SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: VAN EXT IMIT CLEAR

Other means of identification

SDS number: 000000064721
Pack Codes 930618, 900057995

Recommended use and restriction on use

Recommended use: Food Ingredient
Restrictions on use: For Manufacturing Use Only

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: McCormick and Company, Inc
Address: 24 Schilling Road, Suite 1
Hunt Valley, Maryland 21031
USA

Telephone: (410) 771-7500
Fax: (410) 527-6442

Emergency telephone number: 1-800-424-9300 (Chemtrec - North America)
001-703-527-3887 (Chemtrec - International)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids	Category 3

Health Hazards

Acute toxicity (Inhalation - vapor)	Category 4
Serious Eye Damage/Eye Irritation	Category 2A

Unknown toxicity - Health

Acute toxicity, inhalation, dust or mist	13.64 %

Label Elements

Hazard Symbol:

Signal Word:	Warning
Hazard Statement:	Flammable liquid and vapor. Harmful if inhaled. Causes serious eye irritation.
Precautionary Statements	
Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical equipment. Use non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling.
Response:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Call a POISON CENTER/doctor if you feel unwell. In case of fire: Use alcohol resistant foam to extinguish. Use carbon dioxide to extinguish. Use dry chemical powder to extinguish. Use water to extinguish.
Storage:	Store in a well-ventilated place. Keep cool.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):	None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Ethyl Alcohol	No data available.	64-17-5	10 - <20%
Vanillin	No data available.	121-33-5	0.1 - <1%
Trade Secret	No data available.	Trade Secret	0 - <0.1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Trade secret information: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

Inhalation: Move to fresh air.

Skin Contact: Get medical attention if symptoms occur. Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

Ingestion: Rinse mouth thoroughly.

Personal Protection for First-aid Responders: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Most important symptoms and effects, both acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Get medical attention if symptoms occur.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Water spray, fog, CO2, dry chemical, or alcohol resistant foam. Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	Avoid water in straight hose stream; will scatter and spread fire.
Special hazards arising from the substance or mixture:	Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.
Accidental release measures:	Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.
Methods and material for containment and cleaning up:	Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal. In case of leakage, eliminate all ignition sources.
Environmental Precautions:	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	No data available.

Safe handling advice: Avoid contact with eyes. Wash hands thoroughly after handling. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. EMPTY CONTAINER WARNING: Empty containers may retain residue (including vapors) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with government regulations.

Contact avoidance measures: No data available.

Storage

Safe storage conditions: Store in a well-ventilated place. Store in a cool place.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters
Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Ethyl Alcohol	IDLH	3,300 ppm	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	LEL	3.3 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	AN ESL	1,880 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL	1,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	10,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	18,800 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL	1,880 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL	1,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	18,800 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended

	ST ESL		10,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	PEL	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	1,000 ppm	1,900 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA PEL	1,000 ppm	1,900 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	TWA	1,000 ppm	1,900 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	STEL	1,000 ppm		US. ACGIH Threshold Limit Values, as amended
Trade Secret	STEL	125 ppm	450 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	REL	100 ppm	360 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	TWA PEL	100 ppm	360 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	PEL	100 ppm	360 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
	TWA	100 ppm		US. ACGIH Threshold Limit Values, as amended
	TWA	100 ppm	360 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	125 ppm		US. ACGIH Threshold Limit Values, as amended
	STEL	125 ppm	450 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	STEL	125 ppm	450 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	TWA	100 ppm	360 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	AN ESL		73 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL		20 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	STEL	125 ppm	450 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
	ST ESL		150 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL		42 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	LEL		1.2 %	US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended
	IDLH	500 ppm		US. NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values
No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

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

Skin Protection

Hand Protection: No data available.

