

OCCIDENTAL CHEMICAL CORPORATION
 MSDS NUMBER : M42498
 PRODUCT NAME : PYRONIL(R) 45 (SOLID) 50%

2. COMPOSITION/INFORMATION ON INGREDIENTS (Continued)

26040-51-7 1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-
 bis(2-ethylhexyl) ester

EXPOSURE LIMITS

PEL: Not Established
 TLV: Not Established
 PELZ2: Not Established

PERCENTAGE
 VOL
 WT

ND
 50

COMMON NAMES:

Pyronil(R) 45

Listed On(List Legend Below):

00 19 23 36 51

LIST LEGEND

00 TSCA INVENTORY

22 CANADIAN DOMESTIC SUB LIST

36 CANADIAN NDSL

19 PA REQUIREMENT- 3% OR GREATER

23 NJ REQUIREMENT- 1% OR GREATER

51 EINECS

3. HAZARDS IDENTIFICATION

***** EMERGENCY OVERVIEW *****
 *
 * DUST OR VAPORS MAY BE IRRITATING TO EYES, SKIN AND RESPIRATORY *
 * TRACT. *
 *
 * White powder or granules *

POTENTIAL HEALTH EFFECTS

ROUTES OF ENTRY:

Inhalation, Ingestion

TARGET ORGANS:

Lungs.

IRRITANCY:

Fumes produced in processing may irritate the eyes and respiratory tract.

SENSITIZING CAPABILITY:

None known.

REPRODUCTIVE EFFECTS:

None known.

CANCER INFORMATION:

Contains a carcinogen below the reportable 0.1% by weight value.

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3. HAZARDS IDENTIFICATION (Continued)

SHORT-TERM EXPOSURE (ACUTE)

INHALATION:

Vapors or mists from decomposition products may be irritating.

EYES:

May be irritating.

SKIN:

May be irritating.

INGESTION:

Not a likely route of exposure.

REPEATED EXPOSURE (CHRONIC)

May be irritating.

SYNERGISTIC MATERIALS:

None known.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

None known.

4 FIRST AID MEASURES

EYES:

Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN:

Immediately flush contaminated areas with water. Remove contaminated clothing and footwear. Wash contaminated areas with plenty of soap and water. Wash clothing before reuse. Discard footwear which cannot be decontaminated. GET MEDICAL ATTENTION IMMEDIATELY.

INHALATION:

Remove to fresh air if safe to transport. Otherwise attempt to provide fresh air by ventilation. If breathing is difficult, have a trained person administer oxygen. If respiration or pulse has stopped, have a trained person administer Basic Life Support (Cardio-Pulmonary Resuscitation/Automatic External Defibrillator) and CALL FOR EMERGENCY SERVICES IMMEDIATELY (911 or emergency transport services).

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4. FIRST AID MEASURES (Continued)

INGESTION:

Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. (If available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear and give more water. GET MEDICAL ATTENTION IMMEDIATELY.

NOTES TO PHYSICIAN:

No specialized procedures. Treat for clinical symptoms.

5. FIRE FIGHTING MEASURES

Flash Point: Not determined

Method: Not applicable

Autoignition Temperature: Not determined

FLAMMABLE LIMITS IN AIR, BY % VOLUME

Upper: Not determined
Lower: Not determined

EXTINGUISHING MEDIA:

Water is most effective. ABC dry chemical, AFFF and protein type air foams are also effective. The product is an ordinary combustible.

FIRE FIGHTING PROCEDURES:

Keep unauthorized personnel removed and upwind. Wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus and full protective clothing.

FIRE AND EXPLOSION HAZARD:

This product is nonflammable and nonexplosive under normal conditions of use. At high temperatures this product can decompose to give off hydrochloric acid and gas.

The minimum ignition energy for explosion of resin dust is much higher than that of natural materials such as corn starch and flour and also exceeds those of other plastic materials. Care should be taken in addressing ignition sources in working and handling areas.

