# orporation

# SAFETY DATA SHEET

## 1. Identification

**Product identifier Doverphos S 680** 

Other means of identification

**CAS** number 3806-34-6 Additive Recommended use **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

**DOVER CHEMICAL CORPORATION** Company name

3676 Davis Road NW **Address** 

> Dover, OH 44622 **United States**

Toll free: 1-800-321-8805 **Telephone** 

Website www.doverchem.com msdsdept@doverchem.com E-mail

**Emergency phone number** CHEMTREC (U.S. and 1-800-424-9300

Canada)

CHEMTREC (Outside the 1-703-741-5970

U.S.)

# 2. Hazard(s) identification

Physical hazards Not classified. Not classified. **Health hazards Environmental hazards** Not classified. Not classified. **OSHA** defined hazards

Label elements

None. **Hazard symbol** Signal word None.

The substance does not meet the criteria for classification. **Hazard statement** 

**Precautionary statement** 

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information 100% of the mixture consists of component(s) of unknown acute oral toxicity. 100% of the mixture

consists of component(s) of unknown acute inhalation toxicity. 100% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 100% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

# 3. Composition/information on ingredients

## **Substances**

Chemical name	Common name and synonyms	CAS number	%
O,O'-dioctadecylpentaerythritol bis(phosphite)		3806-34-6	100

#### Residuals

Chemical name	Common name and synonyms	CAS number	%
Phenol		108-95-2	0.5

Material name: Doverphos S 680 SDS US 1/7

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**Composition comments** Occupational Exposure Limits for residuals are listed in Section 8.

4. First-aid measures

**Inhalation** Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**Wash off with soap and water. Get medical attention if irritation develops and persists. **Eye contact**Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

IngestionRinse mouth. Get medical attention if symptoms occur.Most importantDusts may irritate the respiratory tract, skin and eyes.

symptoms/effects, acute and

delayed

Treat symptomatically.

Indication of immediate medical attention and special

treatment needed
General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

and precautions for firefighters Fire fighting

Use water spray to cool unopened containers.

equipment/instructions
Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards No unusual fire or explosion hazards noted.

# 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS.

**Environmental precautions** 

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places

where dust is formed. Practice good housekeeping.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

# 8. Exposure controls/personal protection

#### Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Residuals	Type	Value	
Phenol (CAS 108-95-2)	PEL	19 mg/m3	
		5 ppm	

Material name: Doverphos S 680

US.	<b>ACGIH</b>	<b>Threshold</b>	<b>Limit Values</b>
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Residuals	Туре	Value	
Phenol (CAS 108-95-2)	TWA	5 ppm	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Residuals	Туре	Value	
Phenol (CAS 108-95-2)	Ceiling	60 mg/m3	
		15.6 ppm	
	TWA	19 mg/m3	
		5 ppm	

## **Biological limit values**

ACGIH Biological Exposure Indices

Residuals	Value	Determinant	Specimen	Sampling Time
Phenol (CAS 108-95-2)	250 mg/g	Phenol with hydrolysis	Creatinine in urine	*

<sup>\* -</sup> For sampling details, please see the source document.

## **Exposure guidelines**

US - California OELs: Skin designation

Phenol (CAS 108-95-2) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

Phenol (CAS 108-95-2) Skin designation applies.

US - Tennessee OELs: Skin designation

Phenol (CAS 108-95-2) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation** 

Phenol (CAS 108-95-2) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

Phenol (CAS 108-95-2) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Phenol (CAS 108-95-2) Can be absorbed through the skin.

Appropriate engineering controls

exhaust ventilation to keep exposures below the recommended 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 Wear appropriate chemical resistant gloves.

Other Wear suitable protective clothing.

Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels Respiratory protection

If material is ground, cut, or used in any operation which may generate dusts, use appropriate local

exceeding the exposure limits.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

Always observe good personal hygiene measures, such as washing after handling the material General hygiene

and before eating, drinking, and/or smoking. Routinely wash work clothing and protective considerations

equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance** Flakes, powder

Solid. Physical state Solid. **Form** Color White. Odor very faint Not available. **Odor threshold** Not available. pН

98.6 - 114.8 °F (37 - 46 °C) Melting point/freezing point

1301 °F (705 °C) Initial boiling point and boiling

range

Material name: Doverphos S 680

Flash point 365.0 °F (185.0 °C) Cleveland Open Cup

Evaporation rate Not available.
Flammability (solid, gas) Not available.
Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Flammability limit - upper

(%)

Not available.

