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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier Trade name

: OPTIPHEN OD

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : preservative in Personal Care

Details of the supplier of the safety data	Emergency telephone number
sheet	1-800-ASHLAND (1-800-274-5263)
Ashland	
P.O. Box 2219	Regulatory Information Number
Columbus, OH 43216	1-800-325-3751
United States of America	
	Product Information
	614-790-3333
EHS Customer Requests@ashland.com	

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification Eye irritation	: Category 2A
GHS Label element Hazard pictograms	
Signal Word	: Warning
Hazard Statements	: Causes serious eye irritation.
Precautionary Statements	 Prevention: Wash skin thoroughly after handling. Wear eye protection/ face protection. Response: 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.

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Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
1,2-OCTANEDIOL	1117-86-8	Eye Irrit. 2A; H319	100.00

SECTION 4. FIRST AID MEASURES

General advice	 Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended. 	
If inhaled	 Move to fresh air. IF INHALED: Call a POISON CENTER or doctor/ physicia you feel unwell. Keep patient warm and at rest. If unconscious place in recovery position and seek medica advice. 	
In case of skin contact	 First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water. 	9
In case of eye contact	 Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. 	
If swallowed	 Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. 	
Most important symptoms and effects, both acute and delayed	No symptoms known or expected. Causes serious eye irritation.	
Notes to physician	No hazards which require special first aid measures.	

SECTION 5. FIREFIGHTING MEASURES

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Suitable extinguishing media	circu	extinguishing measures that are appropriate to local nstances and the surrounding environment. r spray
Unsuitable extinguishing media	: High	volume water jet
Specific hazards during firefighting	suffic and r lights point	duct is heated above its flash point it will produce vapors ient to support combustion. Vapors are heavier than air nay travel along the ground and be ignited by heat, pilot , other flames and ignition sources at locations near the of release. Dt allow run-off from fire fighting to enter drains or water ies.
Hazardous combustion products	: No h	azardous combustion products are known
Specific extinguishing methods	:	
	Prod	uct is compatible with standard fire-fighting agents.
Further information		esidues and contaminated fire extinguishing water must sposed of in accordance with local regulations.
Special protective equipment for firefighters	: In the	event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	 Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid breathing dust. Persons not wearing protective equipment should be exclude from area of spill until clean-up has been completed. 	d
Environmental precautions	 Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. 	
Methods and materials for containment and cleaning up	Keep in suitable, closed containers for disposal.	
Other information	: Comply with all applicable federal, state, and local regulations	3.

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Advice on safe handling	 Avoid dust formation. Provide sufficient air exchange and/or exhaust in work rooms. Do not breathe vapours/dust. Do not smoke. Container hazardous when empty. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	 Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Engineering measures	:	Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects. Provide appropriate exhaust ventilation at places where dust is formed.
Personal protective equipment	٦t	
Respiratory protection	:	In the case of dust or aerosol formation use respirator with an approved filter. Dust safety masks are recommended when the dust concentration is more than 10 mg/m3.
Hand protection		
•	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.
Skin and body protection	:	Wear as appropriate: Safety shoes Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear resistant gloves (consult your safety equipment supplier).

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Hygiene measures: Avoid breathing dust.
Wash hands before breaks and at the end of workday.
When using do not eat or drink.
When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: solid
Odour	: No data available
Odour Threshold	: No data available
рН	: Not applicable
Melting point/freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: 280 °F / 138 °C
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 1.4 hPa (90 °C)
Relative vapour density	: No data available
Relative density	: No data available
Density	: 0.914 g/cm3 (20 °C)
Solubility(ies) Water solubility	: No data available
Solubility in other solvents	: No data available
Partition coefficient: n- octanol/water	: No data available
Thermal decomposition	: No data available
Viscosity Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available

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Oxidizing properties

: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	No decomposition if stored and applied as directed.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Product will not undergo hazardous polymerization.
Conditions to avoid	Keep away from heat, flame, sparks and other ignition sources.
Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	:	Inhalation Skin contact Eye Contact Ingestion
Acute toxicity Not classified based on available <u>Components:</u> 1,2-OCTANEDIOL:	e	information.
	:	LD 50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 401 GLP: yes Assessment: No adverse effect has been observed in acute oral toxicity tests.
Acute inhalation toxicity	:	LC 50 (Rat): > 7.015 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Remarks: Information given is based on data obtained from similar substances.

Skin corrosion/irritation

Not classified based on available information. <u>Product:</u> Remarks: May cause skin irritation in susceptible persons.