Skin and Body Protection: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Avoid contact with eyes. Observe good industrial hygiene practices. When using do not smoke.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	
Physical state:	liquid
Form:	Clear Liquid
Color:	Colorless clear
Odor:	Characteristic
Odor Threshold:	No data available.
Freezing point:	No data available.
Boiling Point:	187 °F/86 °C
Flammability:	No data available.
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	115.00 °F/46.11 °C
Self Ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	2.99
Viscosity	
Dynamic viscosity:	No data available.
Kinematic viscosity:	0.96 mm2/s (104 °F/40 °C)

Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	The product is soluble in water.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	0.969 (32 °F/0 °C)
Density:	0.9809 g/cm3
Bulk density:	No data available.
Relative vapor density:	No data available.
Particle characteristics	
Particle Size:	No data available.
Particle Size Distribution:	No data available.
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available.
Crystallinity:	No data available.
Surface treatment:	No data available.

Other information

Refractive Index	1.3439 68 °F/20 °C

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Heat, sparks, flames.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No data available.

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure

Inhalation:	No data available.

Skin Contact: No data available.

Eye contact: Causes serious eye irritation.

Ingestion: No data available.

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 21,869.1 mg/kg

Components:

Ethyl Alcohol	LD 50 (Rat): 7,060 mg/kg Supporting study LD 50 (Mouse): 3,450 mg/kg Supporting study LD 50 (Mouse): 8,300 mg/kg Key study LD 50 (Guinea pig): 5,560 mg/kg Supporting study LD 50 (Rat): 12,400 mg/kg Supporting study LD 50 (Rat): 10,470 mg/kg Key study LD 50 (Rat): 7,060 mg/kg Supporting study LD 50 (Monkey): 6,000 mg/kg Supporting study LD 50 (Mouse): 9,500 mg/kg Supporting study LD 50 (Rat): 12,640 mg/kg Supporting study LD Lo (Cat): 6,000 mg/kg Supporting study LD 50 (Rat): 11,850 mg/kg Supporting study LD Lo (Rabbit): 7,000 mg/kg Supporting study LD 50 (Rat): 10,600 mg/kg Supporting study LD 50 (Rat): 7,692 mg/kg Supporting study LD 50 (Rat): 16,710 mg/kg Supporting study LD 50 (Rat): 2,769 mg/kg LD 0 (Rat): 2,528 mg/kg LD 50 (Rat): 15,010 mg/kg Key study LD 50 (Monkey): 7,000 - 9,000 mg/kg
Vanillin	LD 50 (Rat): 4,600 mg/kg disregarded study LD 50 (Rat): 4,333 mg/kg disregarded study LD 50 (Rat): 3,830 mg/kg Key study LD 50 (Rat): 3,978 mg/kg Key study

Trade Secret	LD 50 (Rat): 4,015 mg/kg Supporting study LD 50 (Rabbit): 3.4 g/kg LD 50 (Rat): 4,610 mg/kg Supporting study LD 50 (Rat): 3,488 mg/kg Supporting study LD 50 (Rabbit): 3,438 mg/kg Supporting study LD 50 (Rat): 1,300 mg/kg Supporting study LD 50 (Rat): 4,000 mg/kg Supporting study LD 50 (Rat): 3,900 mg/kg Supporting study LD 50 (Rat): 5,726 mg/kg Weight of evidence LD 50 (Rat): 3,645 mg/kg LD 50 (Rat): 3,936 mg/kg LD 50 (Mouse): 3,000 mg/kg LD 50 (Rat): 3,030 mg/kg LD 50 (Rat): 5,000 mg/kg Weight of evidence LD 50 (Rat): 4,172 mg/kg LD 50 (Rat): 2,200 mg/kg LD 50 (Rat): 2,690 mg/kg LD 50 (Rat): 5,000 mg/kg Supporting study

Dermal

Product:	Not classified for acute toxicity based on available data.
Components:	
Ethyl Alcohol	LD 50 (Rabbit): 17,100 mg/kg Read-across from supporting substance (structural analogue or surrogate), Supporting study
Vanillin	LD 50 (Rat): > 2,000 mg/kg Experimental result, Key study
Trade Secret	LD 50 (Rabbit): 3,970 mg/kg LD 50 (Rabbit): 3,216 mg/kg Experimental result, Key study

