

SAFETY DATA SHEET**500396 TOLYL ALDEHYDE FCC, PARA**

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1. IDENTIFICATION

Product Description:	TOLYL ALDEHYDE FCC, PARA
CAS #	104-87-0
FEMA Number	3068
Other means of identification	
Vigon Item #	500396
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 Only

Company

Vigon International, LLC
127 Airport Road
E. Stroudsburg, PA 18301
For information call: 570-476-6300
Web Site: www.vigon.com

24 Hour Emergency Response Information

INFOTRAC (ACCT# 78928);
1-800-535-5053 WITHIN THE U.S.A.
1-352-323-3500 OUTSIDE THE U.S.A.

Manufacturer/Importer/Supplier/Distributor information**Manufacturer**

Company name	Vigon International, LLC	
Address	127 Airport Road E. Stroudsburg, PA 18301 United States	
Telephone	For information call:	570-476-6300
Website	www.vigon.com	
E-mail	regulatory@vigon.com	
Emergency phone number	INFOTRAC	(ACCT# 78928);
	1-800-535-5053	WITHIN THE U.S.A.
	1-352-323-3500	OUTSIDE THE U.S.A.

2. HAZARD(S) IDENTIFICATION

Physical hazards	Flammable liquids	Category 4
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 3
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2

Label elements**Signal word**

Warning

Hazard statement

Combustible liquid. Harmful if swallowed. Causes mild skin irritation. Toxic to aquatic life.



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Precautionary statement

Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment.

Response

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. If skin irritation occurs: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.

Storage

Store in a well-ventilated place.

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	%
TOLYL ALDEHYDE PARA	4-Methylbenzaldehyde P-TOLUALDEHYDE (4-METHYLBENZALDEHYDE) P-FORMYLTOLUENE	104-87-0	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

Direct contact with eyes may cause temporary irritation. Mild skin irritation.

Indication of immediate medical attention and special treatment needed

Not available.

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 MEASURES

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.

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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.

Large Spills: Dike the spilled material, where this is possible. Collect and dispose of spillage as indicated in section 13 of the SDS.

Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains.

Small Spills: Clean surface thoroughly to remove residual contamination. Wipe up with absorbent material (e.g. cloth, fleece).

Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Stop the flow of material, if this is without risk. Cover with plastic sheet to prevent spreading.

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.

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.



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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, such as personal protective equipment

Eye/face protection

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. Keep away from food and drink. 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.

pH

Not available.

Melting point/freezing point

21.2 °F (-6 °C)

Initial boiling point and boiling range

399.2 °F (204 °C) at 760.00 mmHg

Flash point

161.0 °F (71.7 °C) Closed Cup

Evaporation rate

Not available.

Flammability (solid, gas)

Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.

Vapor pressure

0.26 mm Hg at 25 °C

Vapor density

4.2

Relative density

Not available.

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Solubility(ies)

Solubility (water) Insoluble

**Partition coefficient
(n-octanol/water)** 2.26

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Density 1.02 g/cm³ estimated at 17 °C

Explosive properties Not explosive.

Flammability class Combustible IIIA estimated

Molecular formula C₈H₈O

Molecular weight 120.16 g/mol

Oxidizing properties Not oxidizing.

Specific gravity 1.02 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 No adverse effects due to inhalation are expected.

Skin contact Causes mild skin irritation.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics Mild skin irritation.

Information on toxicological effects

Acute toxicity Harmful if swallowed.



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Product	Species	Test Results
TOLYL ALDEHYDE PARA (CAS 104-87-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2500 mg/kg
Skin corrosion/irritation	Causes mild skin irritation. Harmful if absorbed through skin. Skin Irritation rabbit: Irritant. (Draize test) This product has not been tested. The statement has been derived from products of a similar structure and composition. Literature data.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation. Eye Irritation rabbit: Irritant. (Draize test). Literature data	
Respiratory or skin sensitization		
Respiratory sensitization	Due to partial or complete lack of data the classification is not possible.	
Skin sensitization	Due to partial or complete lack of data the classification is not possible. Sensitization: Guinea pig maximization test/guinea pig: Non-sensitizing. (OECD Guideline 406)	
Germ cell mutagenicity	Genetic toxicity: The substance was not mutagenic in bacteria. 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		
Not listed.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)		
Not listed.		
US. National Toxicology Program (NTP) Report on Carcinogens		
Not listed.		
Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.	
Specific target organ toxicity - single exposure	Not classified.	
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.	

12. ECOLOGICAL INFORMATION

Ecotoxicity Toxic to aquatic life.

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Product	Species	Test Results
TOLYL ALDEHYDE PARA (CAS 104-87-0)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Leuciscus idus (Golden orfe)
		> 22 - < 46 mg/l, 96 hours DIN 38412 Part 15 static. The details of the toxic effect relate to the nominal concentration.
Other	EC10	Bacterium
		138, 0.5 hours DIN 38412 Part 27 (draft) aerobic. The details of the toxic effect relate to the nominal concentration. The product has low solubility in the test medium. An aqueous solution prepared with solubilizers has been tested.

Persistence and degradability

Environmental fate and transport
 Biodegradation
 Test method: (aerobic), activated sludge
 Degree of elimination: > 70% (28 d)
 Evaluation: Readily biodegradable (according to OECD criteria)
 Easily eliminated from water.
 The product has not been tested. The statement has been derived from products of a similar structure and composition.
 Bioaccumulation
 Significant accumulation in organisms is not to be expected.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)
 2.26

Mobility in soil

No data available.

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.

13. DISPOSAL CONSIDERATIONS

Disposal instructions

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.

Local disposal regulations

Dispose in accordance with all applicable regulations.

Hazardous waste code

Not established.

Waste from residues / unused products

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.



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14. TRANSPORT INFORMATION

ADN

Not regulated as dangerous goods.

ADR

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

DOT

BULK

UN number	NA1993
Proper shipping name	COMBUSTIBLE LIQUID, N.O.S. (TOLYL ALDEHYDE PARA)
Hazard class	Combustible liq
Packing group	III
Environmental hazards	
Marine pollutant	No
Packaging exceptions	150
Packaging bulk	241
Labels required	None

DOT

NON-BULK

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. REGULATORY INFORMATION

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

Toxic Substances Control Act (TSCA)

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.



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SARA 311/312 Hazardous chemical

Yes

Classified hazard categories

Flammable (gases, aerosols, liquids, or solids)
Acute toxicity (any route of exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

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

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

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

Issue date

11-24-2015

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HMIS® ratings

Health: 1
Flammability: 2
Physical hazard: 0

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AICIS: Australian Inventory of Industrial Chemicals.
CAS: Chemical Abstract Service.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.
IMDG: International Maritime Dangerous Goods.
MARPOL: International Convention for the Prevention of Pollution from Ships.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
STEL: Short term exposure limit.
TWA: Time Weighted Average.



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Disclaimer

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Revision information

This document has undergone significant changes and should be reviewed in its entirety.