

# 500859 ALDEHYDE C-9 FCC

 Revision Date: 07-26-2017
 Page 1 of 11

 Version # 01
 Print Date: 07-26-2017

1. IDENTIFICATION			
Product Description:	ALDEHYDE C-9 FCC		
CAS #	124-19-6		
FEMA Number	2782		
Other means of identification Vigon Item #	500859		
Recommended use	Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.		
Recommended restrictions	For Manufacturing Use On	lly	
<u>Company</u>		24 Hour Emerger	cy Response Information
Vigon International, Inc.		INFOTRAC (ACC	T# 78928);
127 Airport Road			VITHIN THE U.S.A.
E. Stroudsburg, PA 18301		1-352-323-3500 (	DUTSIDE THE U.S.A.
For information call: 570-476-6300	)		
Web Site: www.vigon.com			
Manufacturer/Importer/Supplier/Di	stributor information		
Company name	Vigon International, Inc.		
Address	127 Airport Road		
	E. Stroudsburg, PA 18301 United States		
Telephone	For information call:	570-476-6300	
Website	www.vigon.com		
E-mail	Not available.		
Emergency phone number	INFOTRAC	(ACCT# 78928)	;
	1-800-535-5053	WITHIN THE U.	
	1-352-323-3500	OUTSIDE THE	U.S.A.
2. HAZARD(S) IDENTIFICA	TION		
Physical hazards	Flammable liquids		Category 4
Health hazards	Skin corrosion/irritation		Category 2
	Serious eye damage/eye ir	rritation	Category 2A

Environmental hazards

Hazardous to the aquatic environment, long-term hazard

Category 3 respiratory tract irritation

Category 2

Specific target organ toxicity, single

Label elements



exposure



# 500859 ALDEHYDE C-9 FCC

Revision Date: 07-26-2017	Page 2 of 11
Version # 01	Print Date: 07-26-2017

Signal word	Warning
Signal word	warning
Hazard statement	Combustible liquid. Causes skin irritation. Causes skin and eye irritation. Causes serious eye irritation. May cause respiratory irritation. Toxic to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/eye protection/face protection.
Response	IF ON SKIN: Wash with plenty of water. 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. Call a POISON CENTER/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.
Storage	Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	After prolonged contact with highly porous materials, this product may spontaneously combust.
Supplemental information	None.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances				
Chemical name	Common name and synonyms	CAS number	%	
NONANAL	nonanoic aldehyde nonylic aldehyde Pelargonic aldehyde NONYL ALDEHYDE	124-19-6	100	

### 4. FIRST-AID MEASURES

Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Call a physician if symptoms develop or persist.
Skin contact	Take off immediately all contaminated clothing. Get medical attention if irritation develops and persists. Wash skin thoroughly with soap and water for several minutes.
Eye contact	Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists. Promptly wash eyes with plenty of water while lifting the eye lids.
Ingestion	Call a physician or poison control center immediately. If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Not available.



# 500859 ALDEHYDE C-9 FCC

Revision Date: 07-26-2017 Version # 01 Page 3 of 11 Print Date: 07-26-2017

General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.
5. FIRE-FIGHTING MEASUF	RES
Suitable extinguishing media	Water spray, fog, CO2, dry chemical, or alcohol resistant foam.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases. Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.
Specific methods	Use water spray to cool unopened containers.
General fire hazards	Static charges generated by emptying package in or near flammable vapor may cause flash fire.

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps.
	The product is immiscible with water and will spread on the water surface.
	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. Prevent product from entering drains. Do not allow material to contaminate ground water system. Absorb in vermiculite, dry sand or earth and place into containers.
	Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in section 13 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid release to the environment. Retain and dispose of contaminated wash water. Contact local authorities in case of spillage to drain/aquatic environment.