Inhalation

Product:	ATEmix: 10.8 mg/l
Components:	
Ethyl Alcohol	LC 50 (Mouse, 4 h): 0.039 g/m3 LC 50 (Rat, 10 h): 20000 ppm LC 50 (Cat, 6 h): 43.68 mg/l Inhalation LC 50 (Mouse, 134 min): 79.43 mg/l Inhalation LC 50 (Rat, 6 h): 54.8 mg/l 2 = reliable with restrictions; Vapor LC 50 (Rat, 4 h): 115.9 mg/l 2 = reliable with restrictions; Vapor LC 50 (Rat, 4 h): 128.2 mg/l 2 = reliable with restrictions; Vapor LC 50 (Rat, 4 h): 133.8 mg/l 2 = reliable with restrictions; Vapor LC 50 (Rat, 4 h): 130.7 mg/l 2 = reliable with restrictions; Vapor LC 50 (Rat, 6 h): 52.9 mg/l 2 = reliable with restrictions; Vapor LC 50 (Mouse, 4 h): 39 mg/l 4 = not assignable; Inhalation LC 50 (Mouse, 24 h): 38 mg/l 4 = not assignable; Inhalation LC 50 (Rat, 4 h): 124.7 mg/l 2 = reliable with restrictions; Vapor LC 50 (Rat, 6 h): 87.5 mg/l 2 = reliable with restrictions; Vapor LC 50 (Rat, 4 h): 116.9 mg/l 2 = reliable with restrictions; Vapor LC 50 (Mouse, 60 min): 60000 ppm 2 = reliable with restrictions; Vapor LC 50 (Rat, 6 h): 92.6 mg/l 2 = reliable with restrictions; Vapor LC 50 (Cat, 45 h): 85.41 mg/l Inhalation LC 50 (Rat, 6 h): 51.3 mg/l 2 = reliable with restrictions; Vapor LC 50 (Rat, 6 h): 82.1 mg/l 2 = reliable with restrictions; Vapor
Vanillin	LC 50 (Rat, 4 h): 41.7 mg/m3 3 = not reliable; Vapor
Trade Secret	LC 50 (Mouse, 6 h): 14 mg/l 2 = reliable with restrictions; Aerosol LC 50 (Rat, 6 h): 14 mg/l 2 = reliable with restrictions; Aerosol

Repeated dose toxicity

Product:	No data available.
Components:	
Ethyl Alcohol	NOAEL (Rat(Female, Male), Inhalation, 4 Weeks): >= 6,130 ppm(m) Inhalation Experimental result, Supporting study NOAEL (Mouse(Female, Male), Inhalation, 7,202 - 7,373 h): 0.13 mg/l Inhalation Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study LOAEL (Monkey, Inhalation, 7 - 29 Months): 0.13 mg/l Inhalation Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study LOAEL (Rat(Female, Male), Inhalation, 7,318 - 7,496 h): 1.3 mg/l Inhalation Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study NOAEL (Rat(Female, Male), Inhalation): 6.66 mg/l Inhalation Read-across from supporting substance (structural analogue or surrogate), Weight of Evidence study
Vanillin	NOAEL (Rat, Inhalation): 0.0005 mg/l Inhalation Experimental result, Not specified LOAEL (Rat, Inhalation): 0.0015 mg/l Inhalation Experimental result, Not specified NOAEL (Rat(Female, Male), Oral, 2 yr): >= 20,000 ppm(m) Oral Experimental result, Weight of Evidence study NOAEL (Rat(Female, Male), Oral, 13 Weeks): > 10,000 ppm(m) Oral Experimental result, Weight of Evidence study NOAEL (Rat(Female, Male), Oral, 27 - 28 Weeks): >= 1,000 ppm(m) Oral Experimental result, Weight of Evidence study
Trade Secret	NOAEL (Rat(Female, Male), Inhalation): >= 6,400 mg/m3 Inhalation Experimental result, Key study NOAEL (Rat(Female, Male), Oral, 14 d): 250 mg/kg Oral Experimental result, Not specified NOAEL (Rat(Male), Oral, 3 - 17 Weeks): 500 mg/kg Oral Experimental result, Supporting study NOAEL (Rat(Male), Oral, 3 Months): 1,250 mg/kg Oral Experimental result, Key study NOAEL (Rat(female), Oral, 42 - 53 d): 300 mg/kg Oral Experimental result, Supporting study

