4518 Aurelius Road Lansing, MI 48910 Office (800)862-8620 Fax (517)882-0507

0120 - Sassafras Flavor, Artificial

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 06/30/2015 Version: 1

SECTION 1: Identification of the	substance/mixture and of the company/undertaking	
.1. Product identifier		
Product name	: 0120 - Sassafras Flavor, Artificial	
Product form	: Mixture	
.2. Relevant identified uses of the	substance or mixture and uses advised against	
Jse of the substance/mixture	: Food industry: component	
.3. Details of the supplier of the sa	fety data sheet	
orAnn Oils, Inc. 1518 Aurelius Road ansing, MI 48910 Telephone: 1.800.862.8620		
.4. Emergency telephone number		
mergency number : CHEMTREC: V	Within USA and Canada: 1.800.424.9300 Outside USA and Canada: +1 703 527 3887	
SECTION 2: Hazards identification	on	
2.1. Classification of the substance		
Classification (GHS-US)		
Ham. Liq. 4 H227 Accute Tox. 4 (Oral) H302 Accute Tox. 4 (Inhalation:dust,mist) H332 Skin Sens. 1 H317 Aquatic Acute 3 H402		
2.2. Label elements		
GHS-US labeling lazard pictograms (GHS-US)	: GH507	
ignal word (GHS-US)	: Warning	
lazard statements (GHS-US)	: Combustible liquid Harmful if swallowed or if inhaled May cause an allergic skin reaction Harmful to aquatic life	
recautionary statements (GHS-US)	 Keep away from heat source and sparks . No smoking near container. Avoid breathing fumes Wash both hands thoroughly after handling Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Contaminated work clothing must not be allowed out of the workplace Avoid release to the environment Wear eye protection and protective gloves. IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell IF ON SKIN: Wash with plenty of soap and water 	
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If inhaled: Remove person to fresh air and keep comfortable for breathing Call a doctor if you feel unwell Specific treatment (see Safety Data Sheet) If swallowed, rinse mouth If skin irritation or rash occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse In case of fire: Use ABC-powder to extinguish Store in a well-ventilated place. Keep cool Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	%	Classification (GHS-US)
Proprietary Flavor Ingredient - P173	57.13 - 68.81	Acute Tox. 4 (Oral), H302 Aquatic Acute 3, H402
Proprietary Flavor Ingredient - P106	26.64 - 32.09	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Acute 2, H401
Proprietary Flavor Ingredient - 1075	0.18 - 0.21	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Chronic 1, H410
Proprietary Flavor Ingredient - 1074	0.13 - 0.16	Flam. Liq. 4, H227 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412

*The specific chemical identities of the ingredients in this mixture, as well as, exact concentrations of any hazardous ingredients stated above, are considered trade secrets. This information is withheld in accordance with the provisions of 1910.1200 of the Code of Federal Regulations.

Full text of H-phrases: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	
First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow the victim to rest. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see Safety Data Sheet). Wash contaminated clothing before reuse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
First-aid measures after ingestion	: If swallowed, rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

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4.2. Most important symptoms and ef	
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause an allergic skin reaction.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.
4.3. Indication of any immediate med	ical attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.
5.2. Special hazards arising from the	substance or mixture
Fire hazard	: Combustible liquid.
Explosion hazard	: May form flammable/explosive vapor-air mixture.
5.3. Advice for firefighters	, , , , ,
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any
	chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release me	
	equipment and emergency procedures
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.
6.1.1. For non-emergency personnel	
Emergency procedures	: Evacuate unnecessary personnel.
C12 For emergency recorder	
6.1.2. For emergency responders	. Four descus even with success succession
Protective equipment	: Equip cleanup crew with proper protection. : Ventilate area.
Emergency procedures	· ventuate di ed.
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Noti	fy authorities if liquid enters sewers or public waters. Avoid release to the environment.
6.3. Methods and material for contain	ment and cleaning up
Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
6.4. Reference to other sections	
See Heading 8. Exposure controls and personal	protection.
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Handle empty containers with care because residual vapors are flammable. Keep away from heat source and sparks . No smoking near container.
Precautions for safe handling	 Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing fumes.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash both hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, inclu	ding any incompatibilities
Technical measures	: Proper grounding procedures to avoid static electricity should be followed.

