

Air Toxics Science Advisory Committee

Supplemental Technical Information

Acrolein, carbon tetrachloride, chloroform, methylene chloride, tetrachloroethylene, toluene: April 15, 2015 ATSAC meeting



State of Oregon
Department of
Environmental
Quality

Acrolein (Dean Atkinson, Bruce Hope)

Integrated Risk Information System:

<http://www.epa.gov/iris/subst/0364.htm>

Provisional Peer-Reviewed Toxicity Values:

http://hhpprtv.ornl.gov/quickview/pprtv_papers.php Document (2002) available for slope factor.

California Office of Environmental Health Hazard Assessment / Air Resources Board:

<http://www.arb.ca.gov/toxics/healthval/healthval.htm>. Click on link to “contable.pdf”.

International Agency for Research on Cancer Monographs:

No IARC monographs available.

World Health Organization Concise International Chemical Assessment Document:

http://www.who.int/ipcs/publications/cicad/cicads_alphabetical/en/ No. 43, 2002.

Agency for Toxic Substances Disease Registry Minimal Risk Levels – non-cancer effects:

<http://www.atsdr.cdc.gov/mrls/index.asp>. Click on link to “MRL List.pdf”.

Office of Air Quality Planning and Standards

<http://www2.epa.gov/sites/production/files/2014-05/documents/table1.pdf>

EPA Regional Screening Levels (not part of the formal ATSAC hierarchy of sources, but a good way to do a rough comparison check against other toxicity values):

http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm. I recommend using the first “pdf” file (i.e., Summary Table) under this column heading: (TR=1E-06 THQ=1.0). This will give you the most-recent version of this source table (January 2015). If you choose to open the pdf link for “Resident Air,” you’ll see that table is dated November 2014.

Washington State Acceptable Source Impact Levels:

Again, not part of the formal ATSAC hierarchy of sources, but good for rough comparison checks.

<http://app.leg.wa.gov/WAC/default.aspx?cite=173-460-150>

Carbon tetrachloride (Kent Norville, Dave Stone)

IRIS:

<http://www.epa.gov/iris/subst/0020.htm>

PPRTVs:

No Provisional Peer-Reviewed Toxicity Values (PPRTVs) available.

California OEHHA/ARB:

<http://www.arb.ca.gov/toxics/healthval/healthval.htm>. Click on link to “contable.pdf.”

IARC Monographs:

No IARC monographs available.

WHO CICAD:

No WHO CICAD available.

Environmental Solutions, Technical Service, Air Quality

811 SW 6th Avenue

Portland, OR 97204

Phone: 503-229-6458

800-452-4011

Fax: 503-229-5850

Contact: Sue MacMillan

Macmillan.susan@deq.state.or.us

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ATSDR MRLs – non-cancer effects:

<http://www.atsdr.cdc.gov/mrls/index.asp>. Click on link to “MRL List.pdf.”

OAQPS:

<http://www2.epa.gov/sites/production/files/2014-05/documents/table1.pdf>

EPA RSLs (not part of the ATSAC hierarchy of sources, but a good way to do a rough comparison check against other toxicity values):

http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm. I recommend using the first “pdf” file (i.e., Summary Table) under this column heading: (TR=1E-06 THQ=1.0). This will give you the most-recent version of this source table (January 2015). If you choose to open the pdf link for “Resident Air,” you’ll see that table is dated November 2014.

Washington State ASILs:

Again, not part of the formal ATSAC hierarchy of sources, but good for rough comparison checks.

<http://app.leg.wa.gov/WAC/default.aspx?cite=173-460-150>

Chloroform (Dave Stone, Kent Norville)

IRIS:

<http://www.epa.gov/iris/subst/0025.htm>

PPRTVs:

No PPRTVs available.

California OEHHA/ARB:

<http://www.arb.ca.gov/toxics/healthval/healthval.htm>. Click on link to “contable.pdf.”

IARC Monographs:

No IARC monographs available.

WHO CICAD:

http://www.who.int/ipcs/publications/cicad/cicads_alphabetical/en/ No. 58, 2004

ATSDR MRLs – non-cancer effects:

<http://www.atsdr.cdc.gov/mrls/index.asp>. Click on link to “MRL List.pdf”.

OAQPS:

<http://www2.epa.gov/sites/production/files/2014-05/documents/table1.pdf>

EPA RSLs (not part of the ATSAC hierarchy of sources, but a good way to do a rough comparison check against other toxicity values):

http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm. I recommend using the first “pdf” file (i.e., Summary Table) under this column heading: (TR=1E-06 THQ=1.0). This will give you the most-recent version of this source table (January 2015). If you choose to open the pdf link for “Resident Air,” you’ll see that table is dated November 2014.

Washington State ASILs:

Again, not part of the formal ATSAC hierarchy of sources, but good for rough comparison checks.

<http://app.leg.wa.gov/WAC/default.aspx?cite=173-460-150>

Methylene Chloride / Dichloromethane (David Farrer, Max Hueftle)

IRIS:

<http://www.epa.gov/iris/subst/0070.htm>

PPRTVs:

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No PPRTVs available.

California OEHHA/ARB:

<http://www.arb.ca.gov/toxics/healthval/healthval.htm>. Click on link to “contable.pdf.”

IARC Monographs:

No IARC Monographs available.

WHO CICAD:

No WHO CICAD available.

ATSDR MRLs – non-cancer effects:

<http://www.atsdr.cdc.gov/mrls/index.asp>. Click on link to “MRL List.pdf.”

OAQPS:

<http://www2.epa.gov/sites/production/files/2014-05/documents/table1.pdf>

EPA RSLs (not part of the ATSAC hierarchy of sources, but a good way to do a rough comparison check against other toxicity values):

http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm. I recommend using the first “pdf” file (i.e., Summary Table) under this column heading: (TR=1E-06 THQ=1.0). This will give you the most-recent version of this source table (January 2015). If you choose to open the pdf link for “Resident Air,” you’ll see that table is dated November 2014.

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<http://app.leg.wa.gov/WAC/default.aspx?cite=173-460-150>

Tetrachloroethylene/Perchloroethylene (Bill Lambert, Max Hueftle)

IRIS:

<http://www.epa.gov/iris/subst/0106.htm>

PPRTVs:

No PPRTVs available.

California OEHHA/ARB:

<http://www.arb.ca.gov/toxics/healthval/healthval.htm>. Click on link to “contable.pdf.”

IARC Monographs:

<http://monographs.iarc.fr/ENG/Monographs/vol106/index.php> Volume 106 (2014): Trichloroethylene, Tetrachloroethylene, and Some Other Chlorinated Agents

WHO CICAD:

http://www.who.int/ipcs/publications/cicad/cicads_alphabetical/en/ No. 68, 2006

ATSDR MRLs – non-cancer effects:

<http://www.atsdr.cdc.gov/mrls/index.asp>. Click on link to “MRL List.pdf.”

OAQPS:

<http://www2.epa.gov/sites/production/files/2014-05/documents/table1.pdf>

EPA RSLs (not part of the ATSAC hierarchy of sources, but a good way to do a rough comparison check against other toxicity values):

http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm. I recommend using the first “pdf” file (i.e., Summary Table) under this column heading: (TR=1E-06 THQ=1.0). This will give you the most-recent version of this source table (January 2015). If you choose to open the pdf link for “Resident Air,” you’ll see that table is dated November 2014.

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<http://app.leg.wa.gov/WAC/default.aspx?cite=173-460-150>

Toluene (Bruce Hope, Dean Atkinson)

IRIS:

<http://www.epa.gov/iris/subst/0118.htm>

PPRTVs:

http://hhpprtv.ornl.gov/quickview/pprtv_papers.php Document (2009) available for subchronic toxicity values.

California OEHHA/ARB:

<http://www.arb.ca.gov/toxics/healthval/healthval.htm>. Click on link to “contable.pdf”.

IARC Monographs:

No IARC Monographs available.

WHO CICAD:

No WHO CICAD available.

ATSDR MRLs – non-cancer effects:

<http://www.atsdr.cdc.gov/mrls/index.asp>. Click on link to “MRL List.pdf.”

OAQPS:

<http://www2.epa.gov/sites/production/files/2014-05/documents/table1.pdf>

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http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/index.htm. I recommend using the first “pdf” file (i.e., Summary Table) under this column heading: (TR=1E-06 THQ=1.0). This will give you the most-recent version of this source table (January 2015). If you choose to open the pdf link for “Resident Air,” you’ll see that table is dated November 2014.

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<http://app.leg.wa.gov/WAC/default.aspx?cite=173-460-150>

Links to technical literature articles

Acrolein

<http://ehp.niehs.nih.gov/1306911/>

<http://ehp.niehs.nih.gov/119-a68a/>

<http://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=557&tid=102> (go to Toxicological Profile link)

http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC35753

Carbon tetrachloride

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2912240/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2923770/>

http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC33661



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Portland, OR 97204
Phone: 503-229-6458
800-452-4011
Fax: 503-229-5850
Contact: Sue MacMillan
Macmillan.susan@deq.state.or.us

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<http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=35> (go to Toxicological Profile link)

Chloroform

<http://ehp.niehs.nih.gov/11079/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2274901/>

http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC33630

<http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=16> (go to Toxicological Profile link)

Methylene chloride/Dichloromethane

<http://ehp.niehs.nih.gov/1308030/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3166749/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC179887/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1128815/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1469447/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1566447/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1469552/>

http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC32832

www.oehha.ca.gov/air/chronic_rels/pdf/75092.pdf

<http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=42> (go to Toxicological Profile link)

Tetrachloroethylene/Perchloroethylene

<http://ehp.niehs.nih.gov/1307055/>

<http://ehp.niehs.nih.gov/1307359/>

<http://ehp.niehs.nih.gov/120-a362a/>

<http://ehp.niehs.nih.gov/1103996/>

<http://ehp.niehs.nih.gov/1103884/>

<http://www.atsdr.cdc.gov/csem/csem.asp?csem=14&po=10>

http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC35248

<http://www.atsdr.cdc.gov/ToxProfiles/TP.asp?id=265&tid=48> (go to Toxicological Profile link)

Toluene

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2935171/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2790325/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3096820/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3934838/>

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2643065/>

<http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=29> (go to Toxicological Profile link)

http://www.pesticideinfo.org/Detail_Chemical.jsp?Rec_Id=PC34598



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**Environmental
Solutions, Technical
Service, Air Quality**
811 SW 6th Avenue
Portland, OR 97204
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800-452-4011
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