

Material Safety Data Sheet

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1. Identification of the substance/preparation and of the company/undertaking

Product name: 850S Plate Finisher

Product code: 5270517

Supplier: EASTMAN KODAK COMPANY, 343 State Street, Rochester, New York, 14650

For Emergency Health, Safety & Environmental Information, call (585) 722-5151 (USA)

For other information or to request an MSDS, call (800) 242-2424.

Synonyms: PCD F1631

Product Use: Graphic Arts product, For industrial use only.

2. Hazards identification

CONTAINS: Boric acid (10043-35-3), sodium 2-biphenylate (132-27-4), Benzenesulfonic acid, hexadecyl(sulfophenoxy)-, disodium salt (65143-89-7)

WARNING!

**MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR SWALLOWED
CAUSES SKIN AND EYE IRRITATION**

HMIS III Hazard Ratings: Health - 2*, Flammability - 1, Reactivity (Stability) - 0

NFPA Hazard Ratings: Health - 1, Flammability - 1, Instability - 0

NOTE: HMIS III and NFPA 704 (2007) hazard indexes involve data review and interpretation that may vary among companies. They are intended only for rapid, general identification of the magnitude of the potential hazards. To adequately address safe handling, ALL information in this MSDS must be considered.

3. Composition/information on ingredients

Weight %	Components - (CAS-No.)
1 - 5	Boric acid (10043-35-3)
0.1 - < 1	sodium 2-biphenylate (132-27-4)
0.1 - < 1	Benzenesulfonic acid, hexadecyl(sulfophenoxy)-, disodium salt (65143-89-7)

4. First aid measures

Inhalation: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. If easy to do, remove contact lens, if worn.

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Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes.

Ingestion: If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

5. Fire-fighting measures

Extinguishing Media: Water spray, Carbon dioxide (CO₂), Dry chemical, Alcohol-resistant foam.

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing.

Hazardous Combustion Products: Carbon oxides

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

7. Handling and storage

Personal precautions: Avoid breathing mist or vapour. Avoid contact with eyes, skin, and clothing. Use only with adequate ventilation. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials.

Storage: Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls/personal protection

Occupational exposure controls

Chemical Name	Regulatory List	Value Type	Value
Boric acid	ACGIH	time weighted average <i>Form of exposure: Inhalable fraction.</i>	2 mg/m ³
	ACGIH	Short term exposure limit <i>Form of exposure: Inhalable fraction.</i>	6 mg/m ³

Ventilation: Good general ventilation should be used. Ventilation should be sufficient so that applicable occupational exposure limits are not exceeded. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances.

Respiratory protection: None should be needed. If engineering controls do not maintain airborne concentrations below recommended exposure limits, an approved respirator must be worn. Respirator

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type: N95 Particulate Filter. If respirators are used, a program should be instituted to assure compliance with applicable federal, state, commonwealth, provincial, or local laws and regulations.

Eye protection: Tightly fitting safety goggles

Hand protection: Wear impervious gloves and protective clothing appropriate for the risk of exposure.

9. Physical and chemical properties

Physical form: liquid

Colour: yellow

Odour: odourless

Specific gravity: 1.051

Vapour pressure: 24 mbar (18.0 mm Hg)

Vapour density: 0.6

Volatile fraction by weight: > 75 %

Melting point/range: < 0 °C (32.0 °F)

Water solubility: soluble

pH: 3.5

Flash point: does not flash

Flammability Limits: Not specified

10. Stability and reactivity

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents.

Hazardous decomposition products: Carbon oxides

Hazardous Polymerization: Hazardous polymerisation does not occur.

11. Toxicological information

Effects of Exposure

General advice:

Contains: Boric acid. Based on repeated-dose ingestion studies in animals, may cause

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adverse reproductive and developmental effects. However, high doses to humans handling this material are not expected since oral consumption is not a likely route of significant exposure.

Inhalation: Expected to be a low hazard for recommended handling. Mist may be harmful if inhaled. Airborne dust/mist/vapor irritating.

Eyes: Causes eye irritation. Airborne dust/mist/vapor irritating.

Skin: Causes skin irritation. May be harmful if absorbed through skin.

Ingestion: May be harmful if swallowed.

