SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	BANANA FL N&A TYPE
Registration number	-
Synonyms	None.
Product code	CA1019F
Issue date	30-November-2015
Version number	03
Revision date	12-July-2016
Supersedes date	19-May-2016

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

Identified uses	Use in accordance with supplier's recommendations.
Uses advised against	No other uses are advised.

1.3. Details of the supplier of the safety data sheet

Supplier

Company name	Capella Flavors, Inc.	
Address	6155 Corte Del Cedro Carlsbad, CA 92011 United States	
Division		
Telephone	Office	760 650-0200
	Fax	n/a
e-mail	customerservice@capellaflavors.com	
Contact person	Not available.	

1.4. Emergency telephone number	CHEMTREC	800-424-9300
	INTERNATIONAL	703-741-5500

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

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

Classification	R10, R52/53

The full text for all R-phrases is displayed in section 16.

Classification according to Regulation (EC) No 1272/2008 as amended

Physical hazards		
Flammable liquids	Category 3	H226 - Flammable liquid and vapour.
Environmental hazards		
Hazardous to the aquatic environment, long-term aquatic hazard	Category 3	H412 - Harmful to aquatic life with long lasting effects.

Hazard summary

Physical hazards	Flammable.
Health hazards	Not classified for health hazards. However, occupational exposure to the mixture or substance(s) may cause adverse health effects.
Environmental hazards	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Specific hazards	None known.
Main symptoms	Direct contact with eyes may cause temporary irritation.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms



Signal word Warning

Hazard statements

H226 Flammable liquid and vapour.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P273 Avoid release to the environment.

P280 Wear protective gloves/eye protection/face protection.

Response

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P370 + P378 In case of fire: Use appropriate media to extinguish.

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information 5,33 % of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. EUH208 - Contains VANILLIN #234, EUGENOL NAT #114 NOP. May produce an allergic reaction.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP	5 - < 10	123-92-2 204-662-3	-	607-130-00-2	#
Classification: **DSD:** R10, R66					C
CLP: Flam. Liq. 3;H226					C
ETHYL ALCOHOL 190 PROOF NAT NFI	1-<3	64-17-5 200-578-6	-	603-002-00-5	
Classification: **DSD:** F;R11, Xi;R36					
CLP: Flam. Liq. 2;H225, Eye Irrit. 2;H319, Aquatic Chronic 2;H411					
ISOAMYL ISOVALERATE #29	1-<3	659-70-1 211-536-1	-	-	
Classification: **DSD:** N;R51/53					
CLP: Aquatic Chronic 2;H411					
TRADE SECRET	<1	Proprietary -	-	-	
Classification: **DSD:** Xn;R22, Xi;R36, R43, R52/53					
CLP: Acute Tox. 4;H302, Skin Sens. 1;H317, Eye Irrit. 2;H319, Aquatic Chronic 3;H412					

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	INDEX No.	Notes
TRADE SECRET	< 1	Proprietary -	-	-	

Classification: **DSD:** Xn;R22, Xi;R36, R43, R52/53

CLP: Acute Tox. 4;H302, Skin Sens. 1;H317, Eye Irrit. 2;H319, Aquatic Chronic 3;H412

Other components below reportable levels 90 - 100

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.
DSD: Directive 67/548/EEC.
M: M-factor
vPvB: very persistent and very bioaccumulative substance.
PBT: persistent, bioaccumulative and toxic substance.
#: This substance has been assigned Community workplace exposure limit(s).

Composition comments The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Take off immediately all contaminated clothing. Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed Direct contact with eyes may cause temporary irritation.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

SECTION 5: Firefighting measures

General fire hazards Flammable liquid and vapour.

5.1. Extinguishing media

Suitable extinguishing media Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.

For emergency responders Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up.

6.2. Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

6.3. Methods and material for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil etc) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use water spray to reduce vapours or divert vapour cloud drift. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	Ceiling	3800 mg/m3
		2000 ppm
	MAK	1900 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	MAK	270 mg/m3
		50 ppm
	STEL	540 mg/m3
		100 ppm

Belgium. Exposure Limit Values.

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	1907 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	1000 mg/m3

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	MAC	1900 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	MAC	270 mg/m3
		50 ppm
	STEL	540 mg/m3
		100 ppm
PROPYLENE GLYCOL NOM NFI (CAS 57-55-6)	MAC	10 mg/m3
		150 ppm

Czech Republic. OELs. Government Decree 361

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	Ceiling	3000 mg/m3
	TWA	1000 mg/m3
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	Ceiling	540 mg/m3
	TWA	270 mg/m3

Denmark. Exposure Limit Values

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TLV	1900 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	TLV	271 mg/m3
		50 ppm

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	1900 mg/m3
		1000 ppm
	TWA	1000 mg/m3
		500 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	2500 mg/m3
		1300 ppm

Finland. Workplace Exposure Limits

Components	Type	Value
	TWA	1900 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	VLE	9500 mg/m3
		5000 ppm
	VME	1900 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	VLE	540 mg/m3
		100 ppm
	VME	270 mg/m3
		50 ppm

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	960 mg/m3
		500 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	TWA	270 mg/m3
		50 ppm

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	AGW	960 mg/m3
		500 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	AGW	270 mg/m3
		50 ppm

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	800 mg/m3
		150 ppm
	TWA	530 mg/m3
		100 ppm

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	7600 mg/m3
	TWA	1900 mg/m3

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
	TWA	270 mg/m3

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	266 mg/m3
		50 ppm

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	1000 ppm	
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	520 mg/m3	
		100 ppm	
	TWA	260 mg/m3	
		50 ppm	
PROPYLENE GLYCOL NOM NFI (CAS 57-55-6)	TWA	470 mg/m3	Total vapour and particulates.
		10 mg/m3	Particulate.
		150 ppm	Total vapour and particulates.

