UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III
841 Chestnut Street
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SEMS DocID 2294637

March 17, 1997

SUBJECT: Updated Risk-Based Concentration Table

FROM: Roy L. Smith, Ph.D.
Toxicologist

TO: RBC Table mailing list

Attached is the EPA Region III Risk-Based Concentration (RBC) table, which is updated periodically and made available to all interested parties. The Region encourages users of the Table to obtain it from Region III's Internet website, as described below. Region III no longer maintains a mailing list for distribution of the Table but a limited number of printed copies are available on request.

IMPORTANT MESSAGE -- THE RBC "ON LINE"

EPA Region III's Internet website now includes the RBC Table and associated material. It can be found at **http://www.epa.gov/reg3hwmd/index.html** *(then select the "Risk" button). I suggest you set a bookmark to ease future access! The Table can be browsed on line and separate files in .ZIP format can be quickly downloaded for use with Lotus or Excel. The cover memo and background information are also included.*

Region III strongly encourages all RBC table users to obtain the table electronically rather than on paper. In this way, users can access the most current RBC table immediately in a form that can be used directly for comparisons with data or risk estimates. This distribution method also saves EPA Region III reams of paper and costs substantially less.

CONTENTS, USES, AND LIMITATIONS OF THE RBC TABLE

The table contains reference doses and carcinogenic potency slopes (obtained from IRIS through December 1, 1996, HEAST through May 1995, the EPA-NCEA Superfund Health Risk Technical Support Center, and other EPA sources) for nearly 600 chemicals. These toxicity constants have been combined with "standard" exposure scenarios to calculate RBCs--chemical concentrations corresponding to fixed levels of risk (*i.e.*, a hazard quotient of one, or lifetime cancer risk of 10^{-6}, whichever occurs at a lower concentration) in water, air, fish tissue, and soil.

The RBC table also includes soil screening levels (SSLs) for protection of groundwater and air. Most SSLs were obtained directly from EPA/OSWER's proposed SSL guidance document, to which we have added some additional SSLs based on the same methodology.

Sources of SSLs are noted in the table. SSLs incorporate the same exposure assumptions as RBCs, plus additional assumptions needed for inter-media extrapolation. SSLs are therefore distinct from RBCs, and should be used only in the framework proposed in the OSWER document (available from NTIS as document numbers 9355.4-1, PB95-965530, or EPA540/R-94/105).

The Region III toxicologists use RBCs to screen sites not yet on the NPL, respond rapidly to citizen inquiries, and spot-check formal baseline risk assessments. The background materials provide the complete basis for all the calculations, with the intent of showing users exactly how the RBCs were developed. Simply put, RBCs are risk assessments run in reverse. For a single contaminant in a single medium, under standard default exposure assumptions, the RBC corresponds to the target risk or hazard quotient.

RBCs also have several important limitations. Specifically excluded from consideration are (1) transfers from soil to air and groundwater, and (2) cumulative risk from multiple contaminants or media. Also, the toxicity information in the table has been assembled by hand, and (despite extensive checking and years of use) may contain errors. It's advisable to cross-check before relying on any RfDs or CPSs in the table. If you find any errors, please send me a note.

Many users want to know if the risk-based concentrations can be used as valid no-action levels or cleanup levels, especially for soils. The answer is a bit complex. First, it is important to realize that the RBC table does not constitute regulation or guidance, and should not be viewed as a substitute for a site-specific risk assessment. For sites where:

1. A single medium is contaminated;
2. A single contaminant contributes nearly all of the health risk;
3. Volatilization or leaching of that contaminant from soil is expected not to be significant;
4. The exposure scenarios used in the RBC table are appropriate for the site;
5. The fixed risk levels used in the RBC table are appropriate for the site; and
6. Risk to ecological receptors is expected not to be significant;

the risk-based concentrations would probably be protective as no-action levels or cleanup goals. However, to the extent that a site deviates from this description, as most do, the RBCs would not necessarily be appropriate.

To summarize, the table should generally not be used to (1) set cleanup or no-action levels at CERCLA sites or RCRA Corrective Action sites, (2) substitute for EPA guidance for preparing baseline risk assessments, or (3) determine if a waste is hazardous under RCRA.

ANSWERS TO FREQUENTLY ASKED QUESTIONS

To help you better understand the RBC table, here are answers to our most often-asked questions:

1. How can the age-adjusted inhalation factor (11.66) be less than the inhalation rate for either a child (12) or an adult (20)?

Age-adjusted factors are not intake rates, but rather partial calculations which have different units than intake rates do. The fact that these partial calculations have values similar to intake rates is really coincidental, an artifact of the similar magnitude of years of exposure and time-averaged body weight.

2. Why does arsenic appear in the RBC table separately as a carcinogen and a non-carcinogen, while other contaminants do not?

Arsenic is double-entered to ensure that the risk assessor realizes that non-carcinogenic concerns are significant for arsenic. Otherwise, it might be tempting to accept a 1e-4 risk (43 ppm in residential soil), when the oral reference dose would be exceeded at 23 ppm.

Also, EPA has a little-known risk management policy for arsenic (dating from 1988) that suggests that arsenic-related cancer risks of up to 1e-3 can be accepted because the cancers are squamous cell carcinomas with a low mortality rate. Thus, non-carcinogenic RBCs represent an important limitation on acceptable arsenic concentrations.

3. Many contaminants have no inhaled reference dose or carcinogenic potency slope in IRIS, yet these numbers appear in the RBC table with IRIS given as the source. Where did the numbers come from?

Most inhaled reference doses and potency slopes in the RBC table are converted from reference concentrations and unit risk values which do appear in IRIS. These conversions assume 70-kg persons inhaling 20 m^3/d. For example, the inhalation unit risk for arsenic (4.3e-3 risk per $\mu g/m^3$) is divided by 20 m^3/d and multiplied by 70 kg times 1000 μg/mg, yielding a CPSi of 15.1 risk per mg/kg/d.

4. Why does the RBC table base soil RBCs for cadmium on a reference dose that applies only to drinking water?

The RBC table's use of the drinking water RfDs for cadmium reflects (1) the limited space available in the already-crowded table, and (2) the intended use of the table as a screening tool rather than a source of cleanup levels (thereby making false positives acceptable). For a formal risk assessment, Region III would use the food RfD for soil ingestion.

At this time, only cadmium(as far as we know) has distinct oral RfDs for water and food. Adding the food RfD to the table would require an entire column, which would be about 99.9% blank. The table has become so crowded that it would be difficult to accommodate another column. Also, we've given this problem a relatively low priority because the table's primary

purpose is to identify environmental problems needing further study. RBCs were never intended for uncritical use as cleanup levels, merely to identify potential problems which need a closer look.

5. For manganese, IRIS shows an oral reference dose of 0.14 mg/kg/d, but the RBC table uses 2.3e-2 mg/kg/d. Why? The IRIS RfD includes manganese from all sources, including diet. The explanatory text in IRIS recommends using a modifying factor of 3 when calculating risks associated with ingesting soil or drinking water, and the table follows this recommendation. I have also incorporated a factor of 2 for relative source contribution on the assumption that a typical individual will obtain half of the RfD (5 mg/d, or 0.07 mg/kg/d) from her diet, thereby limiting the acceptable contribution from soil and water to only half of the IRIS RfD. Thus, the IRIS RfD has been lowered by a factor of 2x3, or 6.

7. What is the source of the child's inhalation rate of 12 m3/d?

The calculation comes from basic physiology. It's a scaling of the mass-specific 20 m3/d rate for adults from a body mass of 70 kg to 15 kg, using the two-thirds power of mass, as follows:

Let: IRcm = mass-specific child inhalation rate (m3/kg/d)
IRc = child inhalation rate (m3/d)

20 m3/d ÷ 70kg = 0.286 m3/kg/d (mass-specific adult inhalation rate)

$0.286 \text{ m3/kg/d} \times (70^{.67}) = (\text{IRcm}) \times (15^{67})$

$\text{IRcm} = (0.286) \times (70^{.67}) \div (15^{.67}) = 0.286 \times 2.807 = 0.803 \text{ m3/kg/d}$

IRc = IRcm x 15kg = 0.803 m3/kg/d x 15kg = 12.04 m3/d

A short (but algebraically equivalent) way to do the conversion:

$20 \times (15 \div 70)^{.333} = 11.97$ (different from, but actually more correct than, 12.04 because of rounding error in calculating by the long form).

8. Can the oral RfDs in the RBC table be applied to dermal exposure?

Not directly. EPA's Office of Research and Development is working on dermal RfDs for some substances, but has not yet produced any final values. When dermal RfDs do appear, they will undoubtedly be based on absorbed dose rather than administered dose. Oral RfDs are (usually) based on administered dose and therefore tacitly include a GI absorption factor. Thus, any use of oral RfDs in dermal risk calculations would have to involve removing this absorption factor.

*9. The exposure variables table in the RBC background document lists the averaging time for non-carcinogens as "ED*365". What does that mean?*

ED is exposure duration, in years, and '*' is the computer-ese symbol for multiplication. Multiplying ED by 365 simply converts the duration to days. In fact, the ED term is included in both the numerator and denominator of the RBC algorithms for non-cancer risk, canceling it altogether. We expressed the algorithm this way to allow users to realize this. The total exposure is really adjusted only by EF (days exposed per year) divided by 365. (Note that this explanation applies to non-carcinogenic risk only; for carcinogens, exposure is pro-rated over the number of days in a 70-year life span.)

10. Why is inorganic lead not included in the RBC table?

The reason that lead is missing from the RBC table is simple, and fundamental: EPA has no reference dose or potency slope for inorganic lead, so it wasn't possible to calculate risk-based concentrations. EPA considers lead a special case because:

(1) Lead is ubiquitous in all media, so human exposure comes from multiple sources. Comparing single-medium exposures with a reference dose would be misleading.

(2) If EPA did develop a reference dose for lead by the same methods other reference doses, we would probably find that most people already exceed it. Since EPA already knows this and is moving aggressively to lower lead releases nationally, such findings at individual sites would be irrelevant and unduly alarming.

(3) EPA decided to take a new approach to distinguish important lead exposures from trivial ones. EPA developed a computer model (the IEUBK model) which predicts children's blood lead concentrations using lead levels in various media as inputs. The idea is to evaluate a child's entire environment, and reduce lead exposures in the most cost-effective way.

On the practical side, there are several EPA policies on lead which effectively substitute for RBCs. The EPA Office of Solid Waste has released a detailed directive on risk assessment and cleanup of residential soil lead. The directive recommends that soil lead levels less than 400 ppm be considered safe for residential use. Above that level, the document suggests collecting certain types of data and modeling children's blood lead with the IEUBK model. For the purposes of the RBC table, the *de facto* residential soil number would be 400 mg/kg. For water, we suggest 15 ppb (from the national EPA Action Level), and for air, the National Ambient Air Quality Standard.

11. Where did the potency slopes for carcinogenic PAHs come from?

The source of the potency slopes for PAHs is "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons," Final Draft, EPA Environmental Criteria and Assessment Office, Cincinnati, OH. It's available from NTIS as document number ECAO-CIN-842 (March, 1993). The slopes are expressed in terms of order-of-magnitude equivalence factors relating the compounds to benzo[a]pyrene; we have converted these TEQs

to potency slopes to fit the format of the table.

12. May I please have a copy of the January 1991 RBC table?

We're sorry, but no. The RBC table doesn't represent regulation or guidance, so past issues have no importance. Each time we update the table we destroy all obsolete copies, electronic and paper. We do this to ensure that only one set of RBCs, the one based on current information, exists at any time.

13. I've noticed that some soil RBCs are one million parts per million. Since some of these substances are liquids, that's obviously ridiculous. What is that basis for these calculations?

A soil RBC of one million parts per million means that no amount of the contaminant in soil will cause a receptor to exceed the oral reference dose by incidental ingestion of soil. In fact, some contaminants would have RBCs of more than one million ppm, but the algorithms cap concentrations at 100%. The reason we retain these admittedly impossible numbers is to let users see that the contaminant is not a threat via soil ingestion.

However, it's important to realize that the RBC calculations do not consider the potential of soil contaminants to leach to groundwater or escape to air by volatilization or dust entrainment. To consider these inter-media transfers, it's necessary to either monitor air and groundwater, or to use a mathematical model. Measured or modeled air and groundwater concentrations should then be compared to the RBCs for air and tap water.

We have begun to incorporate inter-media transfers into the RBC table in the form of soil screening levels (SSLs). However, EPA Headquarters has proposed only about a hundred SSLs so far, so the list is still rather short.

14. Please elaborate on the meaning of the 'W' source code in the table.

The "W" code means that a reference dose or potency slope for a contaminant is currently not present on either IRIS or HEAST, but that it once was present on either IRIS or HEAST and was removed. Such withdrawal usually indicates that consensus on the number no longer exists among EPA scientists, but not that EPA believes the contaminant to be unimportant. Older versions of the RBC table had separate codes for IRIS and HEAST withdrawals, but we changed to a single code for both because, after all, it hardly matters.

We retain withdrawn numbers in the table because we still need to deal with these contaminants during the sometimes very long delays before replacement numbers are ready. We take the position that for the purpose of screening an obsolete RBC is better than none at all. The 'W' code should serve as a clear warning that before making any serious decision involving that contaminant you will need to develop an interim value based on current scientific understanding.

If you are assessing risks at a site where a major contaminant is coded "W," consider working with your Regional EPA risk assessor to develop a current toxicity constant. If the site

is being studied under CERCLA, the EPA-NCEA Regional Technical Support group may be able to assist.

15. Can I get copies of supporting documents for interim toxicity constants which are coded "E" in the RBC table?

Unfortunately, Region 3 does not have a complete set of supporting documents. The EPA-NCEA Superfund Health Risk Technical Support Center prepares these interim toxicity constants in response to site-specific requests from Regional risk assessors, and sends the documentation only to the requestor. The RBC tables contain only the interim values (those with "E" codes) that we've either requested ourselves or otherwise obtained copies of. There may be many more interim values of which we are unaware. Also, we don't receive automatic updates when NCEA revisits a contaminant, so it's likely that some interim values in the RBC table are obsolete.