Skin Corrosion/Irritation

Product:	No data available.
Components:	
Ethyl Alcohol	in vivo (Rabbit): not irritating (but reversibility not established due to short observation period) , 24 - 72 h in vivo (Human): Not irritant , 4 h in vivo (Rabbit): ambiguous , 24 - 72 h in vivo (Rabbit): Slightly irritating , 2 - 4 d in vivo (Rabbit): Moderately irritating , 24 - 72 h in vivo (Rabbit): Not irritant , 24 - 72 h in vivo (Human): slightly irritating under extreme repeat dose situations
Vanillin	in vivo (Rabbit): Not irritant , 24 h in vivo (Rat): Not irritant , 24 - 72 h
Trade Secret	in vivo (Rabbit): Irritating , 24 - 72 h

Serious Eye Damage/Eye Irritation

Product:	No data available.

Components:

Ethyl Alcohol	Category III in vivo Rabbit: EU
	Category III in vivo Rabbit: EU
	Category III in vivo Rabbit: EU
	Category III in vivo Rabbit: EU
	Category III in vivo Rabbit: EU
	Category III in vivo Rabbit: EU
	Category 2A in vivo Rabbit, 24 - 72 hrs: EU
	Not irritant in vivo Rabbit, 24 hrs: EU
	Not irritant in vivo Rabbit, 1 - 72 hrs: EU
	Not irritant in vivo Rabbit, 72 hrs: EU
	Not irritant in vivo Rabbit, 24 - 72 hrs:
	Category 2A in vivo Rabbit, 24 - 72 hrs: EU
	Not irritant in vivo Rabbit, 24 - 72 hrs: EU
	Not irritant in vivo Rabbit, 96 hrs: EU
	Not irritant in vivo Rabbit, 24 - 72 hrs:
	Not irritant in vivo Rabbit, 96 hrs: EU
	Not irritant in vivo Rabbit, 48 hrs: EU
	Not irritant in vivo Rabbit, 24 hrs: EU
	Not irritant in vivo Rabbit, 24 - 72 hrs: EU
	Not irritant in vivo Rabbit, 48 hrs: EU
	Not irritant in vivo Rabbit, 24 - 48 hrs: EU
	Not irritant in vivo Rabbit, 24 - 72 hrs: EU
	Not irritant in vivo Rabbit, 1 hrs: EU
	Not irritant in vivo Rabbit, 24 - 48 hrs: EU
	Not irritant in vivo Rabbit, 1 - 24 hrs: EU
	Not irritant in vivo Rabbit, 1 hrs: EU
	Category 2A in vivo Rabbit, 24 - 72 hrs: EU
	Category 2A in vivo Rabbit, 24 - 72 hrs: EU
	Not irritant in vivo Rabbit, 24 - 72 hrs:
	Not irritant in vivo Rabbit, 72 - 96 hrs: EU
	Not irritant in vivo Rabbit, 24 - 72 hrs:
	Not irritant in vivo Rabbit, 24 hrs:
	Not irritant in vivo Rabbit, 24 hrs: EU
	Not irritant in vivo Rabbit, 24 - 72 hrs: EU
Vanillin	Irritating in vivo Rabbit, 24 - 72 hrs: EU
	Irritating in vivo Rabbit, 24 - 72 hrs: EU
	Irritating in vivo Rabbit, 24 - 72 hrs: EU
Trade Secret	No data available.

Respiratory or Skin Sensitization

Product: No data available.

Components:

Ethyl Alcohol	Skin sensitization:, in vivo (Guinea pig): Non sensitising
	Skin sensitization:, in vivo (Mouse): Non sensitising
Vanillin	Skin sensitization:, in vivo (Mouse): Non sensitising
	Skin sensitization:, in vivo (Guinea pig): Non sensitising
	Skin sensitization:, in vivo (Guinea pig): ambiguous
	Skin sensitization:, in vivo (Guinea pig): Non sensitising
	Skin sensitization:, in vivo (Guinea pig): not possible
Trade Secret	Skin sensitization:, in vivo (Guinea pig): ambiguous
	Skin sensitization:, in vivo (Guinea pig): Non sensitising

Carcinogenicity

Product: No data available.