Italy. Occupational Exposure Limits

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	1000 mg/m3
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm
PROPYLENE GLYCOL NOM NFI (CAS 57-55-6)	TWA	7 mg/m3

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	1900 mg/m3
		1000 ppm

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value
	TWA	1000 mg/m3
		500 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm
PROPYLENE GLYCOL NOM NFI (CAS 57-55-6)	TWA	7 mg/m3

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Malta. OELs. Occupational Exposure Limit Values (L.N. 227. of Occupational Health and Safety Authority Act (CAP. 424), Schedules I and V)

Components	Type	Value
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Netherlands. OELs (binding)

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	1900 mg/m3
	TWA	260 mg/m3
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	530 mg/m3

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TLV	950 mg/m3
		500 ppm
PROPYLENE GLYCOL NOM NFI (CAS 57-55-6)	TLV	79 mg/m3
		25 ppm

Poland. MACs. Minister of Labour and Social Policy Regarding Maximum Allowable Concentrations and Intensities in Working Environment

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	1900 mg/m3
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	500 mg/m3
	TWA	250 mg/m3

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value
	TWA	270 mg/m3
		50 ppm

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	100 ppm
	TWA	50 ppm

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	9500 mg/m3
		5000 ppm
	TWA	1900 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	1920 mg/m3
		1000 ppm
	TWA	960 mg/m3
		500 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	TWA	270 mg/m3
		50 ppm

Spain. Occupational Exposure Limits

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	1910 mg/m3
		1000 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Sweden. Occupational Exposure Limit Values

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	1900 mg/m3
		1000 ppm
	TWA	1000 mg/m3
		500 ppm
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	STEL	1920 mg/m3
		1000 ppm
	TWA	960 mg/m3
		500 ppm

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)	TWA	1920 mg/m3	
		1000 ppm	
PROPYLENE GLYCOL NOM NFI (CAS 57-55-6)	TWA	474 mg/m3	Total vapour and particulates.
		10 mg/m3	Particulate.
		150 ppm	Total vapour and particulates.

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)	STEL	540 mg/m3
		100 ppm
	TWA	270 mg/m3
		50 ppm

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no-effect level (DNEL) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

- Hand protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

- Other Wear suitable protective clothing.

Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
Environmental exposure controls	Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Colour	Not available.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	-78,5 °C (-109,3 °F) estimated
Initial boiling point and boiling range	142,5 °C (288,5 °F) estimated
Flash point	52,4 °C (126,3 °F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	0,58 hPa estimated
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	371,11 °C (700 °F) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

9.2. Other information

Refractive index	1,415 - 1,445
Specific gravity	1 - 1,03

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
10.5. Incompatible materials	Nitrates.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation May cause allergy or asthma symptoms or breathing difficulties if inhaled. Prolonged inhalation may be harmful.

Skin contact May cause an allergic skin reaction.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on toxicological effects

Acute toxicity No data available.

Skin corrosion/irritation Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye irritation Due to partial or complete lack of data the classification is not possible.

Respiratory sensitisation Due to partial or complete lack of data the classification is not possible.

Skin sensitisation Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity Due to partial or complete lack of data the classification is not possible.

Carcinogenicity Due to partial or complete lack of data the classification is not possible.

IARC Monographs. Overall Evaluation of Carcinogenicity

TRADE SECRET (CAS Proprietary)	3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - single exposure Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure Due to partial or complete lack of data the classification is not possible.

Aspiration hazard Due to partial or complete lack of data the classification is not possible.

Mixture versus substance information No information available.

Other information May cause allergic respiratory and skin reactions.

SECTION 12: Ecological information

12.1. Toxicity Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability No data is available on the degradability of this product.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

ETHYL ALCOHOL 190 PROOF NAT NFI	-0,31
TRADE SECRET	1,37
	2,27

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment Not available.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. UN number	UN1197
14.2. UN proper shipping name	EXTRACTS, FLAVOURING, LIQUID
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
Hazard No. (ADR)	30
Tunnel restriction code	D/E
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

RID

14.1. UN number	UN1197
14.2. UN proper shipping name	EXTRACTS, FLAVOURING, LIQUID
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

ADN

14.1. UN number	UN1197
14.2. UN proper shipping name	Extracts, Flavouring, Liquid
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
Label(s)	3
14.4. Packing group	III
14.5. Environmental hazards	No.
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IATA

14.1. UN number	UN1197
14.2. UN proper shipping name	Extracts, flavouring, liquid
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	No.
ERG Code	3L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.

IMDG

14.1. UN number	UN1197

14.2. UN proper shipping name	EXTRACTS, FLAVOURING, LIQUID
14.3. Transport hazard class(es)	
Class	3
Subsidiary risk	-
14.4. Packing group	III
14.5. Environmental hazards	
Marine pollutant	No.
EmS	F-E, S-D
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.

ADN; ADR; IATA; IMDG; RID



SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I, as amended

Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended

Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended

Not listed.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding, as amended

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances

ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended

ETHYL ALCOHOL 190 PROOF NAT NFI (CAS 64-17-5)
ISOAMYL ACETATE - SINGLE ISOMER #93 NOP (CAS 123-92-2)

Directive 94/33/EC on the protection of young people at work, as amended

Not listed.

Other regulations The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations Not available.

References Not available.

Information on evaluation method leading to the classification of mixture The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any statements or R-phrases and H-statements under Sections 2 to 15

R10 Flammable.
R11 Highly flammable.
R22 Harmful if swallowed.
R36 Irritating to eyes.
R43 May cause sensitisation by skin contact.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R66 Repeated exposure may cause skin dryness or cracking.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

Revision information None.

Training information Follow training instructions when handling this material.

Disclaimer Capella Flavors, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.