# 500859 ALDEHYDE C-9 FCC

Revision Date: 07-26-2017 Version # 01 Page 4 of 11 Print Date: 07-26-2017

### 7. HANDLING AND STORAGE

Precautions for safe handling	Do not handle or store near an open flame, heat or other sources of ignition. Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material. May auto-oxidize with sufficient heat generation to ignite if spread (as a thin film) or absorbed on porous or fibrous material. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Contaminated rags and cloths must be put in fireproof containers for disposal. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Do not store in direct sunlight. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Keep under a nitrogen blanket.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits	This substance has no PEL, TLV, or other recommended exposure limit.
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Use explosion-proof ventilation equipment to stay below exposure limits.
Individual protection measures, suc Eye/face protection	<b>h as personal protective equipment</b> Wear safety glasses with side shields (or goggles).
Skin protection Hand protection	Chemical resistant gloves.
Other	Not available.
Respiratory protection	Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must be provided.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	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.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Refer to Spec Sheet
Physical state	Liquid.
Form	Liquid.
Color	Refer to Spec Sheet
Odor	Characteristic.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling	375.8 °F (191 °C)
range	
Flash point	162.0 °F (72.2 °C) Closed Cup
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.



# 500859 ALDEHYDE C-9 FCC

Revision Date: 07-26-2017 Version # 01 Page 5 of 11 Print Date: 07-26-2017

#### Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.2 mm Hg at 20 °C
Vapor density	4.9
Relative density	Not available.
Solubility(ies) Solubility (water)	0 Insoluble
Partition coefficient (n-octanol/water)	3.27
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.83 g/cm3 at 22 °C
Flammability class	Combustible IIIA estimated
Molecular formula	C9-H18-O
Molecular weight	142.24 g/mol
Specific gravity	0.83 at 25 °C

### **10. STABILITY AND REACTIVITY**

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products if stored and handled as indicated.

### **11. TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.



# 500859 ALDEHYDE C-9 FCC

Revision Date: 07-26-2017 Version # 01

Symptoms related to the

toxicological characteristics

physical, chemical and

Page 6 of 11 Print Date: 07-26-2017

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	May cause respiratory irritation.	
Product	Species	Test Results
NONANAL (CAS 124-19-6)		
Acute		
Dermal		
LD50	Rabbit	> 5000 ml/kg
Oral		
LD50	Rat	> 5000 ml/kg
* Estimates for product may	/ be based on additional component d	ata not shown.
Skin corrosion/irritation	Causes skin irritation. Irritation (dermal, rabbit)(OECD 404): Non irritant @ 100% Irritation (dermal, rabbit)(OECD 404): Irritant @ 100%	
	Skin irritation : Species: rabbit Skin irritation	
Serious eye damage/eye irritation	Causes serious eye irritation. Irritation (ocular, rabbit)(OECD 40	05): Non irritant @ 100%
	Eye irritation : May cause irrevers	ible eye damage.
Respiratory or skin sensitization Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	Sensitization (Guinea pig): Non s Sensitization (OET)(OECD 406): Phototoxicity : UV-VIS absorption Result:negative	Non sensitizing @ 1%
Germ cell mutagenicity	Mutagenicity (OECD 471): Non n Mutagenicity (OECD 476): Effect Genotoxicity (in vitro, rat hepatoc Genotoxicity (in vitro, human hep	ytes)(OECD 482): No effects
	Genotoxicity in vitro : Ames test negative	
Carcinogenicity		
IARC Monographs. Overall Not listed.	Evaluation of Carcinogenicity	
	ed Substances (29 CFR 1910.1001-10	)50)
Not regulated.		
•	ogram (NTP) Report on Carcinogens	
Not listed.	- · · · · ·	



