 not covered by P5a and P5b

Restriction relating to the product or contained substnace pursuant to Annex XVII to EC Regolation 1907/2006

Product	
Point	3
Point	40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0.1%
Substances subject to authorization (Annex XIV REACH)
None
Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012
None
Substances subject to the Rotterdam Convention
None
Substances subject to the StockholmConvention
None
Healthcare controls
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:	
Acute Tox. 4	Acute toxicity, category 4
Eye Irrit. 2	Eye irritation, category 2
Flam. Liq. 2	Flammable liquid, category 2
Flam. Liq. 3	Flammable liquid, category 3
STOT SE 3	Specific target organ toxicity (single exposure). Category 3
Skin Irrit. 2	Skin Irritation, category 2
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness

Classification according to Regulation (EC) Nr. 1272/2008	**Classification procedure**
Flam. Liq. 3	Calculation method

Legend:
- ADR: European agreement concerning the carriage of dangerous goods by road

- ADN: Internations inland waterways code for dangerous goods
- ATE: Acute toxicity estimate
- ATEmix: Acute toxicity estimate of mixture
- CAS NUMBER: Chemical abstract service number
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived no effect level
- DMEL: Derived minimal effect level
- EmS: Emergency schedule
- GHS: Globally harmonized system of classification and labeling of chemicals
- IATA DGR: International air transport association dangerous goods regulation
- IMDG: International maritime code for dangerous goods
- IMO: International maritime organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- IOELV: Indicative OEL value
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic compounds
- vPvB: Very persistent and very bioaccumulative as for REACH regulation
- WGK: Water hazard classes (German)
- WEL: Workplace Exposure Limit

General bibliography:

1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
2. Regulation (EU) 453/2010 of the European Parliament
3. Regulation (EU) 830/2015 of the European Parliament
4. Regulation (EC) 1272/2008 of the European Parliament (CLP)
5. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
7. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
8. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
9. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
10. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
11. Regulation (EU) 1221/2015 (VII Atp. CLP) of the European Parliament
12. Regulation (EU) 918/2016 (VIII Atp. CLP) of the European Parliament
13. Regulation (EU) 1179/2016 (IX Atp. CLP) of the European Parliament
14. Regulation (EU) 776/2017 (X Atp. CLP) of the European Parliament
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- Website ECHA agency

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.