Components:

Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:
No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

In vivo

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Reproductive toxicity

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Aspiration Hazard

Product:	No data available.
Components:	

Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Information on health hazards

Other hazards

Product: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Components:

Ethyl Alcohol	NOAEL (Oncorhynchus mykiss, 96 h): 7,900 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 50 (Oncorhynchus mykiss, 24 h): 11,200 mg/l Experimental result, Supporting study
Vanillin	LC 50 (Fathead minnow (Pimephales promelas), 48 h): 97 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 72 h): 112 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 72 h): 116 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 72 h): 121 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 72 h): 88 mg/l Mortality
Trade Secret	NOAEL (Oncorhynchus mykiss, 96 h): 160 mg/l Experimental result, Key study LC 50 (Oncorhynchus mykiss, 96 h): 700 mg/l Experimental result, Key study LC 100 (Oncorhynchus mykiss, 96 h): < 1,000 mg/l Experimental result, Key study LC 0 (Oncorhynchus mykiss, 96 h): < 400 mg/l Experimental result, Key study

Aquatic Invertebrates

Product: No data available.

Components:

Ethyl Alcohol	LC 50 (Brachionus plicatilis, 24 h): 35.4 g/l experimental result Experimental result, Supporting study LC 50 (Palaemonetes sp., 96 h): > 250 mg/l EC 50 (Daphnia obtusa, 48 h): 22,200 mg/l read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Supporting study EC 50 (Daphnia magna, 1 d): 2,500 mg/l experimental result Experimental result, Supporting study LC 50 (Planorbella trivolvis, 96 h): > 100 mg/l experimental result Experimental result, Supporting study
Vanillin	EC 50 (Daphnia magna, 48 h): 48.1 mg/l Not specified, Not specified EC 50 (Daphnia magna, 48 h): 36.79 mg/l experimental result Experimental result, Key study EC 50 (Daphnia magna, 48 h): 180 mg/l experimental result Experimental result, Not specified NOAEL (Daphnia magna, 48 h): 26.8 mg/l experimental result Experimental

	result, Key study
Trade Secret	EC 100 (Daphnia magna, 48 h): 580 mg/l experimental result Experimental result, Key study EC 100 (Daphnia magna, 24 h): 580 mg/l experimental result Experimental result, Key study ED 0 (Daphnia magna, 48 h): 100 mg/l experimental result Experimental result, Key study ED 0 (Daphnia magna, 24 h): 180 mg/l experimental result Experimental result, Key study EC 50 (Daphnia magna, 24 h): 320 mg/l experimental result Experimental result, Key study

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Toxicity to microorganisms

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
Ethyl Alcohol	LOAEL (Oryzias latipes): 7,900 mg/l (Static) read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Supporting study NOAEL (Oryzias latipes): 15,800 mg/l (Static) read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Supporting study NOAEL (Oryzias latipes): 11,850 mg/l (Static) read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Supporting study LOAEL (Oryzias latipes): 11,850 mg/l (Static) read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Supporting study NOAEL (Oryzias latipes): 7,900 mg/l (Static) read-across from supporting substance (structural analogue or surrogate) Read-across from supporting substance (structural analogue or surrogate), Supporting study
Vanillin	No data available.
Trade Secret	No data available.

Aquatic Invertebrates

Product:	No data available.
Components:	
Ethyl Alcohol	NOAEL (Ceriodaphnia dubia): 9.6 mg/l (semi-static) experimental result Experimental result, Key study NOAEL (Daphnia magna): > 10 mg/l (semi-static) experimental result

	Experimental result, Supporting study LOAEL (Palaemonetes pugio): 0.39 g/l (Static) experimental result Experimental result, Supporting study NOAEL (Biomphalaria tenagophila): 19.8 mg/l (semi-static) experimental result Experimental result, Supporting study NOAEL (Daphnia magna): 9.6 mg/l (semi-static) experimental result Experimental result, Key study
Vanillin	NOAEL (Daphnia magna): 10 mg/l (semi-static) experimental result Experimental result, Key study NOAEL (Daphnia magna): 5.9 mg/l (semi-static) experimental result Experimental result, Key study EC 50 (Daphnia magna): 24 mg/l (semi-static) experimental result Experimental result, Key study LOAEL (Daphnia magna): 10 mg/l (semi-static) experimental result Experimental result, Key study LOAEL (Daphnia magna): 18 mg/l (semi-static) experimental result Experimental result, Key study
Trade Secret	No data available.

