

Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 1/11



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

Product name: BENZYL ALCOHOL

Product code: 10093700

Synonyms: None.

Relevant identified uses of the substance or mixture and uses advised against:

Identified uses: Film or paper manufacturing chemical. For industrial use only.

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

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

For further information about this product, call (800) 242-2424.

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of 29 CFR 1910.1200:

Hazard class	Hazard category	Route of exposure
Acute toxicity	Category 4	Inhalation
Acute toxicity	Category 4	Oral
Acute toxicity	Category 4	Dermal
Skin corrosion/irritation	Category 2	--
Serious eye damage/eye irritation	Category 2B	--
Acute aquatic toxicity	Category 2	--

GHS-Labeling

Contains:

Benzyl alcohol (100-51-6)

Symbol(s):



Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 2/11

Signal word: Warning

Hazard statements: Harmful if inhaled. Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes eye irritation. Toxic to aquatic life.

Precautionary statements:

Prevention: Wear protective gloves/ protective clothing. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response: Call a POISON CENTRE or doctor/physician if you feel unwell. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. 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. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Rinse mouth. Take off contaminated clothing and wash before reuse.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation.

HMIS III Hazard Ratings: Health - 2, Flammability - 1, Physical Hazard - 0

NFPA Hazard Ratings: Health - 2, 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 percent	Components - (CAS-No.)
100	Benzyl alcohol (100-51-6)

4. First aid measures

Inhalation: If inhaled, remove to fresh air. Treat symptomatically. Get medical attention.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 3/11

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: Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed: No information available.

Indication of any immediate medical attention and special treatment needed:

Treatment: No information available.

5. Firefighting measures

Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

Hazardous Combustion Products: Carbon oxides

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

Unusual Fire and Explosion Hazards: None.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Refer to protective measures listed in sections 7 and 8.

Methods and materials for containment and cleaning up: Absorb spill with inert material, then place in a chemical waste container. Clean surface thoroughly to remove residual contamination.

Environmental precautions: No information available.

7. Handling and storage

Precautions for safe handling

Personal precautions: Avoid contact with eyes, skin, and clothing. Do not breathe vapours or spray mist. Wash thoroughly after handling. Keep container tightly closed. Use only with adequate ventilation.

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

Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 4/11

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Keep away from incompatible substances (see Incompatibility section.)

8. Exposure controls/personal protection

Occupational exposure controls: Not established

Appropriate engineering controls: 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.

Individual protection measures, such as personal protective equipment

Eye protection: Wear safety glasses with side shields (or goggles).

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

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment.

9. Physical and chemical properties

Physical form: liquid

Colour: Colorless

Odour: aromatic

Specific gravity: 1.045

Vapour pressure (at 58.0 °C (136.4 °F)): 1.3 mbar (1.0 mm Hg) **(at 77.0 °C (170.6 °F)):** 5.00 mbar (3.8 mm Hg)

Vapour density: 3.72

Boiling point/boiling range: 204 °C (399.2 °F)

Melting point/range: -15 °C (5.0 °F)

Water solubility: soluble (33 g/l at 20 °C)

pH: No data available

Flash point: 93.3 °C (199.9 °F) (method unspecified)

Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 5/11

96 °C (204.8 °F) (closed cup)

Evaporation rate: No data available

Flammability (Solid; gas): No data available

Upper explosion limit: No data available

Lower explosion limit: No data available

Partition coefficient: n-octanol/water: log Pow= 1.1

Auto-ignition temperature: 436.0 °C (816.8 °F)

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

10. Stability and reactivity

Reactivity: No data available

Chemical stability: Stable under normal conditions.

No exotherm to boiling. 203 °C

Possibility of hazardous reactions: Hazardous polymerisation does not occur.

Conditions to avoid: No data available

Incompatible materials: Strong oxidizing agents, Strong acids, Iron.

Hazardous decomposition products: None under normal conditions of use.

11. Toxicological information

Effects of Exposure

General advice: May cause CNS effects based on animal data. May cause adverse thymus effects following repeated ingestion based on animal studies.

Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 6/11

Inhalation: Harmful if inhaled.

Eyes: Causes eye irritation.

Skin: Harmful in contact with skin. Causes skin irritation. This material has a low potential to cause allergic skin reactions; however, cases of human skin sensitization have been reported.

Ingestion: Harmful if swallowed.