Smoke generated when resin burns is within the narrow limits of toxicity of smoke from all commonly used materials. The primary toxic combustion products are carbon monoxide and hydrogen chloride. Carbon monoxide is an asphyxiant generated by all natural and synthetic organic materials from incomplete combustion and is the principal toxicant in fire atmospheres. The doses of carbon monoxide and hydrogen chloride needed to cause lethality are very similar. Resin combustion products include many other compounds, such as carbon dioxide and water from complete combustion, but do not include phosgene, acrolein, or vinyl chloride.

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5. FIRE FIGHTING MEASURES (Continued)

SENSITIVITY TO MECHANICAL IMPACT:

Not applicable.

SENSITIVITY TO STATIC DISCHARGE:

Electrostatic charge may build up during handling. Grounding of equipment is recommended.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:

Evacuate unnecessary personnel and eliminate all sources of ignition.

ENVIRONMENTAL PRECAUTIONS:

Contain spill with dike to prevent entry into sewers or waterways.

TCLP: This product or others of similar composition, in the as shipped condition, have been tested and found to be not hazardous using the USEPA's Toxicity Characteristic Leaching Procedure (TCLP - 40 CFR 261, Appendix II). Any physical or chemical modification of this product may change the TCLP test results.

METHODS FOR CLEANING UP:

Sweep or vacuum spills. To minimize dust, vacuum cleaning is preferred.

7. HANDLING AND STORAGE

HANDLING:

Use good housekeeping practices. As with handling of all powdered materials, accumulations of the product should be removed from settling areas such as rafters, roofs, building columns, and ductwork to eliminate any secondary potential dust explosion or fire hazards.

Use with adequate ventilation.

SPECIAL MIXING AND HANDLING INSTRUCTIONS:

Normal Melt Processing: Virtually all thermoplastic materials will emit fumes and/or vapors when heated to processing temperatures. The concentration and composition of these vapors will depend upon variables such as specific compound formulation and processing method and temperature. Always use the product under well ventilated conditions and avoid breathing process vapors. For personal hygiene, wash thoroughly after handling resin, especially before eating, smoking, or using toilet facilities. Do not store or consume food in processing areas.

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7. HANDLING AND STORAGE (Continued)

Cleanup: Cleanup following normal melt processing should be performed under well ventilated conditions. Compound based upon vinyl resin may be held at process temperatures for a short time without significant thermal degradation. However, it should be recognized that exposure to either elevated temperature or excessive heat history (time) will result in decomposition. (As a general rule, degradation begins to occur after about one (1) hour at 177 C (350 F), about ten (10) minutes at 204 C (400 F), and within five (5) minutes at 232 C (450 F). Equipment should not be shut down for extended time periods with the product in it, or decomposition and possible corrosion of unprotected metal may result. If dies and screws are not cleaned manually, then compound should be purged from processing equipment prior to shutdown using special vinyl purge compound or a compatible thermoplastic such as general purpose ABS. (Do not use flame retarded or halogen containing grades for this purpose.)

STORAGE:

Store in a cool, dry, ventilated area away from heat, sparks and flame.

The resin by itself will not support combustion, however, materials such as wooden pallets, paper bags, cardboard boxes, and other combustibles can provide sufficient fuel to cause the product to burn.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS:

General room ventilation plus local exhaust at points of emission to maintain levels of airborne contaminants below exposure limits.

PERSONAL PROTECTION

RESPIRATORY:

For conditions of use where exposure to dust or mist is apparent, a NIOSH approved half-face respirator may be worn.

A respiratory protection program that meets 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant use of a respirator.

EYE/FACE:

Wear safety glasses with side shields (ANSI Z87.1).

SKIN:

Wear protective gloves such as leather, canvas or cotton to minimize skin contact.

OTHER:

Emergency shower and eyewash facility should be in close proximity (ANSI Z358.1).