0.9 g/cm3 @ 25 C

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density Not available.

Relative density Solubility(ies)

Solubility (water) Insoluble

Partition coefficient (n-octanol/water)

15

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Explosive properties

Molecular formula

C41-H82-O6-P2

Molecular weight

733.05 g/mol

Oxidizing properties

Not oxidizing.

Specific gravity

Nog @ 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**Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular

weight hydrocarbons.

# 11. Toxicological information

Information on likely routes of exposure

InhalationDust may irritate respiratory system.Skin contactDust or powder may irritate the skin.

**Eye contact** Dust may irritate the eyes.

**Ingestion** Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity Not known.

Material name: Doverphos S 680 sps us

Product	Species	Test Results	
O,O'-dioctadecylpentaeryt	hritol bis(phosphite) (CAS 3806-34-6)		
<u>Acute</u>			
Dermal			
LD50	Rabbit	> 2000 mg/kg	
	Rat	> 2000 mg/kg	
Residuals	Species	Test Results	
Phenol (CAS 108-95-2)			
<u>Acute</u>			
Dermal			
LD50	Rabbit	850 mg/kg	

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Rat

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation. **Serious eye damage/eye** Direct contact with eyes may cause temporary irritation.

irritation

Oral LD50

Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

**Carcinogenicity** Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Phenol (CAS 108-95-2) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

**Aspiration hazard** Not an aspiration hazard.

# 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

530 mg/kg

Product		Species	Test Results
O,O'-dioctadecylpenta	erythritol bis(phosp	hite) (CAS 3806-34-6)	
Aquatic			
Algae	IC50	Algae	1.03 mg/l, 96 hours ECOSAR estimate
Crustacea	EC50	Daphnia	7.76 mg/l, 48 hours ECOSAR estimate
Fish	LC50	Fish	2.94 mg/l, 96 hours ECOSAR estimate
Residuals		Species	Test Results
Phenol (CAS 108-95-2	2)		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	4.24 - 10.7 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	7.5 - 14 mg/l, 96 hours

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

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Persistence and degradability No data is available on the degradability of this substance.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

O,O'-dioctadecylpentaerythritol bis(phosphite) 15

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** Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Dispose in accordance with all applicable regulations. Local disposal regulations

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. 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.

# 14. Transport information

DOT

Not regulated as dangerous goods.

**TDG** 

Not regulated as dangerous goods.

**IMDG** 

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

Transport in bulk tankers

according to Annex II of

MARPOL 73/78 and the IBC

Code

# 15. Regulatory information

**US** federal regulations

**Toxic Substances Control** This substance is on the TSCA 8(b) inventory and is designated "active".

Act (TSCA)

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

Not applicable.

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)** 

Phenol (CAS 108-95-2) Listed.

SARA 304 Emergency release notification

PHENOL (CAS 108-95-2) 1000 LBS

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

# Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

**Threshold** Chemical name **CAS** number Reportable **Threshold** Threshold quantity planning quantity planning quantity, planning quantity, (pounds) (pounds) lower value upper value (pounds) (pounds) Phenol 108-95-2 1000 500 10000

SARA 311/312 Hazardous

No

chemical

SARA 313 (TRI reporting)

Not regulated.

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# Other federal regulations

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

Phenol (CAS 108-95-2)

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

## FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Phenol (CAS 108-95-2) Low priority

Inventory name

## **US state regulations**

## **California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

# US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Phenol (CAS 108-95-2)

#### **International Inventories**

Country(s) or region

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
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

<sup>\*</sup>A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

# 16. Other information, including date of preparation or last revision

Issue date 05-15-2014 12-17-2019 **Revision date** 

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Disclaimer DOVER CHEMICAL CORPORATION 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.

Material name: Doverphos S 680 SDS US

On inventory (yes/no)\*

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