Storage	conditions	: Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use. Keep in fireproof place.
Incompa	tible products	: Strong bases. Strong acids.
Incompa	tible materials	: Sources of ignition. Direct sunlight. Heat sources.
7.3.	Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

0120 - Sassafras Flavor, Artificial		
ACGIH	Not applicable	
OSHA	Not applicable	
Proprietary Flavor Ingredi	ent - 1074	
Proprietary Flavor Ingredi ACGIH	ent - 1074 Not applicable	

Proprietary Flavor Ingredient - 1075		
ACGIH	Not applicable	
OSHA	Not applicable	

Proprietary Flavor Ingredient - P106		
ACGIH	Not applicable	
OSHA	Not applicable	

Proprietary Flavor Ingredient - P173	
ACGIH	Not applicable
OSHA	Not applicable

8.2. Exposure controls	
Personal protective equipment	: Avoid all unnecessary exposure.
	, ,
Hand protection	: Wear eye protection and protective gloves. protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties Information on basic physical and chemical properties 9.1. Physical state : Liquid Color : Refer to specification sheet Odor : characteristic Odor threshold : No data available pН : No data available Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available Freezing point : No data available Boiling point : No data available Flash point : 165 °F Auto-ignition temperature : No data available

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Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1.125
Solubility	: Miscible with water. Water: N/A
Log Pow	: No data available
Log Pow Log Kow	: No data available : No data available
5	
Log Kow	: No data available
Log Kow Viscosity, kinematic	No data availableNo data available
Log Kow Viscosity, kinematic Viscosity, dynamic	No data availableNo data availableNo data available
Log Kow Viscosity, kinematic Viscosity, dynamic Explosive properties	No data availableNo data availableNo data availableNo data availableNo data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Combustible liquid. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

: Oral: Harmful if swallowed. Inhalation:dust,mist: Harmful if inhaled.

0120- Sassafras Flavor, Artifici	al	
ATE US (oral)	1088.467 mg/kg body weight	
ATE US (dust, mist)	4.955 mg/l/4h	
Proprietary Flavor Ingredient -	P106	
LD50 oral rat	1620 mg/kg body weight (Rat; Experimental value)	
LD50 dermal rabbit	> 2000 mg/kg (Rabbit; Experimental value)	
ATE US (oral)	1620.000 mg/kg body weight	
ATE US (dust, mist)	1.500 mg/l/4h	
Proprietary Flavor Ingredient -	P173	
LD50 oral rat	887 mg/kg (Rat)	
LD50 dermal rat	> 2500 mg/kg (Rat)	
LD50 dermal rabbit	> 5000 mg/kg (Rabbit)	
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Proprietary Flavor Ingredient - P173	
ATE US (oral)	887.000 mg/kg body weight
Proprietary Flavor Ingredient - P175	5.5 , 5
LD50 oral rat	5620 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 10200 mg/kg bodyweight; Rat)
LD50 dermal rabbit	> 18000 mg/kg (Rabbit; Experimental value; 24 hour cuff method; >20000 mg/kg bodyweight; Rabbit)
LC50 inhalation rat (mg/l)	70.56 mg/l/4h (Rat)
LC50 inhalation rat (ppm)	19600 ppm/4h (Rat)
ATE US (oral)	5620.000 mg/kg body weight
ATE US (gases)	19600.000 ppmV/4h
ATE US (vapors)	70.560 mg/l/4h
ATE US (dust, mist)	70.560 mg/l/4h
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met. Harmful if swallowed. Harmful i inhaled.
Symptoms/injuries after inhalation	: Danger of serious damage to health by prolonged exposure through inhalation. May cause an allergic skin reaction.
Symptoms/injuries after ingestion	: Swallowing a small quantity of this material will result in serious health hazard.

SECTION 12: Ecological information		
12.1.	Toxicity	
Ecology -	water	: Harmful to aquatic life.

Proprietary Flavor Ingredient - P106		
LC50 fish 1	460 mg/l (96 h; Pimephales promelas; Nominal concentration)	
EC50 Daphnia 1	400 mg/l (48 h; Daphnia magna; GLP)	
LC50 fish 2	10 mg/l (96 h; Lepomis macrochirus)	
EC50 Daphnia 2	230 mg/l (48 h; Daphnia magna)	
Threshold limit other aquatic organisms 1	< 658 mg/l (16 h; Pseudomonas putida)	
Threshold limit algae 1	640 ppm (96 h; Scenedesmus quadricauda)	
Threshold limit algae 2	2600 mg/l (72 h; Algae)	
Proprietary Flavor Ingredient - P173		
LC50 fish 1	42 mg/l (96 h; Brachydanio rerio)	
EC50 Daphnia 1	50 mg/l (24 h; Daphnia magna)	
EC50 other aquatic organisms 1	250 mg/l (Activated sludge)	
LC50 fish 2	50 (10 - 100) mg/l (96 h; Pisces)	
EC50 Daphnia 2	50 (10 - 100) mg/l (48 h; Daphnia magna)	