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: white powder or granules
 Odor Threshold: No odor
 Specific Gravity (Water=1): 1.5
 Vapor Pressure: Not determined
 Vapor Density (Air=1): Not applicable
 Density: 1.5
 Evaporation Rate: Not determined
 % Volatiles by Wt: Not determined
 Boiling Point: Not determined
 Freezing Point: Not determined
 Melting Point: Not determined
 solubility in water (% by wt.): Negligible
 pH: Not applicable
 Octanol/Water Partition Coefficient: Not determined
 Thermal Decomposition Temperature: 1hr. @ 177 C
 Other: Not applicable
 VOC (% by wt;g/l): Not applicable

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:

STABLE UNSTABLE

REACTS WITH:

<input type="checkbox"/> AIR	<input type="checkbox"/> OXIDIZERS	<input type="checkbox"/> METALS
<input type="checkbox"/> WATER	<input type="checkbox"/> ACIDS	<input type="checkbox"/> OTHER
<input type="checkbox"/> HEAT	<input checked="" type="checkbox"/> ALKALIS	<input type="checkbox"/> NONE

HAZARDOUS POLYMERIZATION:

OCCURS WILL NOT OCCUR

COMMENTS:

Avoid heat, sparks and open flames.

HAZARDOUS DECOMPOSITION PRODUCTS:

Hydrogen chloride, carbon monoxide, carbon dioxide, and very small amounts of benzene and aromatic and aliphatic hydrocarbons.

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10. STABILITY AND REACTIVITY (Continued)

Hydrogen bromide.

11. TOXICOLOGICAL INFORMATION

(9002-86-2) Ethene, chloro-, homopolymer (PVC) (non-respirable). This substance is practically non-toxic by the oral route. It is unlikely to cause skin irritation. Eye irritation may occur from the mechanical action of lodged particles.

For further information call or write the address shown on page 1 of the MSDS.

26040-51-7 1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-,

This material may release Pyronil 45 at levels that may produce a biological effect. Minimize contact. Pyronil 45 is practically non-toxic by the oral route and slightly toxic by the dermal route. It is non-irritating to the eye and to the skin. It is not a skin sensitizer.

For further information call or write the address shown on page 1 of the MSDS.

12. ECOLOGICAL INFORMATION

9002-86-2 Ethene, chloro-, homopolymer

TOXICITY: No data available. This material is believed to be non-toxic to aquatic life.

PERSISTENCE: No data available. This material is believed to be likely to persist in the environment.

BIOACCUMULATION: No data available. This material is believed to be unlikely to bioaccumulate.

For further information call or write the address shown on page 1 of the MSDS.

26040-51-7 1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-,

TOXICITY: This material is highly toxic to aquatic life.

PERSISTENCE: This material is believed to be likely to persist in the environment.

BIOACCUMULATION: No data available. This material is believed to be likely to bioaccumulate.

For further information call or write the address shown on page 1 of the MSDS.

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13. DISPOSAL CONSIDERATIONS

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations.

14. TRANSPORT INFORMATION

DOT INFORMATION: Not Regulated

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you, and it is your legal duty to, make all information in this Material Safety Data Sheet available to your employees.

This product contains a toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372. See Section 2, List Legend 02.

TSCA:

All components of this product that are required to be on the TSCA inventory are listed on the inventory.

SARA/TITLE III HAZARD CATEGORIES:

If the word "YES" appears next to any category, this product may be reportable by you under the requirements of 40 CFR 370. Please consult those regulations for details.

Immediate(Acute) Health: NO Reactive Hazard NO
Delayed(Chronic) Health: NO Sudden Release of Pressure NO
Fire Hazard: NO

HMIS HAZARD RATINGS:

HEALTH HAZARD: 0 FIRE HAZARD: 1 REACTIVITY: 0

STATE REGULATIONS:

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING: This product contains a chemical known to the State of California to cause cancer.

See Section 2. COMPOSITION/INFORMATION ON INGREDIENTS list legend for applicable state regulation.