# 500859 ALDEHYDE C-9 FCC

	Page 7 of 11
Version # 01	Print Date: 07-26-2017
US. OSHA Specifically Regu Not available.	lated Substances (29 CFR 1910.1001-1050)
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity -	May cause respiratory irritation.
single exposure	
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not an aspiration hazard.
12. ECOLOGICAL INFORM	ΜΑΤΙΟΝ
Ecotoxicity	Toxic to aquatic life with long lasting effects.
Persistence and degradability	Ready biodegradability: 32%
	Inherent biodegradabilty: Inherently biodegradable
	Ready biodegradability (OECD 301B mod.): IC = 53%, TOC = 81%
Bioaccumulative potential	
Partition coefficient n-octano 3.27	I / water (log Kow)
	I / water (log Kow) No data available.
3.27	
3.27 Mobility in soil	No data available. No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
3.27 Mobility in soil Other adverse effects	No data available. No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.
3.27 Mobility in soil Other adverse effects 13. DISPOSAL CONSIDER Disposal instructions	No data available. No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. <b>RATIONS</b> Do not discharge into drains, water courses or onto the ground. 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
3.27 Mobility in soil Other adverse effects 13. DISPOSAL CONSIDER	No data available. No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. <b>EXTIONS</b> Do not discharge into drains, water courses or onto the ground. 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.
3.27 Mobility in soil Other adverse effects 13. DISPOSAL CONSIDER Disposal instructions	No data available. No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. <b>RATIONS</b> Do not discharge into drains, water courses or onto the ground. 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. Dispose in accordance with all applicable regulations.

ADN	
UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NONANAL)
Transport hazard class(es)	9
Subsidiary class(es)	-
Packing group	III
Environmental hazards	Yes
Labels required	9



# 500859 ALDEHYDE C-9 FCC

Revision Date: 07-26-2017 Version # 01 Page 8 of 11 Print Date: 07-26-2017

#### ADR

ADR	
UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NONANAL)
Transport hazard class(es)	9
Subsidiary class(es)	-
Packing group	III
Environmental hazards	Yes
Labels required	9
RID	
UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NONANAL)
Transport hazard class(es)	9
Subsidiary class(es)	-
Packing Group	III
Environmental Hazards	Yes
Labels required	9
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
DOT	
BULK	
UN number	NA1993
Proper shipping name	COMBUSTIBLE LIQUID, N.O.S. (NONANAL)
Hazard class	Combustible liq
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Packaging exceptions	150
Packaging bulk	242
Labels required	None
DOT	
NON-BULK	
Not regulated as dangerous g	oods.
ΙΑΤΑ	
Not regulated as dangerous g	oods.
IMDG	
UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (NONANAL)
Transport hazard class(es)	9
Subsidiary class(es)	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Labels required	9
Labolo roquilou	•



# 500859 ALDEHYDE C-9 FCC

Revision Date: 07-26-2017 Version # 01 Page 9 of 11 Print Date: 07-26-2017

Transport in bulk according Not applicable. to Annex II of MARPOL 73/78 and the IBC Code

ADN; ADR; IMDG; RID



Marine pollutant



#### **15. REGULATORY INFORMATION**

**US** federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

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

Not available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

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

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories Immediate Hazard - Yes

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No



# 500859 ALDEHYDE C-9 FCC

Revision Date: 07-26-2017 Version # 01 Page 10 of 11 Print Date: 07-26-2017

SARA 302 Extremely hazardo	ous substance	
Not listed.		
SARA 311/312 Hazardous chemical	Yes	
SARA 313 (TRI reporting) Not regulated.		
Other federal regulations		
Clean Air Act (CAA) Section 1	12 Hazardous Air Pollutants (HAPs) List	
Not regulated. Clean Air Act (CAA) Section 1	12(r) Accidental Release Prevention (40 CFR 68.130)	
Not regulated.		
Safe Drinking Water Act (SDWA)	Not regulated.	
International Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
*A "Yes" indicates that all compor	nents of this product comply with the inventory requirements administered by the g	overning country(s)

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

### 16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue date	07-26-2017
Revision date	07-26-2017
Version #	01
HMIS® ratings	Health: 2
	Flammability: 2
	Physical hazard: 0



## 500859 ALDEHYDE C-9 FCC

Revision Date: 07-26-2017	
Version # 01	

Page 11 of 11 Print Date: 07-26-2017

#### Disclaimer

Vigon International, 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. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of Vigon's knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.