

Safety Data Sheet

Phenolphthalein

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Phenolphthalein

Synonyms/Generic Names: 3,3-Bis(4-hydroxyphenyl)-1(3H)-isobenzofuranone; 3,3-Bis(p-

hydroxyphenyl)phthalide; Agoral; Alophen; alpha-(p-Hydroxyphenyl)-alpha-(4-oxo-2,5-cyclohexadien-1-

ylidene)-o-toluic acid; alpha Di(phydroxyphenyl)phthalide; Colax; Correctol; Dialose Ex-Lax

Product Number: 4005

Product Use: Industrial, Manufacturing or Laboratory use

Manufacturer: Columbus Chemical Industries, Inc.

N4335 Temkin Rd. Columbus, WI. 53925

For More Information Call: 920-623-2140 (Monday-Friday 8:00-4:30)

www.columbuschemical.com

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

Target Organs: Adrenal medulla, Kidney, Thymus, Bowel

Signal Word: Danger

Pictograms:



GHS Classification:

Germ cell mutagenicity	Category 2
Carcinogenicity	Category 1B
Reproductive toxicity	Category 2

GHS Label Elements, including precautionary statements:

Hazard Statements:

H341	Suspected of causing genetic defects.
H350	May cause cancer.
H361	Suspected of damaging fertility or the unborn child.

Precautionary Statements:

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P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.

Revised on 04/08/2021 Page 1 of 6

P501	Dispose of contents/container in accordance with local regulations.

Potential Health Effects

Eyes	May cause eye irritation.
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	May be harmful if absorbed through skin. Causes skin irritation.
Ingestion	May be harmful if swallowed.

NFPA Ratings

Health	1
Flammability	1
Reactivity	0
Specific hazard	Not Available

HMIS Ratings

Health	1
Fire	1
Reactivity	0

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS#	EINECS# / ELINCS#	Formula	Molecular Weight
Phenolphthalein	>99	77-09-8	201-004-7	C ₂₀ H ₁₄ O ₄	318.32 g/mol

4. FIRST-AID MEASURES

Eyes	Rinse with plenty of water for at least 15 minutes and seek medical attention.
Inhalation	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not
	breathing, give artificial respiration. Get medical attention.
Skin	Flush with plenty of water for at least 15 minutes while removing contaminated clothing and
	wash using soap. Get medical attention.
Ingestion	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If
	conscious, wash out mouth with water. Get medical attention.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media	May be combustible at high temperature. Use water spray, alcohol- resistant foam, dry chemical or carbon dioxide. Use appropriate media for adjacent fire. Cool containers with water.
Special protective equipment	Wear self-contained, approved breathing apparatus and full protective
and precautions for firefighters	clothing, including eye protection and boots.
Specific hazards arising from	Emits toxic fumes (carbon oxides) under fire conditions. (See also
the chemical	Stability and Reactivity section).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Sweep up and place in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

Revised on 04/08/2021 Page 2 of 6

7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of dusts.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls: Contains no substances with occupational exposure limit values.

Personal Protection

Eyes	Wear chemical safety glasses or goggles.
Inhalation	Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator.
Skin	Wear nitrile or rubber gloves, apron or lab coat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Other	Not Available

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.)	White to off white crystals.
Odor	Odorless.
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	260°C (500°F)
Initial boiling point and boiling range	>450°C (842°F)
Flash point	Not Flammable
Evaporation rate	Not Available
Flammability (solid, gas)	Not Flammable
Upper/lower flammability or explosive limit	Not Explosive
Vapor pressure	<0000001hPa at 20°C (68°F)
Vapor density	Not Available
Density	1.296 g/cm3 at 20°C (68°F)
Solubility (ies)	0.00336 g/l at 20°C (68°F)
Partition coefficient: n-octanol/water	low Pow 0.9 at 25°C (77°F)
Auto-ignition temperature	397°C (746.6°F)
Decomposition temperature	Not Available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable
Possibility of Hazardous Reactions	Will not occur.
Conditions to Avoid	Not Available

Revised on 04/08/2021 Page 3 of 6

Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Phenolphthalein

Skin	Not Available
Eyes	Not Available
Respiratory	Not Available
Ingestion	Not Available

Carcinogenicity

IARC	2B - Group 2B: Possibly carcinogenic to humans (Phenolphthalein).	
ACGIH	No components of this product present at levels greater than or equal to 0.1% is identified	
	as a carcinogen or potential carcinogen by ACGIH.	
NTP	2: Reasonably anticipated to be carcinogens (Phenolphthalein).	
OSHA	No components of this product present at levels greater than or equal to 0.1% is identified	
	as a carcinogen or potential carcinogen by OSHA.	

Signs & Symptoms of Exposure

Skin	Irritation, redness, itchiness.	
Eyes	Irritation, redness, watering eyes, itchiness.	
Respiratory	Irritation, coughing, wheezing.	
Ingestion	Irritation, nausea, vomiting, diarrhea. Phenolphthalein acts as a laxative.	

Chronic Toxicity	Possible human carcinogenCarcinogenicity - rat – Oral; Tumorigenic: Carcinogenic by RTECS criteria. Kidney, Ureter, Bladder: Tumors. Endocrine: Adrenal cortex tumorsCarcinogenicity - mouse – Oral; Tumorigenic: Carcinogenic by RTECS criteria. Endocrine: Tumors. Skin and Appendages: Other: Tumors.	
Teratogenicity	Not Available	
Mutagenicity	In vitro tests showed mutagenic effects.	
	-Genotoxicity in vitro - Hamster – ovary; Cytogenetic analysis	
	-Genotoxicity in vivo - mouse – Oral; Micronucleus test	
Embryotoxicity	Not Available	
Specific Target Organ Toxicity	Not Available	
Reproductive Toxicity	Suspected human reproductive toxicant.	
Respiratory/Skin Sensitization	Not Available	

12. ECOLOGICAL INFORMATION

Ecotoxicity
Phenolphthalein

Aquatic Vertebrate	Not Available		
Aquatic Invertebrate	Not Availa	Not Available	
Terrestrial	Not Available		
Persistence and Degr	radability Not Available		
Bioaccumulative Pote	tential Not Available		
Mobility in Soil		Not Available	
PBT and vPvB Assess	sment	Not Available	
Other Adverse Effects	S	Not Available	

Page 4 of 6 Revised on 04/08/2021

13. DISPOSAL CONSIDERATIONS

Waste Product or	Users should review their operations in terms of the applicable federal/national or	
Residues	local regulations and consult with appropriate regulatory agencies if necessary before	
	disposing of waste product or residue.	
Product	Users should review their operations in terms of the applicable federal/national or	
Containers	local regulations and consult with appropriate regulatory agencies if necessary	
	before disposing of waste product container.	

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active
	inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Listed: Phenolphthalein
Massachusetts: Toxic or Hazardous Substance List	Listed: Phenolphthalein
New Jersey: Right to Know Hazardous Substance List	Listed: Phenolphthalein
Pennsylvania: Hazardous Substance List	Not Listed
Rhode Island: Hazardous Substance List	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Chronic Health Hazard
SARA 312	Chronic Health Hazard
SARA 313	Listed: Phenolphthalein
WHMIS Canada	Class D2A – Poisonous and infectious material –
	other effects – Very toxic
	Class D2B - Poisonous and infectious material –
	other effects – Toxic

Revised on 04/08/2021 Page 5 of 6

16. OTHER INFORMATION

Revision	Date
Revision 1	08-02-2012
Revision 2	11/20/2013
Revision 3	02/23/2015
Revision 4	04/08/2021

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Revised on 04/08/2021 Page 6 of 6