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15. REGULATORY INFORMATION (Continued)

INTERNATIONAL REGULATIONS:

Consult the regulations of the importing country

CANADA:

WHMIS Hazard Class: NOT CLASSIFIED

16. OTHER INFORMATION

For additional non-emergency health, safety or environmental information telephone (972) 404-2076 or write to:

Occidental Chemical Corporation
Product Stewardship Department
5005 LBJ Freeway
P.O. Box 809050
Dallas, Texas 75380

MSDS LEGEND:

ACGIH = American Conference of Governmental Industrial Hygienists

CAS = Chemical Abstracts Service Registry Number

CEILING = Ceiling Limit (15 Minutes)

CEL = Corporate Exposure Limit

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Limit (OSHA)

STEL = Short Term Exposure Limit (15 Minutes)

TDG = Transportation of Dangerous Goods (Canada)

TLV = Threshold Limit Value (ACGIH)

TWA = Time weighted Average (8 Hours)

WHMIS = Worker Hazardous Materials Information System (Canada)

* = See Section 3 Hazards Identification - Repeated Exposure(Chronic) Information

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16. OTHER INFORMATION (Continued)

IMPORTANT: The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE, OR OF ANY OTHER KIND, EXPRESS OR IMPLIED, IS MADE REGARDING PERFORMANCE, STABILITY OR OTHERWISE. This information is not intended to be all-inclusive as to the manner and conditions of use, handling and storage. Other factors may involve other or additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, safe handling and use remains the responsibility of the customer. No suggestions for use are intended as, and nothing herein shall be construed as a recommendation to infringe any existing patents or violate any federal, state or local laws, rules, regulations or ordinances.

17. WARNING LABEL INFORMATION

SIGNAL WORD:

CAUTION

HAZARD WARNINGS:

DUST OR VAPORS MAY BE IRRITATING TO EYES, SKIN AND RESPIRATORY TRACT.

PRECAUTIONS:

Avoid breathing dust, vapors or mist.

Avoid contact with eyes, skin and clothing.

Avoid generation of dust.

Keep container tightly closed and properly labeled.

Use with adequate ventilation.

Wash thoroughly after handling.

FIRST AID

EYES:

Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Washing eyes within several seconds is essential to achieve maximum effectiveness. GET MEDICAL ATTENTION IMMEDIATELY.

SKIN:

Immediately flush contaminated areas with water. Remove contaminated clothing and footwear. Wash contaminated areas with plenty of soap and water. Wash clothing before reuse. Discard footwear which cannot be decontaminated. GET MEDICAL ATTENTION IMMEDIATELY.

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17. WARNING LABEL INFORMATION (Continued)

INHALATION:

Remove to fresh air if safe to transport. Otherwise attempt to provide fresh air by ventilation. If breathing is difficult, have a trained person administer oxygen. If respiration or pulse has stopped, have a trained person administer Basic Life Support (Cardio-Pulmonary Resuscitation/Automatic External Defibrillator) and CALL FOR EMERGENCY SERVICES IMMEDIATELY (911 or emergency transport services).

INGESTION:

Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. (If available, give several glasses of milk.) If vomiting occurs spontaneously, keep airway clear and give more water. GET MEDICAL ATTENTION IMMEDIATELY.

IN CASE OF SPILL OR LEAK:

Sweep or vacuum spills and place in containers for recovery or disposal.

FIRE:

Use carbon dioxide, dry chemical, water or other agent suitable for surrounding fire. Decomposition in an open flame may yield hydrogen chloride gas.

HANDLING AND STORAGE:

Store in a clean, dry, well ventilated area away from heat.

DISPOSAL:

Dispose of in accordance with federal, state and local regulations.

INFORMATION REQUIRED BY FEDERAL, STATE OR LOCAL REGULATIONS:**This Product Contains:**

CAS#	NAME
9002-86-2	Ethene, chloro-, homopolymer
26040-51-7	1,2-Benzenedicarboxylic acid, 3,4,5,6-tetrabromo-, bis(2-ethylhexyl) ester

HMIS RATING: HEALTH 0 FLAMMABILITY 1 REACTIVITY 0

LABEL NUMBER: 1200M42498

For Industrial Use Only