Acute Toxicity Data:

Oral LD50 (rat): 1,600 - 3,200 mg/kg

- Inhalation LC50 (rat): 8.8 mg/l / 4 hr
- Inhalation LC50 (rat): > 4.178 mg/l / 4 hr
- Dermal LD50 (rabbit): 2,000 mg/kg
- Skin irritation: moderate to strong (repeated skin application)
- Skin Sensitization: none
- Eye irritation (Information taken from reference works and the literature.): moderate

Mutagenicity/Genotoxicity Data:

- CHO/HGPRT assay: positive with and without metabolic activation

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 (13-day, rat): NOEL; 853 mg/kg/day (highest dose tested)

Carcinogenicity

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):	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.
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.

Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 7/11

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

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

12. Ecological information

Potential Toxicity:

Toxicity to fish (LC50):	Pimephales promelas (fathead minnow): 460 mg/l (Exposure time: 96 hr)
Toxicity to fish (LC50):	Lepomis macrochirus (Bluegill sunfish): 10 mg/l (Exposure time: 96 hr)
Toxicity to daphnia (EC50):	water flea: 23 mg/l (Exposure time: 48 hr)
Toxicity to other organisms (EC50):	Photobacterium phosphoreum: 71.4 mg/l (Exposure time: 0.5 hr)

Persistence and degradability: Readily biodegradable.

Bioaccumulative potential

Partition coefficient: n-octanol/water log Pow= 1.1

Mobility in soil

No information 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.

Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 8/11

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

15. Regulatory information

Notification status

Regulatory List	Notification status
TSCA	All listed
DSL	All listed
NDSL	None listed
EINECS	All listed
ELINCS	None listed
NLP	None listed
AICS	All listed
IECS	All listed
ENCS	All listed
ECI	All listed
NZIoC	All listed
PICCS	All listed

"Not all listed" 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

U.S. - CERCLA/SARA (40 CFR § 302.4 Designation of hazardous substances):	No components of this product are subject to the SARA Section 302 (40 CFR 302.4) reporting requirements.
U.S. - CERCLA/SARA - Section 302 (40 CFR § 355 Appendices A and B - The List of Extremely Hazardous Substances and Their Threshold Planning Quantities):	No components of this product are subject to the SARA Section 302 (40 CFR 355) reporting requirements.
U.S. - CERCLA/SARA - Section 313 (40 CFR § 372.65 Toxic Chemical Release Reporting):	No components of this product are subject to the SARA Section 313 (40 CFR 372.65) reporting

Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 9/11

	requirements.
U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances:	No components found on the California Director's List of Hazardous Substances.
U.S. - California - 8 CCR Section 5200-5220 - Specifically Regulated Carcinogens:	No components found on the California Specifically Regulated Carcinogens List.
U.S. - California - 8 CCR Section 5203 Carcinogens:	No components found on the California Section 5203 Carcinogens List.
U.S. - California - 8 CCR Section 5209 Carcinogens:	No components found on the California Section 5209 Carcinogens List.
U.S. - Massachusetts - General Law Chapter 111F (MGL c 111F) - Hazardous Substances Disclosure by Employers (a.k.a. Right to Know Law):	Benzyl alcohol
U.S. - Minnesota Employee Right-to-Know (5206.0400, Subpart 5. List of Hazardous Substances):	Benzyl alcohol
U.S. - New Jersey - Worker and Community Right to Know Act (N.J.S.A. 34:5A-1):	No components regulated under the New Jersey Worker and Community Right-to-Know Act.
U.S. - Pennsylvania - Part XIII. Worker and Community Right-to-Know Act (Chapter 323 Hazardous Substance List, Appendix A):	Benzyl alcohol
U.S. - Rhode Island - Title 28 Labor and Labor Relations (Chapters 28-21 Hazardous Substance Right-to-Know Act):	No components regulated under the Rhode Island Hazardous Substance Right-to-Know Act.

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:

BENZYL ALCOHOL

Contains:

Benzyl alcohol (100-51-6)

Symbol(s):

Safety Data Sheet

Revision Date: 06/06/2014
Z20000000124/Version: 2.0
Print Date: 10/24/2014
Page: 10/11



Signal word: Warning

Hazard statements: Harmful if inhaled. Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes eye irritation. Toxic to aquatic life.

Precautionary statements:

Prevention: Wear protective gloves/ protective clothing. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response: Call a POISON CENTRE or doctor/physician if you feel unwell. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. 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. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. Rinse mouth. Take off contaminated clothing and wash before reuse.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulation.

FIRST AID: If inhaled, remove to fresh air. Treat symptomatically. Get medical attention. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention. 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. Get medical attention if symptoms occur. 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, alcohol-resistant foam, dry chemical or carbon dioxide. **IN CASE OF SPILL:** Absorb spill with inert material, then place in a chemical waste container. 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.

Safety Data Sheet

Revision Date: 06/06/2014

Z20000000124/Version: 2.0

Print Date: 10/24/2014

Page: 11/11

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