

Product name: MARK C

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: MARK C**Chemical name:** Isooctyl diphenyl phosphite**Use(s):** PVC Stabilizer**Supplier:** Crompton Co./Cie
565 Coronation Drive
West Hill, Ontario M1E 2K3, Canada**Manufacturer:** Crompton Corporation
199 Benson Road
Middlebury, CT 06749, USA**Prepared by/For MSDS, Product Safety, or regulatory inquiries, call:** Product Safety Department
866-430-2775**Issue date:** 2004.02.06**Emergency telephone number:** Crompton Corporation Emergency Response (24 hours)
800-292-5898**Customer Service:** 877-948-2660

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS#	%W/W
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3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW**CAUTION!**

MAY CAUSE EYE AND SKIN IRRITATION.

NOT ACCUTELY TOXIC BY INGESTION.

CAN BURN IN A FIRE CREATING DENSE TOXIC SMOKE.

EXPOSURE TO MOISTURE OR HIGH HUMIDITY CAN CAUSE HYDROLYSIS PRODUCING PHOSPHORUS ACID AND PHENOL.

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4. FIRST AID MEASURES

Swallowing

Do not induce vomiting. Obtain medical attention immediately.

Skin

Immediately wash with soap and water for at least 15 minutes. Immediately remove contaminated clothing and shoes. If redness or irritation occurs, seek medical attention.

Inhalation

Remove to fresh air. Obtain medical attention if symptoms develop.

Eye contact

Immediately flush eyes with water and continue washing for at least 15 minutes. Remove contact lenses, if worn. Obtain medical attention if irritation develops.

5. FIRE-FIGHTING MEASURES

Flash point: 182 °C (360 °F)

Hazardous combustion products

Carbon dioxide.
Carbon monoxide.
Oxides of phosphorous.
Phosphine.

Special fire fighting procedures

Water spray may be used to cool containers and adjacent surfaces. Run-off water may be highly acidic and should be collected and neutralized if possible.

Special protective equipment for firefighters

Firefighters must be equipped to prevent breathing of vapors or products of combustion. Wear an approved self-contained breathing apparatus and protective clothing. Full protective clothing

Extinguishing media

Suitable:

- CO₂
- dry chemical
- foam

Unusual fire and explosion hazards

Hazardous combustion products may include intense heat, dense black smoke, carbon monoxide, carbon dioxide, hydrocarbon fragments, phosphine, fragments of phosphite/phosphate esters and oxides of phosphorus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear protective clothing when taking up spill. Avoid contact with eyes and skin.

Environmental precautions

Avoid drainage to sewers or natural waters. Since phosphites can hydrolyze, notification of governing agencies may

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be appropriate due to the possible release of phenolic materials.

7. HANDLING AND STORAGE

HANDLING

Handling precautions

Avoid contact with eyes, skin and clothing. Wash thoroughly with soap and water after handling. Do not eat, drink or smoke when handling. Keep containers tightly closed to prevent contamination. Electrically bond and ground all containers and equipment before transfer or use of material.

Other precautions

Caution - If water contamination has occurred, or if you have any reason to suspect water contamination, do not heat containers of product. Do not heat opened containers with steam in a manner which will allow steam to condense into the container.

STORAGE

Storage requirements

Keep away from heat, sparks and flame. Store in a dry place away from excessive heat. Exposure to moisture or high humidity can cause hydrolysis producing phosphorus acid and phenol. Keep container tightly closed. Normal precautions common to safe manufacturing practice should be followed in handling and storage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION

Respiratory protection

None required in normal use. NIOSH approved full face organic respiratory protection required in the absence of proper environmental control. For emergencies, a self-contained breathing apparatus and full chemical resistant suit.

Hand protection / protective gloves

Gauntlet type gloves of nitrile rubber or butyl rubber recommended; for short time contact PVC is suitable.

Eye protection

Safety glasses with side shields.

Safety goggles.

Skin protection

Chemical resistant protective clothing.

Industrial hygiene measures

Do not eat or drink at work.

Remove contaminated clothing and clean it.

ENGINEERING CONTROLS

Ventilation

Use local ventilation or engineering controls as needed to maintain personnel exposure below the exposure limits.

Provide for sufficient ventilation and/or exhaust.

EXPOSURE LIMITS

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No exposure limits have been established
Consult local authorities for acceptable provincial values.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical state	Liquid
Color	Colorless to light yellow
Odor	Phenolic

OTHER PROPERTIES

Boiling point	No data available.
Melting point	No data available.
Density	1.05 g/cm ³ at 25 °C
Vapor pressure	6.7 hPa (5.04 mmHg) at 190 °C
Vapor density (air=1)	12
Solubility in water	Insoluble, Hydrolyzes slowly
Flash point	182 °C (360 °F) Method: Pensky Martens closed cup

10. STABILITY AND REACTIVITY

Stability: Stable.

Stability - Conditions to avoid

Moisture.
Water.

Incompatible materials

Strong oxidizing agents.
Water.

Hazardous reactions

Will react in the presence of water. Reaction rate will increase with increasing temperatures and pressures.
Hydrolyzed by moisture to phosphorus acid and alcohol(s).

11. TOXICOLOGICAL INFORMATION

SWALLOWING

Test results

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Acute toxicity: LD50 - Rat
Result: > 5,000 mg/kg

SKIN ABSORPTION**Test results**

Acute toxicity: LD50 - Rabbit
Result: > 5,000 mg/kg

INHALATION**Test results**

Acute toxicity: LC50 - Rats
Result: > 10 mg/l

SKIN CONTACT**Test results**

Skin irritation: Species: Rabbit
Classification: Moderate skin irritant.

EYE CONTACT**Test results**

Eye irritation: Species: Rabbit
Result: Moderate irritation

MUTAGENICITY**Assessment**

This material was not mutagenic in an Ames bacterial assay.

SIGNIFICANT DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH

ODPP was not neurotoxic when administered as a single oral dose up to 5g/kg in hens. Oral doses of 0, 100, 1000, or 4000 mg/kg for 1 month in hens showed no clinical signs of neurotoxicity. Microscopic examination revealed neuropathy in 2 of 10 high dose hens.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

General: Dispose of waste material in compliance with all federal, provincial and local regulations. Incinerate in a furnace where permitted under appropriate federal, provincial, and local regulations.

14. TRANSPORT INFORMATION

TDG - Canada

This product is not regulated by TDG.

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IMDG Classification

This product is not regulated by IMDG.

ICAO Classification

This product is not regulated by ICAO.

15. REGULATORY INFORMATION

WHMIS CLASSIFICATION**D2B** Toxic material causing other effects.**CPR Compliance**

This product has been classified with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.

CHEMICAL INVENTORYCanada: The ingredients of this product are on the DSL.Europe: The ingredients of this product are on the EINECS inventory.United States: The ingredients of this product are on the TSCA inventory.Australia: The ingredients of this product are on the AICS inventory.Japan: The ingredients of this product are on the ENCS inventory.Korea: The ingredients of this product are on the ECL.Philippines: The ingredients of this product are on the PICCS.

16. OTHER INFORMATION

FURTHER INFORMATIONMAY BE ON THE INVENTORY LIST BUT NOT NECESSARILY REGISTERED, (Korea, China, New Zealand)
CONSULT REGULATORY SPECIALIST.**LEGEND**

STP	Standard temperature and pressure
W/W	Weight/Weight

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The opinions expressed herein are those of qualified experts within Crompton Corporation. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and



MATERIAL SAFETY DATA SHEET

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of these opinions and the conditions of use of this product are not within the control of Crompton Corporation, it is the user's obligation to determine the conditions of safe use of the products.