Data for Boric acid (CAS 10043-35-3):

Acute Toxicity Data:

- Oral LD50 (rat): > 1,600 mg/kg
- Oral LD50 (rat): 2,660 mg/kg
- Oral LD50 (mouse): 3,450 mg/kg
- Inhalation LC50 (rat): > 2.03 mg/l / 4 hr
- Skin irritation: slight
- Skin irritation: moderate
- Skin irritation: Mild skin irritation
- Skin Sensitization (guinea pig): none
- Eye irritation: slight irritation

Mutagenicity/Genotoxicity Data:

- Salmonella/Mammalian-Microsome Reverse Mutation Screening Assay (TA98, TA100, TA1535, TA1537, TA1538): negative (in presence and absence of activation)
- Mouse lymphoma assay: negative (in presence and absence of activation)
- Sister chromatid exchange (SCE) assay (Chinese Hamster Ovary (CHO)): negative (in presence and absence of activation)
- Unscheduled DNA synthesis (UDS) assay (rat hepatocytes): negative (in absence of activation)
- Mouse micronucleus assay: negative

Definitions for the following section(s): LOEL =lowest-observed-effect level, LOAEL = lowest-observed-adverse-effect, NOAEL = no observed-adverse-effect level, NOEL =no-observed-effect level.

Repeated dose toxicity:

- Feeding study (24 months, male and female rat): NOAEL; 100 mg/kg/day
- Feeding study (24 months, male and female rat): LOEL (Lowest observable effect level); 334 mg/kg/day (target organ effects: testes)

Developmental Toxicity Data:

- Oral (female rat): maternal NOAEL; 78mg/kg/day
- Oral (female rat): NOAEL for developmental toxicity; < 78mg/kg/day

Reproductive Toxicity Data:

- Feeding Study (male and female mouse): NOEL for reproductive toxicity; < 152 mg/kg/day

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Carcinogenicity:

- Oral study (females mouse, 2 years): NOEL; 1,150 mg/kg/day

12. Ecological information

The following properties are ESTIMATED from the components of the preparations.

Potential Toxicity:

Toxicity to fish (LC50): > 100 mg/l

Toxicity to daphnia (EC50): > 100 mg/l

Toxicity to algae (IC50): > 100 mg/l

Chemical Oxygen Demand (COD): no data available

Biochemical Oxygen Demand (BOD): no data available

13. Disposal considerations

Discharge, treatment, or disposal may be subject to federal, state, commonwealth, provincial, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

Not regulated for all modes of transportation.

For more transportation information, go to: www.kodak.com/go/ship.

15. Regulatory information

Notification status

Regulatory List	Notification status
EINECS	n (Negative listing)
TSCA	n (Negative listing)
AICS	y (positive listing)
DSL	y (positive listing)
ENCS (JP)	n (Negative listing)
KECI (KR)	n (Negative listing)
PICCS (PH)	y (positive listing)
INV (CN)	y (positive listing)

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A N (Negative listing) indicates one or more component is either not on the public Inventory or is subject to exemption requirements. If additional information is needed contact Kodak.

Other regulations

American Conference of Governmental Industrial Hygienists (ACGIH):	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
International Agency for Research on Cancer (IARC):	sodium 2-biphenylate: 2B (Possible carcinogen.) (Inadequate data.) (Sufficient data.)
U.S. National Toxicology Program (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.
U.S. Occupational Safety and Health Administration (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.
California Prop. 65:	WARNING! This product contains a chemical known in the State of California to cause cancer.
US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323):	Water, Dextrin
US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000):	sodium 2-biphenylate
US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5):	Water, Dextrin, Boric acid
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:	sodium 2-biphenylate
US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):	SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

16. Other information

The data below reflects current legislative requirements whereas the product in your possession may carry a different version of the label depending on the date of manufacture.

US/Canadian Label Statements:

CONTAINS: Boric acid (10043-35-3), sodium 2-biphenylate (132-27-4), Benzenesulfonic acid, hexadecyl(sulfophenoxy)-, disodium salt (65143-89-7)

WARNING!

MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR SWALLOWED

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CAUSES SKIN AND EYE IRRITATION

Avoid breathing mist or vapour.
Avoid contact with eyes, skin, and clothing.
Use only with adequate ventilation.
Wash thoroughly after handling.

FIRST AID: If inhaled, remove to fresh air. Get medical attention if symptoms occur. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. If easy to do, remove contact lens, if worn. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if symptoms occur. Wash contaminated clothing before re-use. Destroy or thoroughly clean contaminated shoes. If swallowed, DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.

Keep out of reach of children.

Do not handle or use until safety precautions in Material Safety Data Sheet (MSDS) have been read and understood.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

IN CASE OF FIRE: Use Water spray, Carbon dioxide (CO₂), Dry chemical, Alcohol-resistant foam.

IN CASE OF SPILL: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination.

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment. The information relating to the working solution is for guidance purposes only, and is based on correct mixing and use of the product according to instructions.

R-1, S-2, F-1, C-0