Components:

1,2-OCTANEDIOL:

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Species: Rabbit Result: Not irritating to skin

Serious eye damage/eye irritation

Causes serious eye irritation. <u>Product:</u> Remarks: Product dust may be irritating to eyes, skin and respiratory system., Causes serious eye irritation.

Components:

1,2-OCTANEDIOL: Result: Irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information. <u>Components:</u> 1,2-OCTANEDIOL: Test Type: Local lymph node assay Species: Mouse Assessment: Did not cause sensitisation on laboratory animals. Method: OECD Test Guideline 429 Result: Did not cause sensitisation on laboratory animals. GLP: yes

Germ cell mutagenicity

Not classified based on available information. **Components:**

1,2-OCTANEDIOL:

Genotoxicity in vitro

: Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative GLP: yes

Carcinogenicity Not classified based on available information. Reproductive toxicity Not classified based on available information. STOT - single exposure Not classified based on available information. STOT - repeated exposure Not classified based on available information. Aspiration toxicity Not classified based on available information. Further information Product: Remarks: No data available

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

1,2-OCTANEDIOL:	
•	· ICEO (Donio rorio (zobro fich)) · · · · · · · · · · · · · · · · · ·
Toxicity to fish	: LC 50 (Danio rerio (zebra fish)): > 2.2 - < 22.2 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other	: EC 50 (Water flea (Daphnia magna)): 176 mg/l
aquatic invertebrates	Exposure time: 48 h Test Type: semi-static test
	Method: OECD Test Guideline 202
Toxicity to algae	 EC 50 (Pseudokirchneriella subcapitata (green algae)): 35 mg/l End point: Growth inhibition Exposure time: 72 h Method: OECD Test Guideline 201
	GLP: yes
Persistence and degradabilit	у
Components:	
1,2-OCTANEDIOL:	

It: Readily biodegradable
egradation: 75 %
sure time: 28 d
od: OECD Test Guideline 301D
arks: Readily biodegradable

Bioaccumulative potential

Components:

1,2-OCTANEDIOL:		
Partition coefficient: n-	:	log Pow: 1.0
octanol/water		

Mobility in soil

Components:

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No data available

Other adverse effects

No data available

Product:

Additional ecological information

: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life.

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
General advice :	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Dispose of in accordance with all applicable local, state and federal regulations.
Contaminated packaging :	Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD	SUBSIDIARY	PACKING	MARINE
		CLASS	HAZARDS	GROUP	POLLUTANT /
					LTD. QTY.

U.S. DOT - ROAD

Not dangerous goods

CFR_RAIL_C

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TDG_ROAD_C

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Not dangerous goods

TDG_RAIL_C

Not dangerous goods

TDG_INWT_C

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MX_DG

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	no
	1

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards	: Acute Health Hazard		
SARA 313 Component(s)SARA 313	: This material does not con known CAS numbers that reporting levels established	exceed the thresho	old (De Minimis)
Pennsylvania Right To Know 1,2-OCTANEI		1117-86-8	90.00 - 100.00 %
New Jersey Right To Know 1,2-OCTANEI	DIOL	1117-86-8	90.00 -

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100.00 %

California Prop 65 The components of this prod TSCA		This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm. t are reported in the following inventories: On TSCA Inventory
DSL	:	All components of this product are on the Canadian DSL.
AUSTR	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
KECL	:	On the inventory, or in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory

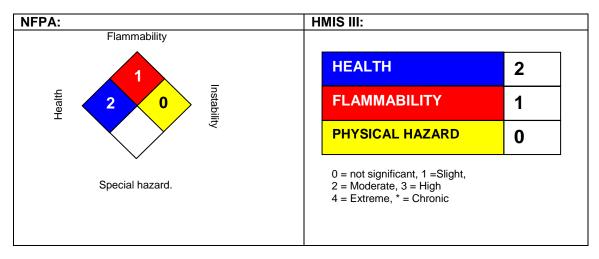
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIOC (New Zealand), PICCS (Philippines), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

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NFPA Flammable and Combustible Liquids Classification Not applicable

Full text of H-Statements referred to under sections 2 and 3.

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H319

Causes serious eye irritation.

Sources of key data used to compile the Safety Data Sheet Ashland internal data including own and sponsored test reports The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

IATA-DGR : Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO : International Civil Aviation Organization ICAO-TI (ICAO) : Technical Instructions by the "International Civil Aviation Organization"

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LČxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act DOT : Department of Transportation FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

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NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System