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Toxicity to microorganisms

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Persistence and Degradability

Biodegradation

Product:	No data available.
Components:	
Ethyl Alcohol	68 % Detected in water. Experimental result, Supporting study 72 % Detected in water. Experimental result, Supporting study 84 % Detected in water. Experimental result, Key study 45 % Detected in water. Experimental result, Supporting study 75 % Detected in water. Experimental result, Supporting study
Vanillin	83.3 % Detected in water. Experimental result, Supporting study 78.5 % Detected in water. Experimental result, Supporting study 81 % Detected in water. Experimental result, Supporting study 100 % (4 d) Detected in water. Experimental result, Not specified 62.5 % (6 d) Detected in water. Experimental result, Supporting study
Trade Secret	84 % (27 d) Detected in water. Experimental result, Key study

BOD/COD Ratio

Product:	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.

Trade Secret	No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	No data available.
Components:	
Ethyl Alcohol	Cyprinus carpio, Bioconcentration Factor (BCF): 1 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study Leuciscus idus, Bioconcentration Factor (BCF): < 10 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study Cyprinus carpio, Bioconcentration Factor (BCF): 3 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study Cyprinus carpio, Bioconcentration Factor (BCF): 4.5 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Supporting study Leuciscus idus, Bioconcentration Factor (BCF): 0.2 Aquatic sediment Read-across from supporting substance (structural analogue or surrogate), Not specified
Vanillin	No data available.
Trade Secret	No data available.

Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.
Components:	
Ethyl Alcohol	Log Kow: -0.31
Vanillin	Log Kow: 1.37 Log Kow: 1.29 - 1.33 QSAR, Weight of Evidence study
Trade Secret	Log Kow: 1.16

Mobility in soil:

Product	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Results of PBT and vPvB assessment:

Product	No data available.
Components:	
Ethyl Alcohol	No data available.
Vanillin	No data available.
Trade Secret	No data available.

Other adverse effects:

Other hazards

Product:	No data available.

13. Disposal considerations

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: No data available.

14. Transport information

DOT

UN number or ID number:	UN 1197
UN Proper Shipping Name:	EXTRACTS, FLAVOURING, LIQUID
Transport Hazard Class(es)	
Class:	3
Label(s):	LTQT
EmS No.:	
Packing Group:	III
Special precautions for user:	Not regulated.

IATA Cargo

UN number or ID number:	UN 1197
UN Proper Shipping Name:	EXTRACTS, FLAVOURING, LIQUID
Transport Hazard Class(es)	
Class	3
Label(s)	LTQT, AELG, PKOR, PSN1, UN1
Packing Group	III
Environmental Hazards	No
Marine Pollutant	No
Special precautions for user	Not regulated.
Cargo aircraft only :	Allowed. Y344

IMDG

UN number or ID number:	UN 1197
UN Proper Shipping Name:	EXTRACTS, FLAVOURING, LIQUID
Transport Hazard Class(es)	
Class:	3
Label(s):	LTQT, PKOR, PSN1, UN1
EmS No.:	F-E, S-D
Packing Group	III
Special precautions for user:	Not regulated.

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
Ethyl Alcohol

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Flammable (gases, aerosols, liquids, or solids), Acute toxicity (any route of exposure), Serious eye damage or eye irritation

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.
For more information go to www.P65Warnings.ca.gov.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity
Trade Secret
Ethyl Alcohol
Trade Secret
Vanillin
Citric Acid
Trade Secret

US. Massachusetts RTK - Substance List

Chemical Identity
Ethyl Alcohol

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
Ethyl Alcohol

US. Rhode Island RTK

Chemical Identity
Ethyl Alcohol

16.Other information, including date of preparation or last revision

Issue Date:	12/01/2022
Version #:	00005.0
Further Information:	No data available.
Disclaimer:	This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.