Proprietary Flavor Ingredient - P175		
LC50 fish 1	454.7 mg/l 96 h; Salmo gairdneri (Oncorhynchus mykiss)	
EC50 Daphnia 1	2500 mg/l (24 h; Daphnia magna)	
LC50 fish 2	230 mg/l (96 h; Pimephales promelas)	
EC50 Daphnia 2	154 mg/l (48 h; Daphnia magna)	
TLM fish 1	100 - 1000,96 h; Pisces	
TLM other aquatic organisms 1	100 - 1000,96 h	
Threshold limit algae 1	2000 mg/l (96 h; Selenastrum capricornutum; Biomass)	
Threshold limit algae 2	15 mg/l (192 h; Scenedesmus quadricauda; Growth rate)	
12.2. Persistence and degradability		
0120 - Sassafras Flavor, Artificial		
Persistence and degradability	Not established.	
Duranistan Flann Transdiant D100		
Proprietary Flavor Ingredient - P106	Dendik, biedenwedelste is unter Diedenwedelste is the sett No (test)date av math ¹⁰ - Cit	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available.	
Biochemical oxygen demand (BOD)	1.6 g O ₂ /g substance	
Chemical oxygen demand (COD)	2.4 g O ₂ /g substance	
ThOD	2.5 g O ₂ /g substance	
Proprietary Flavor Ingredient - P173		
Persistence and degradability	Readily biodegradable in water. Photolysis in water. Biodegradable in the soil.	
ThOD	1.37 g O ₂ /g substance	
BOD (% of ThOD)	(5 day(s)) 0.65	
Proprietary Flavor Ingredient - P175		
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.	
Biochemical oxygen demand (BOD)	0.293 g O₂/g substance	
Chemical oxygen demand (COD)	1.69 g O ₂ /g substance	
ThOD	1.82 g O ₂ /g substance	
12.3. Bioaccumulative potential		
0120 - Sassafras Flavor, Artificial		
Bioaccumulative potential	Not established.	
Proprietary Flavor Ingredient - P106		
Log Pow	1.05 (Experimental value; Other; 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
Proprietary Flavor Ingredient - P173		
BCF fish 1	46 (Pimephales promelas; QSAR)	
Log Pow	1.59 - 2.98	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
Proprietary Flavor Ingredient - P175		
BCF fish 1	30 (3 days; Leuciscus idus)	
Log Pow	0.68 (Experimental value; EPA OPPTS 830.7560; 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
12.4. Mobility in soil		

12.4. Mobility in soil

Proprietary Flavor Ingredient - P106		
Surface tension	0.04 N/m (20 °C)	
Proprietary Flavor Ingredient - P175		
Surface tension	0.024 N/m (20 °C)	

12.5. Other adverse effects		
Effect on ozone layer	:	
Effect on the global warming	: No known ecological damage caused by this product.	
Other information	: Avoid release to the environment.	
SECTION 13: Disposal considerat	ions	
13.1. Waste treatment methods		
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to an approved waste disposal plant.		
Additional information	: Handle empty containers with care because residual vapors are flammable.	
Ecology - waste materials	: Avoid release to the environment.	
SECTION 14: Transport informati	on	
In accordance with DOT		
Not regulated for transport		
Additional information		
Other information	: No supplementary information available.	
ADR		
No additional information available		
Transport by sea		
No additional information available		
Air transport		
No additional information available		
SECTION 15: Regulatory information	tion	
15.1. US Federal regulations		
Proprietary Flavor Ingredient - 1074		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Proprietary Flavor Ingredient - 1075		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Proprietary Flavor Ingredient - P106		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Proprietary Flavor Ingredient - P173		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Proprietary Flavor Ingredient - P175		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not listed on the United States SARA Section 313		
RQ (Reportable quantity, section 304 of EPA's 5000 lb List of Lists) 5000 lb		

15.2. International regulations CANADA

No additional information available

EU-Regulations

No additional information available

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Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

15.3. US State regulations

Proprietary Flavor Ingredient - P175

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information

: DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H-phrases:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
H226	Flammable liquid and vapor
H227	Combustible liquid
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H332	Harmful if inhaled
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects