

Chemical Name: Acetonitrile (methyl cyanide) Developed by: Bob Heitzman, John EstenikCAS # 75-05-8 IRIS Data Retrieval Date: 2-10-98Internal Code #      Fact Sheet Preparation Date: 2-12-98

## CRITERIA SUMMARY

Lake Erie Basin			
Tier I HNC ( $\mu\text{g/l}$ )		Tier I HCC ( $\mu\text{g/l}$ )	
Drinking	Nondrinking	Drinking	Nondrinking
ID	ID	ID	ID

## EXPOSURE AND TOXICITY DATA

Human health trophic level 3 bioaccumulation factor ( $\text{BAFH}_{\text{TL}3}$ ) = Not availableHuman health trophic level 4 bioaccumulation factor ( $\text{BAHH}_{\text{TL}4}$ ) = Not availableAcceptable daily exposure (ADE) =  $6.4\text{E-}3$  mg/kg/day (IRIS RfD, last revised 02/01/96)

Carcinogen assessment: Not available (IRIS)

Cancer slope factor ( $q_1^*$ ) = Not available (IRIS)

Body weight of average human (BW) = 70 kg (OAC 3745-1-38)

Relative source contribution factor (RSC) = 0.8 (OAC 3745-1-38)

Per capita water consumption (WC) = 2.0 l/day for drinking water criteria (OAC 3745-1-38)

= 0.01 l/day for nondrinking water criteria (OAC 3745-1-38)

Mean consumption of trophic level three fish ( $\text{FC}_{\text{TL}3}$ ) = 0.0036 kg/day (OAC 3745-1-38)Mean consumption of trophic level four fish ( $\text{FC}_{\text{TL}4}$ ) = 0.0114 kg/day (OAC 3745-1-38)

## REFERENCES

Integrated Risk Information System. USEPA Office of Research and Development, National Center for Environmental Assessment.

Ohio Administrative Code rule 3745-1-38: Methodologies for Development of Human Health Criteria and Values for the Lake Erie Drainage Basin. Effective 10/31/97.

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### CALCULATION OF HUMAN NONCARCINOGENIC CRITERION (HNC)<sup>a</sup>

$$\text{HNC} = \frac{\text{ADE} \times \text{BW} \times \text{RSC}}{\text{WC} + [(\text{FC}_{\text{TL3}} \times \text{BAFH}_{\text{TL3}}) + (\text{FC}_{\text{TL4}} \times \text{BAFH}_{\text{TL4}})]}$$

Insufficient data (no BAF).

### CALCULATION OF HUMAN CARCINOGENIC CRITERION (HCC)<sup>a</sup>

$$\text{HCC} = \frac{\text{RAD} \times \text{BW}}{\text{WC} + [(\text{FC}_{\text{TL3}} \times \text{BAFH}_{\text{TL3}}) + (\text{FC}_{\text{TL4}} \times \text{BAFH}_{\text{TL4}})]}$$

Insufficient data (no  $q_1^*$  or BAF).

<sup>a</sup>See Ohio Administrative Code 3745-1-38 effective October 31, 1997.