

# MATERIAL SAFETY DATA SHEET

FOR COATINGS, RESINS AND RELATED MATERIALS

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

DATE OF PREP. 3--13-84

BY: J. D. Bonfiglio

## Section I

MANUFACTURER'S NAME DAYTON CHEMICALS DIVISION  
WHITTAKER CORPORATION

STREET ADDRESS 10 Electric Street CITY, STATE, AND ZIP CODE West Alexandria, Ohio 45381

EMERGENCY TELEPHONE NO. 513-839-4612

INFORMATION TELEPHONE NO. Same

PRODUCT CLASS Solvent-Borne Bonding Agent

MANUFACTURERS CODE IDENTIFICATION

DOT CLASS: Adhesives - Flammable Liquid


UN #1133

TRADE NAME THIXON® 413

## Section II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT Wgt	TLV		LEL	VAPOR PRESSURE
		PPM	mg/M <sup>3</sup>		
Methyl Ethyl Ketone	~ 89	200	590	1.8	71

HMS\*



PERSONAL PROTECTION G

## Section III - PHYSICAL DATA

BOILING RANGE 174°-176°F.

VAPOR DENSITY  HEAVIER.  LIGHTER THAN AIR

EVAPORATION RATE  FASTER  SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME 93

WEIGHT PER GALLON 7.0 lbs.

## Section IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION Flammable Liquid

FLASH POINT ~ 21°F. Closed Cup

LEL 1.8

EXTINGUISHING MEDIA CO<sub>2</sub>, dry chemical or alcohol type foam.

UNUSUAL FIRE AND EXPLOSION HAZARDS Considered serious fire hazard due to low flash point high

## Section V – HEALTH HAZARD DATA

LD LIMIT VALUE See Section II.

OF OVEREXPOSURE

ACUTE Irritation of eyes and nasal passages and corneal edema.  
Headache, nausea and serious narcosis may develop in short time.

CHRONIC

AND FIRST AID PROCEDURES Remove excessively contaminated clothing and wash skin with soap and water. Irrigate eyes thoroughly with water. Remove to uncontaminated atmosphere. Give artificial respiration and oxygen if necessary. If swallowed, do not induce vomiting, but contact physician immediately.

## Section VI – REACTIVITY DATA

UNSTABLE  STABLE CONDITIONS TO AVOID None known

ABILITY (Materials to avoid) Strong oxidizers

US DECOMPOSITION PRODUCTS None

US POLYMERIZATION  MAY OCCUR  WILL NOT OCCUR

NS TO AVOID None

## Section VII – SPILL OR LEAK PROCEDURES

BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources. Absorb with rags and/or vermiculite and discard in closed container.

DISPOSAL METHOD

Incineration

## Section VIII – SPECIAL PROTECTION INFORMATION

ORY PROTECTION

Self-contained breathing apparatus or industrial canister type gas mask.

ON Local exhaust preferable

VE GLOVES - Rubber

ECTION - Safety goggles

ROTECTIVE EQUIPMENT

## Section IX – SPECIAL PRECAUTIONS

ONS TO BE TAKEN IN HANDLING AND STORING

Age Category Flammable Keep from heat, sparks and open flame.

Materials Area

RECAUTIONS

not take internally. Avoid prolonged or repeated contact with skin. Always ground container when pouring to avoid static discharge (sparking) which could ignite solvent. Do not allow free fall of more than a few inches when pouring, as dangerous static charge could be generated. Avoid prolonged or repeated breathing of solvent vapors of concentrated solutions.

# MATERIAL SAFETY DATA SHEET

NPCA 1-

FOR COATINGS, RESINS AND RELATED MATERIALS

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

DATE OF PREP 3-13-84

BY: J. D. Bonfiglio

## Section I

MANUFACTURER'S NAME DAYTON CHEMICALS DIVISION  
WHITTAKER CORPORATION

STREET ADDRESS 10 Electric Street CITY, STATE, AND ZIP CODE West Alexandria, Ohio 45381

EMERGENCY TELEPHONE NO. 513-839-4612

INFORMATION TELEPHONE NO. Same

PRODUCT CLASS Solvent-Borne Bonding Agent

MANUFACTURERS CODE IDENTIFICATION

DOT CLASS: Adhesives - Flammable Liquid  
UN #1133

TRADE NAME THIXON® 412

## Section II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT Wgt.	TLV		LEL	VAPOR PRESSURE
		PPM	mg/M <sup>3</sup>		
Methyl Ethyl Ketone	~ 50	200	590	1.8	71
Toluene-2, 4-Diisocyanate (TDI) 584-84-9	~ 2	.02	-	-	-

## Section III - PHYSICAL DATA

BOILING RANGE 174°-176°F.

VAPOR DENSITY  HEAVIER.  LIGHTER THAN AIREVAPORATION RATE  FASTER  SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME 58

WEIGHT PER GALLON 7.8 lbs.

## Section IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION Flammable Liquid

FLASH POINT ~ 21°F. (Closed Cup)

LEL 1.8

EXTINGUISHING MEDIA CO<sub>2</sub>, dry chemical or alcohol type foam.

HMIS\*

UNUSUAL FIRE AND EXPLOSION HAZARDS

Considered serious fire hazard due to low flash point, high volatility and heavy vapor.

SPECIAL FIRE FIGHTING PROCEDURES

Closed or confined quarters require self-contained breathing apparatus.

H HEALTH	3
F FLAMMABILITY	4
R REACTIVITY	0
PERSONAL PROTECTION	6

HS-15201 ©1981 NPCA

## Section V – HEALTH HAZARD DATA

See Section II.

Irritation of eyes and nasal passages and corneal edema.  
Headache, nausea and serious narcosis may develop in short time.

PROCEDURES Remove excessively contaminated clothing and wash skin with  
irrigate eyes thoroughly with water. Remove to uncontaminated atmosphere  
respiration and oxygen if necessary. If swallowed, do not induce  
contact physician immediately.

## Section VI – REACTIVITY DATA

STABLE                      CONDITIONS TO AVOID    None known  
(avoid) Strong oxidizers  
PRODUCTS    None

MAY OCCUR     WILL NOT OCCUR

None

## Section VII – SPILL OR LEAK PROCEDURES

MATERIAL IS RELEASED OR SPILLED

Eliminate all ignition sources. Absorb with rags and/or vermiculite  
and discard in closed container.

Incineration

## Section VIII – SPECIAL PROTECTION INFORMATION

Self-contained breathing apparatus or industrial canister type gas masks.

Exhaust preferable

rubber

safety goggles

RESISTANT

## Section IX – SPECIAL PRECAUTIONS

ON HANDLING AND STORING

Flammable  
Materials Area

Keep from heat, sparks and open flame.

Internally. Avoid prolonged or repeated contact with skin. Always ground  
pouring to avoid static discharge (sparking) which could ignite solvents.  
do not fall of more than a few inches when pouring, as dangerous static charges