It has been NCEA's policy to deny requests for documentation of interim toxicity constants. Although Region 3 has sometimes provided this documentation on request, for the above-stated reasons we have no assurance that the assessments, or even the interim numbers, are current. We've decided to discontinue distributing information that may be misleading. If an "E"-coded contaminant is a major risk contributor at your site, we strongly suggest that you work with EPA to develop an up-to-date reference dose or slope factor.

CHANGES IN THIS ISSUE OF THE RBC TABLE

New or revised EPA toxicity constants are now marked with "**" before the contaminant name. This is to help users quickly pick out substances with new RBCs. Formerly these contaminants were printed in underlined boldface type that copied badly. A new basis code, "M" for MCL, has been added to the upper right corner of each page. This code denotes soil screening levels for groundwater protection that are based on EPA Maximum Contaminant Levels.

Also, please note that a revised approach has been established to evaluate the carcinogenic risks associated with exposure to PCBs and this change is reflected in this edition of the RBC Table. For these compounds, EPA endorses a tiered-approach, incorporating a range of carcinogenic slope factors, for assessing PCB mixtures. The lowest end of the range, 0.04 $(mg/kg/day)^{-1}$, is generally applicable to central tendency risk estimates involving the less chlorinated and less persistent PCB congeners under specific exposure conditions. The upper end of the carcinogenic slope range is 2.0 $(mg/kg/day)^{-1}$, and generally should be used for the more toxic and more persistent PCBs. Please refer to the IRIS database for detailed information on the application of the carcinogenic slope range for PCBs. In the RBC Table, the "Polychlorinated biphenyls (PCBs)" entry is for *total* Aroclors and includes the highest, most conservative carcinogenic slope factor, 2.0 $(mg/kg/day)^{-1}$, for screening purposes. (The next two lines in the Table include reference dose information for the non-cancer health effects related to Aroclors 1016 and 1254.)

If you have a question about the RBC Table, please call the EPA Region III Superfund Technical Support Section at 215-566-3041 (please note this new number). Please limit your

questions to general RBC issues; if you have a question about applying RBCs to a site, please contact the EPA Regional Office handling the project. Thanks for your help and cooperation and we hope that the RBC Table continues to be a useful resource!

I have one last announcement--I have transferred from Region III to the EPA Office of Air Quality Planning and Standards in RTP, NC. Region III will continue to support the RBC Table and I intend to remain involved for the time being. Thank you all for your interest and support; it's been a privilege working with all of you.

Attachment

Sources: I=IRIS H=HEAST A=HEAST alternate W=Withdrawn from IRIS or HEAST E=EPA-NCEA Regional Support provisional value O=Other EPA documents

Basis: C=carcinogenic effects N=noncarcinogenic effects E=EPA draft Soil Screening Level S=soil saturation concentration M=EPA MCL

Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Acephate	30560191	4.00E-03 I		8.70E-03 I			7.70E+00 C	7.20E-01 C	3.60E-01 C	6.60E+02 C	7.30E+01 C	0.00E+00	0.00E+00
Acetaldehyde	75070		2.57E-03 I		7.70E-03 I		9.40E+01 N	8.10E-01 C	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acetochlor	34256821	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Acetone	67641	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	6.20E+04 E	8.00E+00 E
Acetone cyanohydrin	75865	7.00E-02 H	4.00E-02 A				2.60E+03 N	1.50E+02 N	9.50E+01 N	1.40E+05 N	5.50E+03 N	0.00E+00	0.00E+00
Acetonitrile	75078	6.00E-03 I	1.43E-02 A				2.20E+02 N	5.20E+01 N	8.10E+00 N	1.20E+04 N	4.70E+02 N	0.00E+00	0.00E+00
Acetophenone	98862	1.00E-01 I	5.71E-06 W			☒	4.20E-02 N	2.10E-02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Acifluorfen	62476599	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
Acrolein	107028	2.00E-02 H	5.71E-06 I				7.30E+02 N	2.10E-02 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Acrylamide	79061	2.00E-04 I		4.50E+00 I	4.55E+00 I		1.50E-02 C	1.40E-03 C	7.00E-04 C	1.30E+00 C	1.40E-01 C	0.00E+00	0.00E+00
Acrylic acid	79107	5.00E-01 I	2.86E-04 I				1.80E+04 N	1.00E+00 N	6.80E+02 N	1.00E+06 N	3.90E+04 N	0.00E+00	0.00E+00
Acrylonitrile	107131	1.00E-03 H	5.71E-04 I	5.40E-01 I	2.38E-01 I		1.20E-01 C	2.60E-02 C	5.80E-03 C	1.10E+01 C	1.20E+00 C	0.00E+00	0.00E+00
Alachlor	15972608	1.00E-02 I		8.00E-02 H			8.40E-01 C	7.80E-02 C	3.90E-02 C	7.20E+01 C	8.00E+00 C	0.00E+00	0.00E+00
Alar	1596845	1.50E-01 I					5.50E+03 N	5.50E+02 N	2.00E+02 N	3.10E+05 N	1.20E+04 N	0.00E+00	0.00E+00
Aldicarb	116063	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	5.70E+02 S	3.60E-02 M
Aldicarb sulfone	1646884	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
Aldrin	309002	3.00E-05 I		1.70E+01 I	1.71E+01 I		4.00E-03 C	3.70E-04 C	1.90E-04 C	3.40E-01 C	3.80E-02 C	5.00E-01 E	5.00E-03 E
Ally	74223646	2.50E-01 I					9.10E+03 N	9.10E+02 N	3.40E+02 N	5.10E+05 N	2.00E+04 N	0.00E+00	0.00E+00
Allyl alcohol	107186	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Allyl chloride	107051	5.00E-02 W	2.86E-04 I				1.80E+03 N	1.00E+00 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Aluminum	7429905	1.00E+00 E					3.70E+04 N	3.70E+03 N	1.40E+03 N	1.00E+06 N	7.80E+04 N	0.00E+00	0.00E+00
Aluminum phosphide	20859738	4.00E-04 I					1.50E+01 N	1.50E+00 N	5.40E-01 N	8.20E+02 N	3.10E+01 N	0.00E+00	0.00E+00
Amdro	67485294	3.00E-04 I					1.10E+01 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	0.00E+00	0.00E+00
Ametryn	834128	9.00E-03 I					3.30E+02 N	3.30E+01 N	1.20E+01 N	1.80E+04 N	7.00E+02 N	0.00E+00	0.00E+00
m-Aminophenol	591275	7.00E-02 H					2.60E+03 N	2.60E+02 N	9.50E+01 N	1.40E+05 N	5.50E+03 N	0.00E+00	0.00E+00
4-Aminopyridine	504245	2.00E-05 H					7.30E-01 N	7.30E-02 N	2.70E-02 N	4.10E+01 N	1.60E+00 N	0.00E+00	0.00E+00
Amitraz	33089611	2.50E-03 I					9.10E+01 N	9.10E+00 N	3.40E+00 N	5.10E+03 N	2.00E+02 N	0.00E+00	0.00E+00
Ammonia	7664417		2.86E-02 I				1.00E+03 N	1.00E+02 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ammonium sulfamate	7773060	2.00E-01 I					7.30E+03 N	7.30E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	0.00E+00	0.00E+00
Aniline	62533		2.86E-04 I	5.70E-03 I			1.00E+01 N	1.00E+00 N	5.50E-01 C	1.00E+03 C	1.10E+02 C	4.50E+01 N	3.10E-02 N
Antimony and compounds	7440360	4.00E-04 I					1.50E+01 N	1.50E+00 N	5.40E-01 N	8.20E+02 N	3.10E+01 N	0.00E+00	0.00E+00
Antimony pentoxide	1314609	5.00E-04 H					1.80E+01 N	1.80E+00 N	6.80E-01 N	1.00E+03 N	3.90E+01 N	0.00E+00	0.00E+00
Antimony potassium tartrate	304610	9.00E-04 H					3.30E+01 N	3.30E+00 N	1.20E+00 N	1.80E+03 N	7.00E+01 N	0.00E+00	0.00E+00
Antimony tetroxide	1332316	4.00E-04 H					1.50E+01 N	1.50E+00 N	5.40E-01 N	8.20E+02 N	3.10E+01 N	0.00E+00	0.00E+00
Antimony trioxide	1309644	4.00E-04 H					1.50E+01 N	1.50E+00 N	5.40E-01 N	8.20E+02 N	3.10E+01 N	0.00E+00	0.00E+00
Apollo	74115245	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
Aramite	140578	5.00E-02 H		2.50E-02 I	2.49E-02 I		2.70E+00 C	2.50E-01 C	1.30E-01 C	2.30E+02 C	2.60E+01 C	0.00E+00	0.00E+00
Arsenic	7440382	3.00E-04 I					1.10E+01 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	3.80E+02 E	1.50E+01 E
Arsenic (as carcinogen)	7440382			1.50E+00 I	1.51E+01 I		4.50E-02 C	4.10E-04 C	2.10E-03 C	3.80E+00 C	4.30E-01 C	3.80E+02 E	1.50E+01 E
Arsine	7784421		1.43E-05 I				5.20E-01 N	5.20E-02 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Assure	76578148	9.00E-03 I					3.30E+02 N	3.30E+01 N	1.20E+01 N	1.80E+04 N	7.00E+02 N	0.00E+00	0.00E+00
Asulam	3337711	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00

Sources: I=IRIS H=HEAST A=HEAST alternate W=Withdrawn from IRIS or HEAST E=EPA-NCEA Regional Support provisional value O=Other EPA documents.

Basis: C=carcinogenic effects N=noncarcinogenic effects E=EPA draft Soil Screening Level S=soil saturation concentration M=EPA MCL.

Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Soil Ingestion: Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Atrazine	1912249	3.50E-02 I		2.22E-01 H			3.00E-01 C	2.80E-02 C	1.40E-02 C	2.60E+01 C	2.90E+00 C	0.00E+00	0.00E+00
Avermectin B1	65195553	4.00E-04 I					1.50E+01 N	1.50E+00 N	5.40E-01 N	8.20E+02 N	3.10E+01 N	0.00E+00	0.00E+00
Azobenzene	103333			1.10E-01 I	1.08E-01 I		6.10E-01 C	5.80E-02 C	2.90E-02 C	5.20E+01 C	5.80E+00 C	0.00E+00	0.00E+00
Barium and compounds	7440393	7.00E-02 I	1.43E-04 A				2.60E+03 N	5.20E-01 N	9.50E+01 N	1.40E+05 N	5.50E+03 N	3.50E+05 E	3.20E+01 E
Baygon	114261	4.00E-03 I					1.50E+02 N	1.50E+01 N	5.40E+00 N	8.20E+03 N	3.10E+02 N	0.00E+00	0.00E+00
Bayleton	43121433	3.00E-02 I					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
Baythroid	68359375	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
Benefin	1861401	3.00E-01 I					1.10E+04 N	1.10E+03 N	4.10E+02 N	6.10E+05 N	2.30E+04 N	0.00E+00	0.00E+00
Benomyl	17804352	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Bentazon	25057890	2.50E-03 I					9.10E+01 N	9.10E+00 N	3.40E+00 N	5.10E+03 N	2.00E+02 N	0.00E+00	0.00E+00
Benzaldehyde	100527	1.00E-01 I				☒	6.10E+02 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Benzene	71432		1.71E-03 E	2.90E-02 I	2.90E-02 I	☒	3.60E-01 C	2.20E-01 C	1.10E-01 C	2.00E+02 C	2.20E+01 C	5.00E-01 E	2.00E-02 E
Benzenethiol	108985	1.00E-05 H					3.70E-01 N	3.70E-02 N	1.40E-02 N	2.00E+01 N	7.80E-01 N	0.00E+00	0.00E+00
Benzidine	92875	3.00E-03 I		2.30E+02 I	2.35E+02 I		2.90E-04 C	2.70E-05 C	1.40E-05 C	2.50E-02 C	2.80E-03 C	1.30E+00 C	1.10E-06 C
Benzoic acid	65850	4.00E+00 I					1.50E+05 N	1.50E+04 N	5.40E+03 N	1.00E+06 N	3.10E+05 N	3.20E+02 S	2.80E+02 E
Benzotrichloride	98077			1.30E+01 I			5.20E-03 C	4.80E-04 C	2.40E-04 C	4.40E-01 C	4.90E-02 C	1.20E-02 C	7.30E-05 C
Benzyl alcohol	100516	3.00E-01 H					1.10E+04 N	1.10E+03 N	4.10E+02 N	6.10E+05 N	2.30E+04 N	0.00E+00	0.00E+00
Benzyl chloride	100447			1.70E-01 I		☒	6.20E-02 C	3.70E-02 C	1.90E-02 C	3.40E+01 C	3.80E+00 C	5.00E-01 C	3.60E-04 C
Beryllium and compounds	7440417	5.00E-03 I		4.30E+00 I	8.40E+00 I		1.60E-02 C	7.50E-04 C	7.30E-04 C	1.30E+00 C	1.50E-01 C	6.90E+02 E	1.80E+02 E
Bidrin	141662	1.00E-04 I					3.70E+00 N	3.70E-01 N	1.40E-01 N	2.00E+02 N	7.80E+00 N	0.00E+00	0.00E+00
Biphenthrin (Talstar)	82657043	1.50E-02 I					5.50E+02 N	5.50E+01 N	2.00E+01 N	3.10E+04 N	1.20E+03 N	0.00E+00	0.00E+00
1,1-Biphenyl	92524	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	9.00E+03 S	1.10E+02 N
Bis(2-chloroethyl)ether	111444			1.10E+00 I	1.16E+00 I	☒	9.20E-03 C	5.40E-03 C	2.90E-03 C	5.20E+00 C	5.80E-01 C	3.00E-01 E	3.00E-04 E
Bis(2-chloroisopropyl)ether	39638329	4.00E-02 I		7.00E-02 H	3.50E-02 H	☒	2.60E-01 C	1.80E-01 C	4.50E-02 C	8.20E+01 C	9.10E+00 C	0.00E+00	0.00E+00
Bis(chloromethyl)ether	542881			2.20E+02 I	2.17E+02 I	☒	4.90E-05 C	2.90E-05 C	1.40E-05 C	2.60E-02 C	2.90E-03 C	3.70E-05 C	1.00E-07 C
Bis(2-chloro-1-methylethyl)ether	0			7.00E-02 W	7.00E-02 W		9.60E-01 C	8.90E-02 C	4.50E-02 C	8.20E+01 C	9.10E+00 C	0.00E+00	0.00E+00
Bis(2-ethylhexyl)phthalate (DEHP)	117817	2.00E-02 I		1.40E-02 I			4.80E+00 C	4.50E-01 C	2.30E-01 C	4.10E+02 C	4.60E+01 C	2.10E+02 E	1.10E+01 E
Bisphenol A	80057	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Boron (and borates)	7440428	9.00E-02 I	5.71E-03 H				3.30E+03 N	2.10E+01 N	1.20E+02 N	1.80E+05 N	7.00E+03 N	0.00E+00	0.00E+00
Boron trifluoride	7637072		2.00E-04 H				7.30E+00 N	7.30E-01 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bromodichloromethane	75274	2.00E-02 I		6.20E-02 I		☒	1.70E-01 C	1.00E-01 C	5.10E-02 C	9.20E+01 C	1.00E+01 C	1.80E+03 E	3.00E-01 E
Bromoethene	593602				1.10E-01 H	☒	9.60E-02 C	5.70E-02 C	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bromoform (tribromomethane)	75252	2.00E-02 I		7.90E-03 I	3.85E-03 I	☒	2.40E+00 C	1.60E+00 C	4.00E-01 C	7.20E+02 C	8.10E+01 C	4.60E+01 E	5.00E-01 E
Bromomethane	74839	1.40E-03 I	1.43E-03 I			☒	8.70E+00 N	5.20E+00 N	1.90E+00 N	2.90E+03 N	1.10E+02 N	2.00E+00 E	1.00E-01 E
4-Bromophenyl phenyl ether	101553	5.80E-02 O					2.10E+03 N	2.10E+02 N	7.80E+01 N	1.20E+05 N	4.50E+03 N	0.00E+00	0.00E+00
Bromophos	2104963	5.00E-03 H					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Bromoxynil	1689845	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Bromoxynil octanoate	1689992	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
1,3-Butadiene	106990				9.80E-01 I	☒	1.10E-02 C	6.40E-03 C	0.00E+00	0.00E+00	0.00E+00	1.30E-03 C	7.20E-05 C
1-Butanol	71363	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	9.70E+03 E	8.00E+00 E
Butyl benzyl phthalate	85687	2.00E-01 I					7.30E+03 N	7.30E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	5.30E+02 E	6.80E+01 E
Butylate	2008415	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00

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Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
sec-Butylbenzene	135988	1.00E-02 E				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	8.00E+01 S	2.70E-01 M
tert-Butylbenzene	104518	1.00E-02 E				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	2.70E-01 M
Butylphthalyl butylglycolate	85701	1.00E+00 I					3.70E+04 N	3.70E+03 N	1.40E+03 N	1.00E+06 N	7.80E+04 N	0.00E+00	0.00E+00
Cacodylic acid	75605	3.00E-03 H					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
Cadmium and compounds	7440439	5.00E-04 I	5.71E-05 W		6.30E+00 I		1.80E+01 N	9.90E-04 C	6.80E-01 N	1.00E+03 N	3.90E+01 N	9.20E+02 E	6.00E+00 E
Caprolactam	105602	5.00E-01 I					1.80E+04 N	1.80E+03 N	6.80E+02 N	1.00E+06 N	3.90E+04 N	0.00E+00	0.00E+00
Captafol	2425061	2.00E-03 I		8.60E-03 H			7.80E+00 C	7.30E-01 C	3.70E-01 C	6.70E+02 C	7.40E+01 C	0.00E+00	0.00E+00
Captan	133062	1.30E-01 I		3.50E-03 H			1.90E+01 C	1.80E+00 C	9.00E-01 C	1.60E+03 C	1.80E+02 C	0.00E+00	0.00E+00
Carbaryl	63252	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	3.40E-01 S	2.30E+01 N
Carbofuran	1563662	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Carbon disulfide	75150	1.00E-01 I	2.00E-01 I			☒	1.00E+03 N	7.30E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	1.10E+01 E	1.40E+01 E
Carbon tetrachloride	56235	7.00E-04 I	5.71E-04 E	1.30E-01 I	5.25E-02 I	☒	1.60E-01 C	1.20E-01 C	2.40E-02 C	4.40E+01 C	4.90E+00 C	2.00E-01 E	3.00E-02 E
Carbosulfan	55285148	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
Carboxin	5234684	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Chloral	75876	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
Chloramben	133904	1.50E-02 I					5.50E+02 N	5.50E+01 N	2.00E+01 N	3.10E+04 N	1.20E+03 N	0.00E+00	0.00E+00
Chloranil	118752			4.03E-01 H			1.70E-01 C	1.60E-02 C	7.80E-03 C	1.40E+01 C	1.60E+00 C	0.00E+00	0.00E+00
Chlordane	57749	6.00E-05 I		1.30E+00 I	1.29E+00 I		5.20E-02 C	4.90E-03 C	2.40E-03 C	4.40E+00 C	4.90E-01 C	1.00E+01 E	2.00E+00 E
Chlorimuron-ethyl	90982324	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Chlorine	7782505	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Chlorine dioxide	10049044		5.71E-05 I				2.10E+00 N	2.10E-01 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chloroacetaldehyde	107200	6.90E-03 O					2.50E+02 N	2.50E+01 N	9.30E+00 N	1.40E+04 N	5.40E+02 N	0.00E+00	0.00E+00
Chloroacetic acid	79118	2.00E-03 H					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
2-Chloroacetophenone	532274		8.57E-06 I				3.10E-01 N	3.10E-02 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4-Chloroaniline	106478	4.00E-03 I					1.50E+02 N	1.50E+01 N	5.40E+00 N	8.20E+03 N	3.10E+02 N	1.20E+03 S	3.00E-01 E
Chlorobenzene	108907	2.00E-02 I	5.71E-03 A			☒	3.90E+01 N	2.10E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	9.40E+01 E	6.00E-01 E
Chlorobenzilate	510156	2.00E-02 I		2.70E-01 H	2.70E-01 H		2.50E-01 C	2.30E-02 C	1.20E-02 C	2.10E+01 C	2.40E+00 C	0.00E+00	0.00E+00
p-Chlorobenzoic acid	74113	2.00E-01 H					7.30E+03 N	7.30E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	0.00E+00	0.00E+00
4-Chlorobenzotrifluoride	98566	2.00E-02 H					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	8.60E+01 N	7.50E+00 N
2-Chloro-1,3-butadiene	126998	2.00E-02 A	2.00E-03 H			☒	1.40E+01 N	7.30E+00 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
1-Chlorobutane	109693	4.00E-01 H				☒	2.40E+03 N	1.50E+03 N	5.40E+02 N	8.20E+05 N	3.10E+04 N	0.00E+00	0.00E+00
Chlorodibromomethane	124481	2.00E-02 I		8.40E-02 I		☒	1.30E-01 C	7.50E-02 C	3.80E-02 C	6.80E+01 C	7.60E+00 C	1.90E+03 E	2.00E-01 E
1-Chloro-1,1-difluoroethane	75683		1.43E+01 I			☒	8.70E+04 N	5.20E+04 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chlorodifluoromethane	75456		1.43e+01 I			☒	8.70E+04 N	5.20E+04 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chloroethane	75003	4.00E-01 E	2.86E+00 I			☒	8.60E+03 N	1.00E+04 N	5.40E+02 N	8.20E+05 N	3.10E+04 N	2.60E+03 S	3.30E+01 N
2-Chloroethyl vinyl ether	110758	2.50E-02 O				☒	1.50E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
Chloroform	67663	1.00E-02 I		6.10E-03 I	8.05E-02 I	☒	1.50E-01 C	7.80E-02 C	5.20E-01 C	9.40E+02 C	1.00E+02 C	2.00E-01 E	3.00E-01 E
Chloromethane	74873			1.30E-02 H	6.30E-03 H	☒	1.40E+00 C	9.90E-01 C	2.40E-01 C	4.40E+02 C	4.90E+01 C	6.30E-02 C	6.60E-03 C
4-Chloro-2,2-methylaniline hydrochloride	3165933			4.60E-01 H			1.50E-01 C	1.40E-02 C	6.90E-03 C	1.20E+01 C	1.40E+00 C	0.00E+00	0.00E+00
4-Chloro-2-methylaniline	95692			5.80E-01 H			1.20E-01 C	1.10E-02 C	5.40E-03 C	9.90E+00 C	1.10E+00 C	0.00E+00	0.00E+00
beta-Chloronaphthalene	91587	8.00E-02 I					2.90E+03 N	2.90E+02 N	1.10E+02 N	1.60E+05 N	6.30E+03 N	2.80E+00 S	1.40E+02 N
o-Chloronitrobenzene	88733			2.50E-02 H		☒	4.20E-01 C	2.50E-01 C	1.30E-01 C	2.30E+02 C	2.60E+01 C	0.00E+00	0.00E+00

EPA Region III Risk-Based Concentrations: R.L. Smith (03/14/97)

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p-Chloronitrobenzene	100005			1.80E-02 H		☒	5.90E-01 C	3.50E-01 C	1.80E-01 C	3.20E+02 C	3.50E+01 C	0.00E+00	0.00E+00
2-Chlorophenol	95578	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	5.30E+04 E	2.00E+00 E
2-Chloropropane	75296		2.86E-02 H			☒	1.70E+02 N	1.00E+02 N	0.00E+00	0.00E+00	0.00E+00	2.20E+01 N	6.40E-01 N
Chlorothalonil	1897456	1.50E-02 I		1.10E-02 H			6.10E+00 C	5.70E-01 C	2.90E-01 C	5.20E+02 C	5.80E+01 C	0.00E+00	0.00E+00
o-Chlorotoluene	95498	2.00E-02 I					1.20E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	1.20E+03 N	5.60E+00 N
Chlorpropham	101213	2.00E-01 I				☒	7.30E+03 N	7.30E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	0.00E+00	0.00E+00
Chlorpyrifos	2921882	3.00E-03 I					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
Chlorpyrifos-methyl	5598130	1.00E-02 H					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
Chlorsulfuron	64902723	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Chlorthiophos	60238564	8.00E-04 H					2.90E+01 N	2.90E+00 N	1.10E+00 N	1.60E+03 N	6.30E+01 N	0.00E+00	0.00E+00
Chromium III and compounds	16065831	1.00E+00 I	5.71E-07 W				3.70E+04 N	2.10E-03 N	1.40E+03 N	1.00E+06 N	7.80E+04 N	0.00E+00	0.00E+00
Chromium VI and compounds	18540299	5.00E-03 I					1.80E+02 N	1.50E-04 C	6.80E+00 N	1.00E+04 N	3.90E+02 N	1.40E+02 E	1.90E+01 E
Coal tar	8001589				4.20E+01 I		0.00E+00	2.80E-03 C	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt	7440484	6.00E-02 E			2.20E+00 W		2.20E+03 N	2.20E+02 N	8.10E+01 N	1.20E+05 N	4.70E+03 N	0.00E+00	0.00E+00
Coke Oven Emissions	8007452				2.17E+00 I		0.00E+00	2.90E-03 C	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Copper and compounds	7440508	4.00E-02 E					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	0.00E+00	0.00E+00
Crotonaldehyde	123739	1.00E-02 W		1.90E+00 H	1.90E+00 W		3.50E-02 C	3.30E-03 C	1.70E-03 C	3.00E+00 C	3.40E-01 C	0.00E+00	0.00E+00
Cumene	98828	4.00E-02 I	2.57E-03 H				1.50E+03 N	9.40E+00 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	8.10E+01 N	6.50E+01 N
Cyanides:	0						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Barium cyanide	542621	1.00E-01 W					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Calcium cyanide	592018	4.00E-02 I					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	0.00E+00	0.00E+00
Chlorine cyanide	506774	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Copper cyanide	544923	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Cyanazine	21725462	2.00E-03 H		8.40E-01 H			8.00E-02 C	7.50E-03 C	3.80E-03 C	6.80E+00 C	7.60E-01 C	0.00E+00	0.00E+00
Cyanogen	460195	4.00E-02 I					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	0.00E+00	0.00E+00
Cyanogen bromide	506683	9.00E-02 I					3.30E+03 N	3.30E+02 N	1.20E+02 N	1.80E+05 N	7.00E+03 N	0.00E+00	0.00E+00
Cyanogen chloride	506774	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Free cyanide	57125	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Hydrogen cyanide	74908	2.00E-02 I	8.57E-04 I				7.30E+02 N	3.10E+00 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Potassium cyanide	151508	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Potassium silver cyanide	506616	2.00E-01 I					7.30E+03 N	7.30E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	0.00E+00	0.00E+00
Silver cyanide	506649	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Sodium cyanide	143339	4.00E-02 I					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	0.00E+00	0.00E+00
Thiocyanate	0	2.00E-02 E					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Zinc cyanide	557211	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Cyclohexanone	108941	5.00E+00 I				☒	3.00E+04 N	1.80E+04 N	6.80E+03 N	1.00E+06 N	3.90E+05 N	0.00E+00	0.00E+00
Cyclohexlamine	108918	2.00E-01 I					7.30E+03 N	7.30E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	0.00E+00	0.00E+00
Cyhalothrin/Karate	68085858	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Cypermethrin	52315078	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
Cyromazine	66215278	7.50E-03 I					2.70E+02 N	2.70E+01 N	1.00E+01 N	1.50E+04 N	5.90E+02 N	0.00E+00	0.00E+00
Dacthal	1861321	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
Dalapon	75990	3.00E-02 I					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00

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Basis: C=carcinogenic effects N=noncarcinogenic effects E=EPA draft Soil Screening Level S=soil saturation concentration M=EPA MCL.

Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Danitol	39515418	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
DDD	72548			2.40E-01 I			2.80E-01 C	2.60E-02 C	1.30E-02 C	2.40E+01 C	2.70E+00 C	3.70E+01 S	7.00E-01 E
DDE	72559			3.40E-01 I			2.00E-01 C	1.80E-02 C	9.30E-03 C	1.70E+01 C	1.90E+00 C	1.00E+01 S	5.00E-01 E
DDT	50293	5.00E-04 I		3.40E-01 I	3.40E-01 I		2.00E-01 C	1.80E-02 C	9.30E-03 C	1.70E+01 C	1.90E+00 C	8.00E+01 E	1.00E+00 E
Decabromodiphenyl ether	1163195	1.00E-02 I				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
Demeton	8065483	4.00E-05 I					1.50E+00 N	1.50E-01 N	5.40E-02 N	8.20E+01 N	3.10E+00 N	0.00E+00	0.00E+00
Diallate	2303164			6.10E-02 H		☒	1.70E-01 C	1.00E-01 C	5.20E-02 C	9.40E+01 C	1.00E+01 C	0.00E+00	0.00E+00
Diazinon	333415	9.00E-04 H					3.30E+01 N	3.30E+00 N	1.20E+00 N	1.80E+03 N	7.00E+01 N	5.40E+03 S	2.80E+00 N
Dibenzofuran	132649	4.00E-03 E					1.50E+02 N	1.50E+01 N	5.40E+00 N	8.20E+03 N	3.10E+02 N	1.20E+02 S	1.20E+02 N
1,4-Dibromobenzene	106376	1.00E-02 I				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
1,2-Dibromo-3-chloropropane	96128		5.71E-05 I	1.40E+00 H	2.42E-03 H	☒	4.80E-02 C	2.10E-01 N	2.30E-03 C	4.10E+00 C	4.60E-01 C	1.90E+00 N	6.10E-04 M
1,2-Dibromoethane	106934		5.71E-05 H	8.50E+01 I	7.70E-01 I	☒	7.50E-04 C	8.10E-03 C	3.70E-05 C	6.70E-02 C	7.50E-03 C	5.80E-03 C	1.80E-04 M
Dibutyl phthalate	84742	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	1.00E+02 E	1.20E+02 E
Dicamba	1918009	3.00E-02 I					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
1,2-Dichlorobenzene	95501	9.00E-02 I	4.00E-02 A			☒	2.70E+02 N	1.50E+02 N	1.20E+02 N	1.80E+05 N	7.00E+03 N	3.00E+02 E	6.00E+00 E
1,3-Dichlorobenzene	541731	8.90E-02 O				☒	5.40E+02 N	3.20E+02 N	1.20E+02 N	1.80E+05 N	7.00E+03 N	0.00E+00	0.00E+00
1,4-Dichlorobenzene	106467		2.29E-01 I	2.40E-02 H		☒	4.40E-01 C	2.60E-01 C	1.30E-01 C	2.40E+02 C	2.70E+01 C	7.70E+03 E	1.00E+00 E
3,3'-Dichlorobenzidine	91941			4.50E-01 I			1.50E-01 C	1.40E-02 C	7.00E-03 C	1.30E+01 C	1.40E+00 C	5.20E+01 S	1.00E-02 E
1,4-Dichloro-2-butene	764410				9.30E+00 H	☒	1.10E-03 C	6.70E-04 C	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Dichlorodifluoromethane	75718	2.00E-01 I	5.71E-02 A			☒	3.90E+02 N	2.10E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	3.70E+01 N	7.50E+00 N
1,1-Dichloroethane	75343	1.00E-01 H	1.43E-01 A			☒	8.10E+02 N	5.20E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	9.80E+02 E	1.10E+01 E
1,2-Dichloroethane (EDC)	107062		2.86E-03 E	9.10E-02 I	9.10E-02 I	☒	1.20E-01 C	6.90E-02 C	3.50E-02 C	6.30E+01 C	7.00E+00 C	3.00E-01 E	1.00E-02 E
1,1-Dichloroethylene	75354	9.00E-03 I		6.00E-01 I	1.75E-01 I	☒	4.40E-02 C	3.60E-02 C	5.30E-03 C	9.50E+00 C	1.10E+00 C	4.00E-02 E	3.00E-02 E
1,2-Dichloroethylene (cis)	156592	1.00E-02 H				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	1.50E+03 E	2.00E-01 E
1,2-Dichloroethylene (trans)	156605	2.00E-02 I				☒	1.20E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	3.60E+03 E	3.00E-01 E
1,2-Dichloroethylene (mixture)	540590	9.00E-03 H				☒	5.50E+01 N	3.30E+01 N	1.20E+01 N	1.80E+04 N	7.00E+02 N	0.00E+00	0.00E+00
2,4-Dichlorophenol	120832	3.00E-03 I					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	4.80E+03 S	5.00E-01 E
2,4-Dichlorophenoxyacetic Acid (2,4-D)	94757	1.00E-02 I				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	7.00E+03 S	1.70E+00 M
4-(2,4-Dichlorophenoxy)butyric Acid	94826	8.00E-03 I					2.90E+02 N	2.90E+01 N	1.10E+01 N	1.60E+04 N	6.30E+02 N	0.00E+00	0.00E+00
1,2-Dichloropropane	78875		1.14E-03 I	6.80E-02 H		☒	1.60E-01 C	9.20E-02 C	4.60E-02 C	8.40E+01 C	9.40E+00 C	1.10E+01 E	2.00E-02 E
2,3-Dichloropropanol	616239	3.00E-03 I					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
1,3-Dichloropropene	542756	3.00E-04 I	5.71E-03 I	1.75E-01 H	1.30E-01 H	☒	7.70E-02 C	4.80E-02 C	1.80E-02 C	3.30E+01 C	3.70E+00 C	1.00E-01 E	1.00E-03 E
Dichlorvos	62737	5.00e-04 I	1.43E-04 I	2.90E-01 I			2.30E-01 C	2.20E-02 C	1.10E-02 C	2.00E+01 C	2.20E+00 C	3.50E+00 C	7.20E-04 C
Dicofol	115322			4.40E-01 W			1.50E-01 C	1.40E-02 C	7.20E-03 C	1.30E+01 C	1.50E+00 C	0.00E+00	0.00E+00
Dicyclopentadiene	77736	3.00E-02 H	5.71E-05 A			☒	4.20E-01 N	2.10E-01 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
Dieldrin	60571	5.00E-05 I		1.60E+01 I	1.61E+01 I		4.20E-03 C	3.90E-04 C	2.00E-04 C	3.60E-01 C	4.00E-02 C	2.00E+00 E	1.00E-03 E
Diesel emissions	0		1.43E-03 I				5.20E+01 N	5.20E+00 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diethyl phthalate	84662	8.00E-01 I					2.90E+04 N	2.90E+03 N	1.10E+03 N	1.00E+06 N	6.30E+04 N	5.20E+02 E	1.10E+02 E
Diethylene glycol, monobutyl ether	112345		5.71E-03 H				2.10E+02 N	2.10E+01 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diethylene glycol, monoethyl ether	111900	2.00E+00 H					7.30E+04 N	7.30E+03 N	2.70E+03 N	1.00E+06 N	1.60E+05 N	0.00E+00	0.00E+00
Diethylforamide	617845	1.10E-02 H					4.00E+02 N	4.00E+01 N	1.50E+01 N	2.20E+04 N	8.60E+02 N	0.00E+00	0.00E+00
Di(2-ethylhexyl)adipate	103231	6.00E-01 I		1.20E-03 I			5.60E+01 C	5.20E+00 C	2.60E+00 C	4.80E+03 C	5.30E+02 C	0.00E+00	0.00E+00

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Basis: C=carcinogenic effects N=noncarcinogenic effects E=EPA draft Soil Screening Level S=soil saturation concentration M=EPA MCL

Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Soil Ingestion: Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Diethylstilbestrol	56531			4.70E+03 H			1.40E-05 c	1.30E-06 c	7.00E-07 c	1.20E-03 c	1.40E-04 c	0.00E+00	0.00E+00
Difenzoquat (Avenge)	43222486	8.00E-02 I					2.90E+03 N	2.90E+02 N	1.10E+02 N	1.60E+05 N	6.30E+03 N	0.00E+00	0.00E+00
Diflubenzuron	35367385	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
1,1-Difluoroethane	75376		1.14E+01 I			☒	6.90E+04 N	4.20E+04 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diisopropyl methylphosphonate (DIMP)	1445756	8.00E-02 I					2.90E+03 N	2.90E+02 N	1.10E+02 N	1.60E+05 N	6.30E+03 N	0.00E+00	0.00E+00
Dimethipin	55290647	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Dimethoate	60515	2.00E-04 I					7.30E+00 N	7.30E-01 N	2.70E-01 N	4.10E+02 N	1.60E+01 N	0.00E+00	0.00E+00
3,3'-Dimethoxybenzidine	119904			1.40E-02 H			4.80E+00 c	4.50E-01 c	2.30E-01 c	4.10E+02 c	4.60E+01 c	0.00E+00	0.00E+00
Dimethylamine	124403		5.71E-06 W				2.10E-01 N	2.10E-02 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,4-Dimethylaniline hydrochloride	21436964			5.80E-01 H			1.20E-01 c	1.10E-02 c	5.40E-03 c	9.90E+00 c	1.10E+00 c	0.00E+00	0.00E+00
2,4-Dimethylaniline	95681			7.50E-01 H			9.00E-02 c	8.30E-03 c	4.20E-03 c	7.60E+00 c	8.50E-01 c	0.00E+00	0.00E+00
N-N-Dimethylaniline	121697	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
3,3'-Dimethylbenzidine	119937			9.20E+00 H			7.30E-03 c	6.80E-04 c	3.40E-04 c	6.20E-01 c	6.90E-02 c	2.90E+01 c	3.90E-04 c
N,N-Dimethylformamide	68122	1.00E-01 H	8.57E-03 I				3.70E+03 N	3.10E+01 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
1,1-Dimethylhydrazine	57147			2.60E+00 W	3.50E+00 W		2.60E-02 c	1.80E-03 c	1.20E-03 c	2.20E+00 c	2.50E-01 c	0.00E+00	0.00E+00
1,2-Dimethylhydrazine	540738			3.70E+01 W	3.70E+01 W		1.80E-03 c	1.70E-04 c	8.50E-05 c	1.50E-01 c	1.70E-02 c	0.00E+00	0.00E+00
2,4-Dimethylphenol	105679	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	5.40E+03 S	3.00E+00 E
2,6-Dimethylphenol	576261	6.00E-04 I					2.20E+01 N	2.20E+00 N	8.10E-01 N	1.20E+03 N	4.70E+01 N	0.00E+00	0.00E+00
3,4-Dimethylphenol	95658	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
Dimethyl phthalate	131113	1.00E+01 H					3.70E+05 N	3.70E+04 N	1.40E+04 N	1.00E+06 N	7.80E+05 N	1.60E+03 E	1.20E+03 E
Dimethyl terephthalate	120616	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
1,2-Dinitrobenzene	528290	4.00E-04 H					1.50E+01 N	1.50E+00 N	5.40E-01 N	8.20E+02 N	3.10E+01 N	0.00E+00	0.00E+00
1,3-Dinitrobenzene	99650	1.00E-04 I					3.70E+00 N	3.70E-01 N	1.40E-01 N	2.00E+02 N	7.80E+00 N	0.00E+00	0.00E+00
1,4-Dinitrobenzene	100254	4.00E-04 H					1.50E+01 N	1.50E+00 N	5.40E-01 N	8.20E+02 N	3.10E+01 N	0.00E+00	0.00E+00
4,6-Dinitro-o-cyclohexyl phenol	131895	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
2,4-Dinitrophenol	51285	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	3.60E+02 N	1.00E-01 E
Dinitrotoluene mixture	0			6.80E-01 I			9.90E-02 c	9.20E-03 c	4.60E-03 c	8.40E+00 c	9.40E-01 c	0.00E+00	0.00E+00
2,4-Dinitrotoluene	121142	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	1.20E+02 S	2.00E-01 E
2,6-Dinitrotoluene	606202	1.00E-03 H					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	3.70E+02 S	1.00E-01 E
Dinoseb	88857	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
di-n-Octyl phthalate	117840	2.00E-02 H					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	1.00E+06 S	1.00E+06 E
1,4-Dioxane	123911			1.10E-02 I			6.10E+00 c	5.70E-01 c	2.90E-01 c	5.20E+02 c	5.80E+01 c	0.00E+00	0.00E+00
Diphenamid	957517	3.00E-02 I					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
Diphenylamine	122394	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
1,2-Diphenylhydrazine	122667			8.00E-01 I	7.70E-01 I		8.40E-02 c	8.10E-03 c	3.90E-03 c	7.20E+00 c	8.00E-01 c	0.00E+00	0.00E+00
Diquat	85007	2.20E-03 I					8.00E+01 N	8.00E+00 N	3.00E+00 N	4.50E+03 N	1.70E+02 N	0.00E+00	0.00E+00
Direct black 38	1937377			8.60E+00 H			7.80E-03 c	7.30E-04 c	3.70E-04 c	6.70E-01 c	7.40E-02 c	0.00E+00	0.00E+00
Direct blue 6	2602462			8.10E+00 H			8.30E-03 c	7.70E-04 c	3.90E-04 c	7.10E-01 c	7.90E-02 c	0.00E+00	0.00E+00
Direct brown 95	16071866			9.30E+00 H			7.20E-03 c	6.70E-04 c	3.40E-04 c	6.20E-01 c	6.90E-02 c	0.00E+00	0.00E+00
Disulfoton	298044	4.00E-05 I					1.50E+00 N	1.50E-01 N	5.40E-02 N	8.20E+01 N	3.10E+00 N	0.00E+00	0.00E+00
1,4-Dithiane	505293	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
Diuron	330541	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00

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Basis: C=carcinogenic effects N=noncarcinogenic effects E=EPA draft Soil Screening Level S=soil saturation concentration M=EPA MCL.

Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Dodine	2439103	4.00E-03 I					1.50E+02 N	1.50E+01 N	5.40E+00 N	8.20E+03 N	3.10E+02 N	0.00E+00	0.00E+00
Endosulfan	115297	6.00E-03 I					2.20E+02 N	2.20E+01 N	8.10E+00 N	1.20E+04 N	4.70E+02 N	1.00E+00 S	3.00E+00 E
Endothall	145733	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Endrin	72208	3.00E-04 I					1.10E+01 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	1.60E+01 S	4.00E-01 E
Epichlorohydrin	106898	2.00E-03 H	2.86E-04 I	9.90E-03 I	4.20E-03 I		6.80E+00 C	1.00E+00 N	3.20E-01 C	5.80E+02 C	6.50E+01 C	0.00E+00	0.00E+00
1,2-Epoxybutane	106887		5.71E-03 I				2.10E+02 N	2.10E+01 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethephon (2-chloroethyl phosphonic acid)	16672870	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Ethion	563122	5.00E-04 I					1.80E+01 N	1.80E+00 N	6.80E-01 N	1.00E+03 N	3.90E+01 N	0.00E+00	0.00E+00
2-Ethoxyethanol acetate	111159	3.00E-01 A					1.10E+04 N	1.10E+03 N	4.10E+02 N	6.10E+05 N	2.30E+04 N	0.00E+00	0.00E+00
2-Ethoxyethanol	110805	4.00E-01 H	5.71E-02 I				1.50E+04 N	2.10E+02 N	5.40E+02 N	8.20E+05 N	3.10E+04 N	0.00E+00	0.00E+00
Ethyl acrylate	140885			4.80E-02 H			1.40E+00 C	1.30E-01 C	6.60E-02 C	1.20E+02 C	1.30E+01 C	0.00E+00	0.00E+00
EPTC (S-Ethyl dipropylthiocarbamate)	759944	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
Ethyl acetate	141786	9.00E-01 I					3.30E+04 N	3.30E+03 N	1.20E+03 N	1.00E+06 N	7.00E+04 N	0.00E+00	0.00E+00
Ethylbenzene	100414	1.00E-01 I	2.86E-01 I			☒	1.30E+03 N	1.00E+03 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	2.60E+02 E	5.00E+00 E
Ethylene cyanohydrin	109784	3.00E-01 H					1.10E+04 N	1.10E+03 N	4.10E+02 N	6.10E+05 N	2.30E+04 N	0.00E+00	0.00E+00
Ethylene diamine	107153	2.00E-02 H					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Ethylene glycol	107211	2.00E+00 I					7.30E+04 N	7.30E+03 N	2.70E+03 N	1.00E+06 N	1.60E+05 N	0.00E+00	0.00E+00
Ethylene glycol, monobutyl ether	111762		5.71E-03 H				2.10E+02 N	2.10E+01 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ethylene oxide	75218			1.02E+00 H	3.50E-01 H		6.60E-02 C	1.80E-02 C	3.10E-03 C	5.60E+00 C	6.30E-01 C	0.00E+00	0.00E+00
Ethylene thiourea (ETU)	96457	8.00E-05 I		1.19E-01 H			5.70E-01 C	5.30E-02 C	2.70E-02 C	4.80E+01 C	5.40E+00 C	0.00E+00	0.00E+00
Ethyl ether	60297	2.00E-01 I				☒	1.20E+03 N	7.30E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	0.00E+00	0.00E+00
Ethyl methacrylate	97632	9.00E-02 H					3.30E+03 N	3.30E+02 N	1.20E+02 N	1.80E+05 N	7.00E+03 N	0.00E+00	0.00E+00
Ethyl p-nitrophenyl phenylphosphorothioate	2104645	1.00E-05 I					3.70E-01 N	3.70E-02 N	1.40E-02 N	2.00E+01 N	7.80E-01 N	0.00E+00	0.00E+00
Ethylnitrosourea	759739			1.40E+02 W			4.80E-04 C	4.50E-05 C	2.30E-05 C	4.10E-02 C	4.60E-03 C	0.00E+00	0.00E+00
Ethylphthalyl ethyl glycolate	84720	3.00E+00 I					1.10E+05 N	1.10E+04 N	4.10E+03 N	1.00E+06 N	2.30E+05 N	0.00E+00	0.00E+00
Express	10120	8.00E-03 I					2.90E+02 N	2.90E+01 N	1.10E+01 N	1.60E+04 N	6.30E+02 N	0.00E+00	0.00E+00
Fenamiphos	22224926	2.50E-04 I					9.10E+00 N	9.10E-01 N	3.40E-01 N	5.10E+02 N	2.00E+01 N	0.00E+00	0.00E+00
Fluometuron	2164172	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
Fluoride	7782414	6.00E-02 I					2.20E+03 N	2.20E+02 N	8.10E+01 N	1.20E+05 N	4.70E+03 N	0.00E+00	0.00E+00
Fluoridone	59756604	8.00E-02 I					2.90E+03 N	2.90E+02 N	1.10E+02 N	1.60E+05 N	6.30E+03 N	0.00E+00	0.00E+00
Flurprimidol	56425913	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Flutolanil	66332965	6.00E-02 I					2.20E+03 N	2.20E+02 N	8.10E+01 N	1.20E+05 N	4.70E+03 N	0.00E+00	0.00E+00
Fluvalinate	69409945	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
Folpet	133073	1.00E-01 I		3.50E-03 I			1.90E+01 C	1.80E+00 C	9.00E-01 C	1.60E+03 C	1.80E+02 C	0.00E+00	0.00E+00
Fomesafen	72178020			1.90E-01 I			3.50E-01 C	3.30E-02 C	1.70E-02 C	3.00E+01 C	3.40E+00 C	0.00E+00	0.00E+00
Fonofos	944229	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
Formaldehyde	50000	2.00E-01 I			4.55E-02 I		7.30E+03 N	1.40E-01 C	2.70E+02 N	4.10E+05 N	1.60E+04 N	0.00E+00	0.00E+00
Formic Acid	64186	2.00E+00 H					7.30E+04 N	7.30E+03 N	2.70E+03 N	1.00E+06 N	1.60E+05 N	0.00E+00	0.00E+00
Fosetyl-al	39148248	3.00E+00 I					1.10E+05 N	1.10E+04 N	4.10E+03 N	1.00E+06 N	2.30E+05 N	0.00E+00	0.00E+00
Furan	110009	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
Furazolidone	67458			3.80E+00 H			1.80E-02 C	1.60E-03 C	8.30E-04 C	1.50E+00 C	1.70E-01 C	0.00E+00	0.00E+00
Furfural	98011	3.00E-03 I	1.43E-02 A				1.10E+02 N	5.20E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00

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Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Soil Ingestion: Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Furium	531828			5.00E+01 H			1.30E-03 c	1.30E-04 c	6.30E-05 c	1.10E-01 c	1.30E-02 c	0.00E+00	0.00E+00
Furmecyclox	60568050			3.00E-02 I			2.20E+00 c	2.10E-01 c	1.10E-01 c	1.90E+02 c	2.10E+01 c	0.00E+00	0.00E+00
Glufosinate-ammonium	77182822	4.00E-04 I					1.50E+01 N	1.50E+00 N	5.40E-01 N	8.20E+02 N	3.10E+01 N	0.00E+00	0.00E+00
Glycidaldehyde	765344	4.00E-04 I	2.86E-04 H				1.50E+01 N	1.00E+00 N	5.40E-01 N	8.20E+02 N	3.10E+01 N	0.00E+00	0.00E+00
Glyphosate	1071836	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Haloxyfop-methyl	69806402	5.00E-05 I					1.80E+00 N	1.80E-01 N	6.80E-02 N	1.00E+02 N	3.90E+00 N	0.00E+00	0.00E+00
Harmony	79277273	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
HCH (alpha)	319846			6.30E+00 I	6.30E+00 I		1.10E-02 c	9.90E-04 c	5.00E-04 c	9.10E-01 c	1.00E-01 c	9.00E-01 E	4.00E-04 E
HCH (beta)	319857			1.80E+00 I	1.80E+00 I		3.70E-02 c	3.50E-03 c	1.80E-03 c	3.20E+00 c	3.50E-01 c	1.60E+01 E	2.00E-03 E
HCH (gamma) Lindane	58899	3.00E-04 I		1.30E+00 H			5.20E-02 c	4.80E-03 c	2.40E-03 c	4.40E+00 c	4.90E-01 c	4.20E+00 c	6.00E-03 E
HCH-technical	608731			1.80E+00 I	1.79E+00 I		3.70E-02 c	3.50E-03 c	1.80E-03 c	3.20E+00 c	3.50E-01 c	0.00E+00	0.00E+00
Heptachlor	76448	5.00E-04 I		4.50E+00 I	4.55E+00 I	☒	2.30E-03 c	1.40E-03 c	7.00E-04 c	1.30E+00 c	1.40E-01 c	3.00E-01 E	6.00E-02 E
Heptachlor epoxide	1024573	1.30E-05 I		9.10E+00 I	9.10E+00 I	☒	1.20E-03 c	6.90E-04 c	3.50E-04 c	6.30E-01 c	7.00E-02 c	1.00E+00 E	3.00E-02 E
Hexabromobenzene	87821	2.00E-03 I				☒	1.20E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
Hexachlorobenzene	118741	8.00E-04 I		1.60E+00 I	1.61E+00 I	☒	6.60E-03 c	3.90E-03 c	2.00E-03 c	3.60E+00 c	4.00E-01 c	1.00E+00 E	8.00E-01 E
Hexachlorobutadiene	87683	2.00E-04 H		7.80E-02 I	7.70E-02 I	☒	1.40E-01 c	8.10E-02 c	4.00E-02 c	7.30E+01 c	8.20E+00 c	1.00E+00 E	1.00E-01 E
Hexachlorocyclopentadiene	77474	7.00E-03 I	2.00E-05 H			☒	1.50E-01 N	7.30E-02 N	9.50E+00 N	1.40E+04 N	5.50E+02 N	2.00E+00 E	1.00E+01 E
Hexachlorodibenzo-p-dioxin mixture	19408743			6.20E+03 I	4.55E+03 I		1.10E-05 c	1.40E-06 c	5.00E-07 c	9.20E-04 c	1.00E-04 c	0.00E+00	0.00E+00
Hexachloroethane	67721	1.00E-03 I		1.40E-02 I	1.40E-02 I	☒	7.50E-01 c	4.50E-01 c	2.30E-01 c	4.10E+02 c	4.60E+01 c	4.90E+01 E	2.00E-01 E
Hexachlorophene	70304	3.00E-04 I					1.10E+01 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	0.00E+00	0.00E+00
Hexahydro-1,3,5-trinitro-1,3,5-triazine	121824	3.00E-03 I		1.10E-01 I			6.10E-01 c	5.70E-02 c	2.90E-02 c	5.20E+01 c	5.80E+00 c	0.00E+00	0.00E+00
1,6-Hexamethylene diisocyanate	822060		2.86E-06 I				1.00E-01 N	1.00E-02 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
n-Hexane	110543	6.00E-02 H	5.71E-02 I			☒	3.50E+02 N	2.10E+02 N	8.10E+01 N	1.20E+05 N	4.70E+03 N	3.20E+01 N	1.30E+01 N
Hexazinone	51235042	3.30E-02 I					1.20E+03 N	1.20E+02 N	4.50E+01 N	6.70E+04 N	2.60E+03 N	0.00E+00	0.00E+00
Hydrazine, hydrazine sulfate	302012			3.00E+00 I	1.71E+01 I		2.20E-02 c	3.70E-04 c	1.10E-03 c	1.90E+00 c	2.10E-01 c	0.00E+00	0.00E+00
Hydrogen chloride	7647010		5.71E-03 I				2.10E+02 N	2.10E+01 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hydrogen sulfide	7783064	3.00E-03 I	2.85E-04 I				1.10E+02 N	1.00E+00 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
Hydroquinone	123319	4.00E-02 H					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	0.00E+00	0.00E+00
Imazalil	35554440	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
Imazaquin	81335377	2.50E-01 I					9.10E+03 N	9.10E+02 N	3.40E+02 N	5.10E+05 N	2.00E+04 N	0.00E+00	0.00E+00
Iprodione	36734197	4.00E-02 I					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	0.00E+00	0.00E+00
Iron	7439896	3.00E-01 E					1.10E+04 N	1.10E+03 N	4.10E+02 N	6.10E+05 N	2.30E+04 N	0.00E+00	0.00E+00
Isobutanol	78831	3.00E-01 I				☒	1.80E+03 N	1.10E+03 N	4.10E+02 N	6.10E+05 N	2.30E+04 N	0.00E+00	0.00E+00
Isophorone	78591	2.00E-01 I		9.50E-04 I			7.10E+01 c	6.60E+00 c	3.30E+00 c	6.00E+03 c	6.70E+02 c	3.40E+03 E	2.00E-01 E
Isopropalin	33820530	1.50E-02 I					5.50E+02 N	5.50E+01 N	2.00E+01 N	3.10E+04 N	1.20E+03 N	0.00E+00	0.00E+00
Isopropyl methyl phosphonic acid	1832548	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Isoxaben	82558507	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Kepone	143500			1.80E+01 E			3.70E-03 c	3.50E-04 c	1.80E-04 c	3.20E-01 c	3.50E-02 c	0.00E+00	0.00E+00
Lactofen	77501634	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
Linuron	330552	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
Lithium	7439932	2.00E-02 E					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Londax	83056996	2.00E-01 I					7.30E+03 N	7.30E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	0.00E+00	0.00E+00

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Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Soil Ingestion: Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Malathion	121755	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Maleic anhydride	108316	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Maleic hydrazide	123331	5.00E-01 I					1.80E+04 N	1.80E+03 N	6.80E+02 N	1.00E+06 N	3.90E+04 N	0.00E+00	0.00E+00
Malononitrile	109773	2.00E-05 H					7.30E-01 N	7.30E-02 N	2.70E-02 N	4.10E+01 N	1.60E+00 N	0.00E+00	0.00E+00
Mancozeb	8018017	3.00E-02 H					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
Maneb	12427382	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Manganese and compounds	7439965	2.30E-02 I	1.43e-05 I				8.40E+02 N	5.20E-02 N	3.10E+01 N	4.70E+04 N	1.80E+03 N	0.00E+00	0.00E+00
Mephosfolan	950107	9.00E-05 H					3.30E+00 N	3.30E-01 N	1.20E-01 N	1.80E+02 N	7.00E+00 N	0.00E+00	0.00E+00
Mepiquat chloride	24307264	3.00E-02 I					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
Mercuric chloride	7487947	3.00E-04 I					1.10E+01 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	0.00E+00	0.00E+00
Mercury (inorganic)	7439976	3.00E-04 H	8.57E-05 H				1.10E+01 N	3.10E-01 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	7.00E+00 E	3.00E+00 E
Mercury (methyl)	22967926	1.00E-04 I					3.70E+00 N	3.70E-01 N	1.40E-01 N	2.00E+02 N	7.80E+00 N	0.00E+00	0.00E+00
Merphos	150505	3.00E-05 I					1.10E+00 N	1.10E-01 N	4.10E-02 N	6.10E+01 N	2.30E+00 N	0.00E+00	0.00E+00
Merphos oxide	78488	3.00E-05 I					1.10E+00 N	1.10E-01 N	4.10E-02 N	6.10E+01 N	2.30E+00 N	0.00E+00	0.00E+00
Metalaxyl	57837191	6.00E-02 I					2.20E+03 N	2.20E+02 N	8.10E+01 N	1.20E+05 N	4.70E+03 N	0.00E+00	0.00E+00
Methacrylonitrile	126987	1.00E-04 I	2.00E-04 A				3.70E+00 N	7.30E-01 N	1.40E-01 N	2.00E+02 N	7.80E+00 N	0.00E+00	0.00E+00
Methamidophos	10265926	5.00E-05 I					1.80E+00 N	1.80E-01 N	6.80E-02 N	1.00E+02 N	3.90E+00 N	0.00E+00	0.00E+00
Methanol	67561	5.00E-01 I					1.80E+04 N	1.80E+03 N	6.80E+02 N	1.00E+06 N	3.90E+04 N	0.00E+00	0.00E+00
Methidathion	950378	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
Methomyl	16752775	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
Methoxychlor	72435	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	4.10E+01 S	6.20E+01 E
2-Methoxyethanol acetate	110496	2.00E-03 A					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
2-Methoxyethanol	109864	1.00E-03 H	5.71E-03 I				3.70E+01 N	2.10E+01 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
2-Methoxy-5-nitroaniline	99592			4.60E-02 H			1.50E+00 C	1.40E-01 C	6.90E-02 C	1.20E+02 C	1.40E+01 C	0.00E+00	0.00E+00
Methyl acetate	79209	1.00E+00 H					3.70E+04 N	3.70E+03 N	1.40E+03 N	1.00E+06 N	7.80E+04 N	0.00E+00	0.00E+00
Methyl acrylate	96333	3.00E-02 A					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
2-Methylaniline hydrochloride	636215			1.80E-01 H			3.70E-01 C	3.50E-02 C	1.80E-02 C	3.20E+01 C	3.50E+00 C	0.00E+00	0.00E+00
2-Methylaniline	95534			2.40E-01 H			2.80E-01 C	2.60E-02 C	1.30E-02 C	2.40E+01 C	2.70E+00 C	0.00E+00	0.00E+00
Methyl chlorocarbonate	79221	1.00E+00 W					3.70E+04 N	3.70E+03 N	1.40E+03 N	1.00E+06 N	7.80E+04 N	0.00E+00	0.00E+00
4-(2-Methyl-4-chlorophenoxy) butyric acid	94815	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
2-Methyl-4-chlorophenoxyacetic acid	94746	5.00E-04 I					1.80E+01 N	1.80E+00 N	6.80E-01 N	1.00E+03 N	3.90E+01 N	0.00E+00	0.00E+00
2-(2-Methyl-14-chlorophenoxy)propionic acid	93652	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
Methylcyclohexane	108872		8.57E-01 H				3.10E+04 N	3.10E+03 N	0.00E+00	0.00E+00	0.00E+00	6.00E+01 S	1.50E+03 N
Methylene bromide	74953	1.00E-02 A				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
Methylene chloride	75092	6.00E-02 I	8.57E-01 H	7.50E-03 I	1.64E-03 I	☒	4.10E+00 C	3.80E+00 C	4.20E-01 C	7.60E+02 C	8.50E+01 C	7.00E+00 E	1.00E-02 E
4,4'-Methylene bis(2-chloroaniline)	101144	7.00E-04 H		1.30E-01 H	1.30E-01 H		5.20E-01 C	4.80E-02 C	2.40E-02 C	4.40E+01 C	4.90E+00 C	0.00E+00	0.00E+00
4,4'-Methylenebisbenzeneamine	101779			2.50E-01 W			2.70E-01 C	2.50E-02 C	1.30E-02 C	2.30E+01 C	2.60E+00 C	0.00E+00	0.00E+00
4,4'-Methylene bis(N,N'-dimethyl)aniline	101611			4.60E-02 I			1.50E+00 C	1.40E-01 C	6.90E-02 C	1.20E+02 C	1.40E+01 C	0.00E+00	0.00E+00
4,4'-Methylenediphenyl isocyanate	101688		5.71E-06 I			☒	3.50E-02 N	2.10E-02 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Methyl ethyl ketone	78933	6.00E-01 I	2.86E-01 I			☒	1.90E+03 N	1.00E+03 N	8.10E+02 N	1.00E+06 N	4.70E+04 N	0.00E+00	0.00E+00
Methyl hydrazine	60344			1.10E+00 W			6.10E-02 C	5.70E-03 C	2.90E-03 C	5.20E+00 C	5.80E-01 C	0.00E+00	0.00E+00
Methyl isobutyl ketone	108101	8.00E-02 H	2.29E-02 A				2.90E+03 N	8.40E+01 N	1.10E+02 N	1.60E+05 N	6.30E+03 N	0.00E+00	0.00E+00

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Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Methyl methacrylate	80626	8.00E-02 H					2.90E+03 N	2.90E+02 N	1.10E+02 N	1.60E+05 N	6.30E+03 N	0.00E+00	0.00E+00
2-Methyl-5-nitroaniline	99558			3.30E-02 H			2.00E+00 C	1.90E-01 C	9.60E-02 C	1.70E+02 C	1.90E+01 C	0.00E+00	0.00E+00
Methyl parathion	298000	2.50E-04 I					9.10E+00 N	9.10E-01 N	3.40E-01 N	5.10E+02 N	2.00E+01 N	2.80E+01 S	4.10E-02 N
2-Methylphenol (o-cresol)	95487	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	1.20E+04 S	6.00E+00 E
3-Methylphenol (m-cresol)	103394	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
4-Methylphenol (p-cresol)	106445	5.00E-03 H					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Methyl styrene (mixture)	25013154	6.00E-03 A	1.14E-02 A			☒	6.00E+01 N	4.20E+01 N	8.10E+00 N	1.20E+04 N	4.70E+02 N	1.00E+02 N	1.00E+00 N
Methyl styrene (alpha)	98839	7.00E-02 A				☒	4.30E+02 N	2.60E+02 N	9.50E+01 N	1.40E+05 N	5.50E+03 N	8.80E+00 S	7.50E+00 N
Methyl tertbutyl ether (MTBE)	1634044	5.00E-03 E	8.57E-01 I			☒	1.80E+02 N	3.10E+03 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Metolaclor (Dual)	51218452	1.50E-01 H					5.50E+03 N	5.50E+02 N	2.00E+02 N	3.10E+05 N	1.20E+04 N	0.00E+00	0.00E+00
Metribuzin	21087649	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
Mirex	2385855	2.00E-04 I		1.80E+00 W			3.70E-02 C	3.50E-03 C	1.80E-03 C	3.20E+00 C	3.50E-01 C	0.00E+00	0.00E+00
Molinate	2212671	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
Molybdenum	7439987	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Monochloramine	10599903	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Naled	300765	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
2-Naphthylamine	91598			1.30e+02 E			5.20E-04 C	4.80E-05 C	2.40E-05 C	4.40E-02 C	4.90E-03 C	0.00E+00	0.00E+00
Napropamide	15299997	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Nickel refinery dust	0				8.40E-01 I		0.00E+00	7.50E-03 C	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel and compounds	7440020	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	6.90E+03 E	2.10E+01 E
Nickel subsulfide	12035722				1.70E+00 I		0.00E+00	3.70E-03 C	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nitrapyrin	1929824	1.50E-03 W					5.50E+01 N	5.50E+00 N	2.00E+00 N	3.10E+03 N	1.20E+02 N	0.00E+00	0.00E+00
Nitrate	14797558	1.60E+00 I					5.80E+04 N	5.80E+03 N	2.20E+03 N	1.00E+06 N	1.30E+05 N	0.00E+00	0.00E+00
Nitric oxide	10102439	1.00E-01 W					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
Nitrite	14797650	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
2-Nitroaniline	88744	6.00E-05 W	5.71E-05 H				2.20E+00 N	2.10E-01 N	8.10E-02 N	1.20E+02 N	4.70E+00 N	0.00E+00	0.00E+00
3-Nitroaniline	99092	3.00E-03 O					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
4-Nitroaniline	100016	3.00E-03 O					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
Nitrobenzene	98953	5.00E-04 I	5.71E-04 A			☒	3.40E+00 N	2.10E+00 N	6.80E-01 N	1.00E+03 N	3.90E+01 N	1.10E+02 E	9.00E-02 E
Nitrofurantoin	67209	7.00E-02 H					2.60E+03 N	2.60E+02 N	9.50E+01 N	1.40E+05 N	5.50E+03 N	0.00E+00	0.00E+00
Nitrofurazone	59870			1.50E+00 H	9.40E+00 H		4.50E-02 C	6.70E-04 C	2.10E-03 C	3.80E+00 C	4.30E-01 C	0.00E+00	0.00E+00
Nitrogen dioxide	10102440	1.00E+00 W					3.70E+04 N	3.70E+03 N	1.40E+03 N	1.00E+06 N	7.80E+04 N	0.00E+00	0.00E+00
Nitroguanidine	556887	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	0.00E+00	0.00E+00
4-Nitrophenol	100027	6.20E-02 O					2.30E+03 N	2.30E+02 N	8.40E+01 N	1.30E+05 N	4.80E+03 N	0.00E+00	0.00E+00
2-Nitropropane	79469		5.71E-03 I		9.40E+00 H		2.10E+02 N	6.70E-04 C	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
N-Nitrosodi-n-butylamine	924163			5.40E+00 I	5.60E+00 I		1.20E-02 C	1.10E-03 C	5.80E-04 C	1.10E+00 C	1.20E-01 C	0.00E+00	0.00E+00
N-Nitrosodiethanolamine	1116547			2.80E+00 I			2.40E-02 C	2.20E-03 C	1.10E-03 C	2.00E+00 C	2.30E-01 C	0.00E+00	0.00E+00
N-Nitrosodiethylamine	55185			1.50E+02 I	1.51E+02 I		4.50E-04 C	4.10E-05 C	2.10E-05 C	3.80E-02 C	4.30E-03 C	0.00E+00	0.00E+00
N-Nitrosodimethylamine	62759			5.10E+01 I	4.90E+01 I		1.30E-03 C	1.30E-04 C	6.20E-05 C	1.10E-01 C	1.30E-02 C	0.00E+00	0.00E+00
N-Nitrosodiphenylamine	86306			4.90E-03 I			1.40E+01 C	1.30E+00 C	6.40E-01 C	1.20E+03 C	1.30E+02 C	2.90E+01 C	2.00E-01 E
N-Nitroso di-n-propylamine	621647			7.00E+00 I			9.60E-03 C	8.90E-04 C	4.50E-04 C	8.20E-01 C	9.10E-02 C	1.40E-02 C	2.00E-05 E
N-Nitroso-N-methylethylamine	10595956			2.20E+01 I			3.10E-03 C	2.80E-04 C	1.40E-04 C	2.60E-01 C	2.90E-02 C	0.00E+00	0.00E+00

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N-Nitrosopyrrolidine	930552			2.10E+00 I	2.13E+00 I		3.20E-02 c	2.90E-03 c	1.50E-03 c	2.70E+00 c	3.00E-01 c	0.00E+00	0.00E+00
m-Nitrotoluene	99081	1.00E-02 H				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	4.60E+02 s	4.20E-01 N
o-Nitrotoluene	88722	1.00E-02 H				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	4.60E+02 s	4.20E-01 N
p-Nitrotoluene	99990	1.00E-02 H				☒	6.10E+01 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	4.60E+02 s	4.20E-01 N
Norflurazon	27314132	4.00E-02 I					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	0.00E+00	0.00E+00
NuStar	85509199	7.00E-04 I					2.60E+01 N	2.60E+00 N	9.50E-01 N	1.40E+03 N	5.50E+01 N	0.00E+00	0.00E+00
Octabromodiphenyl ether	32536520	3.00E-03 I					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
Octahydro-1357-tetranitro-1357-tetrazocine	2691410	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Octamethylpyrophosphoramide	152169	2.00E-03 H					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
Oryzalin	19044883	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Oxadiazon	19666309	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Oxamyl	23135220	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
Oxyfluorfen	42874033	3.00E-03 I					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
Paclobutrazol	76738620	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
Paraquat	1910425	4.50E-03 I					1.60E+02 N	1.60E+01 N	6.10E+00 N	9.20E+03 N	3.50E+02 N	0.00E+00	0.00E+00
Parathion	56382	6.00E-03 H					2.20E+02 N	2.20E+01 N	8.10E+00 N	1.20E+04 N	4.70E+02 N	1.10E+02 s	3.90E+00 N
Pebulate	1114712	5.00E-02 H					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Pendimethalin	40487421	4.00E-02 I					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	0.00E+00	0.00E+00
Pentabromo-6-chloro cyclohexane	87843			2.30E-02 H			2.90E+00 c	2.70E-01 c	1.40E-01 c	2.50E+02 c	2.80E+01 c	0.00E+00	0.00E+00
Pentabromodiphenyl ether	32534819	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
Pentachlorobenzene	608935	8.00E-04 I				☒	4.90E+00 N	2.90E+00 N	1.10E+00 N	1.60E+03 N	6.30E+01 N	5.70E+02 N	4.80E+01 N
Pentachloronitrobenzene	82688	3.00E-03 I		2.60E-01 H		☒	4.10E-02 c	2.40E-02 c	1.20E-02 c	2.20E+01 c	2.50E+00 c	0.00E+00	0.00E+00
Pentachlorophenol	87865	3.00E-02 I		1.20E-01 I			5.60E-01 c	5.20E-02 c	2.60E-02 c	4.80E+01 c	5.30E+00 c	7.90E+00 c	2.00E-01 E
Permethrin	52645531	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Phenmedipham	13684634	2.50E-01 I					9.10E+03 N	9.10E+02 N	3.40E+02 N	5.10E+05 N	2.00E+04 N	0.00E+00	0.00E+00
Phenol	108952	6.00E-01 I					2.20E+04 N	2.20E+03 N	8.10E+02 N	1.00E+06 N	4.70E+04 N	2.10E+04 s	4.90E+01 E
m-Phenylenediamine	108452	6.00E-03 I					2.20E+02 N	2.20E+01 N	8.10E+00 N	1.20E+04 N	4.70E+02 N	0.00E+00	0.00E+00
p-Phenylenediamine	106503	1.90E-01 H					6.90E+03 N	6.90E+02 N	2.60E+02 N	3.90E+05 N	1.50E+04 N	0.00E+00	0.00E+00
Phenylmercuric acetate	62384	8.00E-05 I					2.90E+00 N	2.90E-01 N	1.10E-01 N	1.60E+02 N	6.30E+00 N	0.00E+00	0.00E+00
2-Phenylphenol	90437			1.94E-03 H			3.50E+01 c	3.20E+00 c	1.60E+00 c	3.00E+03 c	3.30E+02 c	0.00E+00	0.00E+00
Phorate	298022	2.00E-04 H					7.30E+00 N	7.30E-01 N	2.70E-01 N	4.10E+02 N	1.60E+01 N	0.00E+00	0.00E+00
Phosmet	732116	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Phosphine	7803512	3.00E-04 I	8.57E-05 I				1.10E+01 N	3.10E-01 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	0.00E+00	0.00E+00
Phosphoric acid	7664382		2.86E-03 I				1.00E+02 N	1.00E+01 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Phosphorus (white)	7723140	2.00E-05 I					7.30E-01 N	7.30E-02 N	2.70E-02 N	4.10E+01 N	1.60E+00 N	0.00E+00	0.00E+00
p-Phthalic acid	100210	1.00E+00 H					3.70E+04 N	3.70E+03 N	1.40E+03 N	1.00E+06 N	7.80E+04 N	0.00E+00	0.00E+00
Phthalic anhydride	85449	2.00E+00 I	3.43E-02 H				7.30E+04 N	1.30E+02 N	2.70E+03 N	1.00E+06 N	1.60E+05 N	0.00E+00	0.00E+00
Picloram	1918021	7.00E-02 I					2.60E+03 N	2.60E+02 N	9.50E+01 N	1.40E+05 N	5.50E+03 N	0.00E+00	0.00E+00
Pirimiphos-methyl	29232937	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
Polybrominated biphenyls	0	7.00E-06 H		8.90E+00 H			7.60E-03 c	7.00E-04 c	3.50E-04 c	6.40E-01 c	7.20E-02 c	0.00E+00	0.00E+00
**Polychlorinated biphenyls (PCBs)	1336363			2.00E+00 I			3.35E-02 c	3.13E-03 c	1.60E-03 c	2.86E+00 c	3.19E-01 c	0.00E+00	0.00E+00
Aroclor 1016	12674112	7.00E-05 I					2.60E+00 N	2.60E-01 N	9.50E-02 N	1.40E+02 N	5.50E+00 N	0.00E+00	0.00E+00

EPA Region III Risk-Based Concentrations: R.L. Smith (03/14/97)

Sources: I=IRIS H=HEAST A=HEAST alternate W=Withdrawn from IRIS or HEAST E=EPA-NCEA Regional Support provisional value O=Other EPA documents

Basis: C=carcinogenic effects N=noncarcinogenic effects E=EPA draft Soil Screening Level S=soil saturation concentration M=EPA MCL

Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	V O C	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Aroclor 1254	11097691	2.00E-05 I					7.30E-01 N	7.30E-02 N	2.70E-02 N	4.10E+01 N	1.60E+00 N	0.00E+00	0.00E+00
Polychlorinated terphenyls (PCTs)	0			4.50E+00 E			1.50E-02 C	1.40E-03 C	7.00E-04 C	1.30E+00 C	1.40E-01 C	0.00E+00	0.00E+00
Polynuclear aromatic hydrocarbons	0						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.10E+05 S	0.00E+00
Acenaphthene	83329	6.00E-02 I					2.20E+03 N	2.20E+02 N	8.10E+01 N	1.20E+05 N	4.70E+03 N	1.20E+02 S	2.00E+02 E
Anthracene	120127	3.00E-01 I					1.10E+04 N	1.10E+03 N	4.10E+02 N	6.10E+05 N	2.30E+04 N	6.80E+00 S	4.30E+03 E
Benz[a]anthracene	56553			7.30E-01 E	6.10E-01 E		9.20E-02 C	1.00E-02 C	4.30E-03 C	7.80E+00 C	8.80E-01 C	2.70E+01 S	7.00E-01 E
Benzo[b]fluoranthene	205992			7.30E-01 E	6.10E-01 E		9.20E-02 C	1.00E-02 C	4.30E-03 C	7.80E+00 C	8.80E-01 C	2.30E+01 S	4.00E+00 E
Benzo[k]fluoranthene	207089			7.30E-02 E	6.10E-02 E		9.20E-01 C	1.00E-01 C	4.30E-02 C	7.80E+01 C	8.80E+00 C	0.00E+00	4.00E+00 E
Benzo[a]pyrene	50328			7.30E+00 I	6.10E+00 W		9.20E-03 C	1.00E-03 C	4.30E-04 C	7.80E-01 C	8.80E-02 C	1.10E+01 S	4.00E+00 E
Carbazole	86748			2.00E-02 H			3.40E+00 C	3.10E-01 C	1.60E-01 C	2.90E+02 C	3.20E+01 C	1.10E+01 S	5.00E-01 E
Chrysene	218019			7.30E-03 E	6.10E-03 E		9.20E+00 C	1.00E+00 C	4.30E-01 C	7.80E+02 C	8.80E+01 C	3.60E+00 S	1.00E+00 E
Dibenz[ah]anthracene	53703			7.30E+00 E	6.10E+00 E		9.20E-03 C	1.00E-03 C	4.30E-04 C	7.80E-01 C	8.80E-02 C	7.20E+00 S	1.10E+01 E
Fluoranthene	206440	4.00E-02 I					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	6.80E+01 S	9.80E+02 E
Fluorene	86737	4.00E-02 I					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	8.90E+01 S	1.60E+02 E
Indeno[1,2,3-cd]pyrene	193395			7.30E-01 E	6.10E-01 E		9.20E-02 C	1.00E-02 C	4.30E-03 C	7.80E+00 C	8.80E-01 C	2.80E+02 S	3.50E+01 E
Naphthalene	91203	4.00E-02 W					1.50E+03 N	1.50E+02 N	5.40E+01 N	8.20E+04 N	3.10E+03 N	1.80E+02 S	3.00E+01 E
Pyrene	129000	3.00E-02 I					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	5.60E+01 S	1.40E+03 E
Prochloraz	67747095	9.00E-03 I					4.50E-01 C	4.20E-02 C	2.10E-02 C	3.80E+01 C	4.30E+00 C	0.00E+00	0.00E+00
Profluralin	26399360	6.00E-03 H		1.50E-01 I			2.20E+02 N	2.20E+01 N	8.10E+00 N	1.20E+04 N	4.70E+02 N	0.00E+00	0.00E+00
Prometon	1610180	1.50E-02 I					5.50E+02 N	5.50E+01 N	2.00E+01 N	3.10E+04 N	1.20E+03 N	0.00E+00	0.00E+00
Prometryn	7287196	4.00E-03 I					1.50E+02 N	1.50E+01 N	5.40E+00 N	8.20E+03 N	3.10E+02 N	0.00E+00	0.00E+00
Pronamide	23950585	7.50E-02 I					2.70E+03 N	2.70E+02 N	1.00E+02 N	1.50E+05 N	5.90E+03 N	0.00E+00	0.00E+00
Propachlor	1918167	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
Propanil	709988	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Propargite	2312358	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Propargyl alcohol	107197	2.00E-03 I					7.30E+01 N	7.30E+00 N	2.70E+00 N	4.10E+03 N	1.60E+02 N	0.00E+00	0.00E+00
Propazine	139402	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Propham	122429	2.00E-02 I					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Propiconazole	60207901	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
Propylene glycol	57556	2.00E+01 H					7.30E+05 N	7.30E+04 N	2.70E+04 N	1.00E+06 N	1.00E+06 N	0.00E+00	0.00E+00
Propylene glycol, monoethyl ether	52125538	7.00E-01 H					2.60E+04 N	2.60E+03 N	9.50E+02 N	1.00E+06 N	5.50E+04 N	0.00E+00	0.00E+00
Propylene glycol, monomethyl ether	107982	7.00E-01 H	5.71E-01 I				2.60E+04 N	2.10E+03 N	9.50E+02 N	1.00E+06 N	5.50E+04 N	0.00E+00	0.00E+00
Propylene oxide	75569		8.57E-03 I	2.40E-01 I	1.29E-02 I		2.80E-01 C	4.90E-01 C	1.30E-02 C	2.40E+01 C	2.70E+00 C	0.00E+00	0.00E+00
Pursuit	81335775	2.50E-01 I					9.10E+03 N	9.10E+02 N	3.40E+02 N	5.10E+05 N	2.00E+04 N	0.00E+00	0.00E+00
Pydrin	51630581	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
Pyridine	110861	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
Quinalphos	13593038	5.00E-04 I					1.80E+01 N	1.80E+00 N	6.80E-01 N	1.00E+03 N	3.90E+01 N	0.00E+00	0.00E+00
Quinoline	91225			1.20E+01 H			5.60E-03 C	5.20E-04 C	2.60E-04 C	4.80E-01 C	5.30E-02 C	0.00E+00	0.00E+00
Resmethrin	10463868	3.00E-02 I					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
Ronnel	299843	5.00E-02 H					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
Rotenone	83794	4.00E-03 I					1.50E+02 N	1.50E+01 N	5.40E+00 N	8.20E+03 N	3.10E+02 N	0.00E+00	0.00E+00
Savey	78587050	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00

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Basis: C=carcinogenic effects N=noncarcinogenic effects E=EPA draft Soil Screening Level S=soil saturation concentration M=EPA MCL.

Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	VOC	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Selenious Acid	7783008	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Selenium	7782492	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	3.00E+00 E
Selenourea	630104	5.00E-03 H					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Sethoxydim	74051802	9.00E-02 I					3.30E+03 N	3.30E+02 N	1.20E+02 N	1.80E+05 N	7.00E+03 N	0.00E+00	0.00E+00
Silver and compounds	7440224	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Simazine	122349	5.00E-03 I		1.20E-01 H			5.60E-01 C	5.20E-02 C	2.60E-02 C	4.80E+01 C	5.30E+00 C	0.00E+00	0.00E+00
Sodium azide	26628228	4.00E-03 I					1.50E+02 N	1.50E+01 N	5.40E+00 N	8.20E+03 N	3.10E+02 N	0.00E+00	0.00E+00
Sodium diethyldithiocarbamate	148185	3.00E-02 I		2.70E-01 H			2.50E-01 C	2.30E-02 C	1.20E-02 C	2.10E+01 C	2.40E+00 C	0.00E+00	0.00E+00
Sodium fluoroacetate	62748	2.00E-05 I					7.30E-01 N	7.30E-02 N	2.70E-02 N	4.10E+01 N	1.60E+00 N	0.00E+00	0.00E+00
Sodium metavanadate	13718268	1.00E-03 H					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
Strontium, stable	7440246	6.00E-01 I					2.20E+04 N	2.20E+03 N	8.10E+02 N	1.00E+06 N	4.70E+04 N	0.00E+00	0.00E+00
Strychnine	57249	3.00E-04 I					1.10E+01 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	0.00E+00	0.00E+00
Styrene	100425	2.00E-01 I	2.86E-01 I			☒	1.60E+03 N	1.00E+03 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	1.40E+03 E	2.00E+00 E
Systhane	88671890	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
2,3,7,8-TCDD (dioxin)	1746016			1.56E+05 H	1.16E+05 H		4.30E-07 C	5.40E-08 C	0.00E+00 C	3.70E-05 C	4.10E-06 C	0.00E+00	0.00E+00
Tebuthiuron	34014181	7.00E-02 I					2.60E+03 N	2.60E+02 N	9.50E+01 N	1.40E+05 N	5.50E+03 N	0.00E+00	0.00E+00
Temephos	3383968	2.00E-02 H					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Terbacil	5902512	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
Terbufos	13071799	2.50E-05 H					9.10E-01 N	9.10E-02 N	3.40E-02 N	5.10E+01 N	2.00E+00 N	0.00E+00	0.00E+00
Terbutryn	886500	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00
1,2,4,5-Tetrachlorobenzene	95943	3.00E-04 I				☒	1.80E+00 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	9.10E+01 N	6.90E-01 N
1,1,1,2-Tetrachloroethane	630206	3.00E-02 I		2.60E-02 I	2.59E-02 I	☒	4.10E-01 C	2.40E-01 C	1.20E-01 C	2.20E+02 C	2.50E+01 C	0.00E+00	0.00E+00
1,1,2,2-Tetrachloroethane	79345			2.00E-01 I	2.03E-01 I	☒	5.20E-02 C	3.10E-02 C	1.60E-02 C	2.90E+01 C	3.20E+00 C	4.00E-01 E	1.00E-03 E
Tetrachloroethylene (PCE)	127184	1.00E-02 I		5.20E-02 E	2.03E-03 E	☒	1.10E+00 C	3.10E+00 C	6.10E-02 C	1.10E+02 C	1.20E+01 C	1.10E+01 E	4.00E-02 E
2,3,4,6-Tetrachlorophenol	58902	3.00E-02 I					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
p,a,a,a-Tetrachlorotoluene	5216251			2.00E+01 H		☒	5.30E-04 C	3.10E-04 C	1.60E-04 C	2.90E-01 C	3.20E-02 C	0.00E+00	0.00E+00
Tetrachlorovinphos	961115	3.00E-02 I		2.40E-02 H			2.80E+00 C	2.60E-01 C	1.30E-01 C	2.40E+02 C	2.70E+01 C	0.00E+00	0.00E+00
Tetraethyldithiopyrophosphate	3689245	5.00E-04 I					1.80E+01 N	1.80E+00 N	6.80E-01 N	1.00E+03 N	3.90E+01 N	0.00E+00	0.00E+00
Tetraethyl lead	78002	1.00E-07 I					3.70E-03 N	3.70E-04 N	1.40E-04 N	2.00E-01 N	7.80E-03 N	6.80E-04 N	3.40E-05 N
1,1,1,2-Tetrafluoroethane	811972		I 2.29E+01			☒	1.40E+05 N	8.40E+04 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallic oxide	1314325	7.00E-05 W					2.60E+00 N	2.60E-01 N	9.50E-02 N	1.40E+02 N	5.50E+00 N	0.00E+00	0.00E+00
Thallium	0						0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-01 E
Thallium acetate	563688	9.00E-05 I					3.30E+00 N	3.30E-01 N	1.20E-01 N	1.80E+02 N	7.00E+00 N	0.00E+00	0.00E+00
Thallium carbonate	6533739	8.00E-05 I					2.90E+00 N	2.90E-01 N	1.10E-01 N	1.60E+02 N	6.30E+00 N	0.00E+00	0.00E+00
Thallium chloride	7791120	8.00E-05 I					2.90E+00 N	2.90E-01 N	1.10E-01 N	1.60E+02 N	6.30E+00 N	0.00E+00	0.00E+00
Thallium nitrate	10102451	9.00E-05 I					3.30E+00 N	3.30E-01 N	1.20E-01 N	1.80E+02 N	7.00E+00 N	0.00E+00	0.00E+00
Thallium selenite	12039520	9.00E-05 W					3.30E+00 N	3.30E-01 N	1.20E-01 N	1.80E+02 N	7.00E+00 N	0.00E+00	0.00E+00
Thallium sulfate	7446186	8.00E-05 I					2.90E+00 N	2.90E-01 N	1.10E-01 N	1.60E+02 N	6.30E+00 N	0.00E+00	0.00E+00
Thiobencarb	28249776	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
2-(Thiocyanomethylthio)-benzothiazole	21564170	3.00E-02 H					1.10E+03 N	1.10E+02 N	4.10E+01 N	6.10E+04 N	2.30E+03 N	0.00E+00	0.00E+00
Thiofanox	39196184	3.00E-04 H					1.10E+01 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	0.00E+00	0.00E+00
Thiophanate-methyl	23564058	8.00E-02 I					2.90E+03 N	2.90E+02 N	1.10E+02 N	1.60E+05 N	6.30E+03 N	0.00E+00	0.00E+00

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Contaminant	CAS	RfDo mg/kg/d	RfDi mg/kg/d	CPSo kg·d/mg	CPSi kg·d/mg	V O C	Risk-Based Concentrations: Tap Water µg/L	Ambient Air µg/m3	Fish mg/kg	Soil Ingestion: Industrial mg/kg	Residential mg/kg	Soil Screening Levels-Transfers from Soil to: Air mg/kg	Groundwater mg/kg
Thiram	137268	5.00E-03 I					1.80E+02 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Tin and compounds	0	6.00E-01 H					2.20E+04 N	2.20E+03 N	8.10E+02 N	1.00E+06 N	4.70E+04 N	0.00E+00	0.00E+00
Toluene	108883	2.00E-01 I	1.14E-01 I			☒	7.50E+02 N	4.20E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	5.20E+02 E	5.00E+00 E
Toluene-2,4-diamine	95807			3.20E+00 H			2.10E-02 C	2.00E-03 C	9.90E-04 C	1.80E+00 C	2.00E-01 C	0.00E+00	0.00E+00
Toluene-2,5-diamine	95705	6.00E-01 H					2.20E+04 N	2.20E+03 N	8.10E+02 N	1.00E+06 N	4.70E+04 N	0.00E+00	0.00E+00
Toluene-2,6-diamine	823405	2.00E-01 H					7.30E+03 N	7.30E+02 N	2.70E+02 N	4.10E+05 N	1.60E+04 N	0.00E+00	0.00E+00
p-Toluidine	106490			1.90E-01 H			3.50E-01 C	3.30E-02 C	1.70E-02 C	3.00E+01 C	3.40E+00 C	0.00E+00	0.00E+00
Toxaphene	8001352			1.10E+00 I	1.12E+00 I		6.10E-02 C	5.60E-03 C	2.90E-03 C	5.20E+00 C	5.80E-01 C	5.00E+00 E	4.00E-02 E
Tralomethrin	66841256	7.50E-03 I					2.70E+02 N	2.70E+01 N	1.00E+01 N	1.50E+04 N	5.90E+02 N	0.00E+00	0.00E+00
Triallate	2303175	1.30E-02 I					4.70E+02 N	4.70E+01 N	1.80E+01 N	2.70E+04 N	1.00E+03 N	0.00E+00	0.00E+00
Triasulfuron	82097505	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
1,2,4-Tribromobenzene	615543	5.00E-03 I				☒	3.00E+01 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
Tributyltin oxide (TBTO)	56359	3.00E-05 I					1.10E+00 N	1.10E-01 N	4.10E-02 N	6.10E+01 N	2.30E+00 N	0.00E+00	0.00E+00
2,4,6-Trichloroaniline hydrochloride	33663502			2.90E-02 H			2.30E+00 C	2.20E-01 C	1.10E-01 C	2.00E+02 C	2.20E+01 C	0.00E+00	0.00E+00
2,4,6-Trichloroaniline	634935			3.40E-02 H			2.00E+00 C	1.80E-01 C	9.30E-02 C	1.70E+02 C	1.90E+01 C	0.00E+00	0.00E+00
1,2,4-Trichlorobenzene	120821	1.00E-02 I	5.71e-02 H			☒	1.90E+02 N	2.10E+02 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	2.40E+02 E	2.00E+00 E
1,1,1-Trichloroethane	71556	3.50E-02 E	2.86E-01 W			☒	7.90E+02 N	1.00E+03 N	4.70E+01 N	7.20E+04 N	2.70E+03 N	9.80E+02 E	9.00E-01 E
1,1,2-Trichloroethane	79005	4.00E-03 I		5.70E-02 I	5.60E-02 I	☒	1.90E-01 C	1.10E-01 C	5.50E-02 C	1.00E+02 C	1.10E+01 C	8.00E-01 E	1.00E-02 E
Trichloroethylene (TCE)	79016	6.00E-03 E		1.10E-02 W	6.00E-03 E	☒	1.60E+00 C	1.00E+00 C	2.90E-01 C	5.20E+02 C	5.80E+01 C	3.00E+00 E	2.00E-02 E
Trichlorofluoromethane	75694	3.00E-01 I	2.00E-01 A			☒	1.30E+03 N	7.30E+02 N	4.10E+02 N	6.10E+05 N	2.30E+04 N	7.90E+02 N	1.30E+01 N
2,4,5-Trichlorophenol	95954	1.00E-01 I					3.70E+03 N	3.70E+02 N	1.40E+02 N	2.00E+05 N	7.80E+03 N	8.20E+03 S	1.20E+02 E
2,4,6-Trichlorophenol	88062			1.10E-02 I	1.09E-02 I		6.10E+00 C	5.70E-01 C	2.90E-01 C	5.20E+02 C	5.80E+01 C	1.50E+02 C	6.00E-02 E
2,4,5-Trichlorophenoxyacetic acid	93765	1.00E-02 I					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
2-(2,4,5-Trichlorophenoxy)propionic acid	93721	8.00E-03 I					2.90E+02 N	2.90E+01 N	1.10E+01 N	1.60E+04 N	6.30E+02 N	0.00E+00	0.00E+00
1,1,2-Trichloropropane	598776	5.00E-03 I				☒	3.00E+01 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	1.30E+01 N	1.40E-01 N
1,2,3-Trichloropropane	96184	6.00E-03 I		7.00e+00 I		☒	1.50E-03 C	8.90E-04 C	4.50E-04 C	8.20E-01 C	9.10E-02 C	2.70E-05 C	6.00E-06 C
1,2,3-Trichloropropene	96195	5.00E-03 H				☒	3.00E+01 N	1.80E+01 N	6.80E+00 N	1.00E+04 N	3.90E+02 N	0.00E+00	0.00E+00
1,1,2-Trichloro-1,2,2- trifluoroethane	76131	3.00E+01 I	8.57E+00 H			☒	5.90E+04 N	3.10E+04 N	4.10E+04 N	1.00E+06 N	1.00E+06 N	2.40E+03 S	3.10E+03 N
Tridiphane	58138082	3.00E-03 I					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
Triethylamine	121448		2.00E-03 I				7.30E+01 N	7.30E+00 N	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Trifluralin	1582098	7.50E-03 I		7.70E-03 I			8.70E+00 C	8.10E-01 C	4.10E-01 C	7.40E+02 C	8.30E+01 C	0.00E+00	0.00E+00
1,2,4-Trimethylbenzene	95636	5.00e-02 E				☒	3.00E+02 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00
1,3,5-Trimethylbenzene	108678	5.00e-02 E				☒	3.00E+02 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	9.80E+01 S	2.60E-01 M
Trimethyl phosphate	512561			3.70E-02 H			1.80E+00 C	1.70E-01 C	8.50E-02 C	1.50E+02 C	1.70E+01 C	0.00E+00	0.00E+00
1,3,5-Trinitrobenzene	99354	5.00E-05 I					1.80E+00 N	1.80E-01 N	6.80E-02 N	1.00E+02 N	3.90E+00 N	0.00E+00	0.00E+00
Trinitrophenylmethylnitramine	479458	1.00E-02 H					3.70E+02 N	3.70E+01 N	1.40E+01 N	2.00E+04 N	7.80E+02 N	0.00E+00	0.00E+00
2,4,6-Trinitrotoluene	118967	5.00E-04 I		3.00E-02 I			2.20E+00 C	2.10E-01 C	1.10E-01 C	1.90E+02 C	2.10E+01 C	0.00E+00	0.00E+00
Uranium (soluble salts)	7440611	3.00E-03 I					1.10E+02 N	1.10E+01 N	4.10E+00 N	6.10E+03 N	2.30E+02 N	0.00E+00	0.00E+00
Vanadium	7440622	7.00E-03 H					2.60E+02 N	2.60E+01 N	9.50E+00 N	1.40E+04 N	5.50E+02 N	0.00E+00	0.00E+00
Vanadium pentoxide	1314621	9.00E-03 I					3.30E+02 N	3.30E+01 N	1.20E+01 N	1.80E+04 N	7.00E+02 N	0.00E+00	0.00E+00
Vanadium sulfate	36907423	2.00E-02 H					7.30E+02 N	7.30E+01 N	2.70E+01 N	4.10E+04 N	1.60E+03 N	0.00E+00	0.00E+00
Vernam	1929777	1.00E-03 I					3.70E+01 N	3.70E+00 N	1.40E+00 N	2.00E+03 N	7.80E+01 N	0.00E+00	0.00E+00

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Vinclozolin	50471448	2.50E-02 I					9.10E+02 N	9.10E+01 N	3.40E+01 N	5.10E+04 N	2.00E+03 N	0.00E+00	0.00E+00
Vinyl acetate	108054	1.00E+00 H	5.71E-02 I				3.70E+04 N	2.10E+02 N	1.40E+03 N	1.00E+06 N	7.80E+04 N	3.70E+02 E	8.40E+01 E
Vinyl bromide	593602		8.57E-04 I			☒	5.20E+00 N	3.10E+00 N	0.00E+00	0.00E+00	0.00E+00	2.00E+00 N	1.80E-02 N
Vinyl chloride	75014			1.90E+00 H	3.00E-01 H	☒	1.90E-02 C	2.10E-02 C	1.70E-03 C	3.00E+00 C	3.40E-01 C	2.00E-03 E	1.00E-02 E
Warfarin	81812	3.00E-04 I					1.10E+01 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	4.60E-02 N	1.80E+03 N
m-Xylene	1.08E+05	2.00E+00 H	2.00E-01 W			☒	1.40E+03 N	7.30E+02 N	2.70E+03 N	1.00E+06 N	1.60E+05 N	9.50E+02 S	2.40E+02 M
o-Xylene	9.55E+04	2.00E+00 H	2.00E-01 W			☒	1.40E+03 N	7.30E+02 N	2.70E+03 N	1.00E+06 N	1.60E+05 N	7.30E+02 S	1.50E+02 M
p-Xylene	1.06E+05		8.57E-02 W			☒	5.20E+02 N	3.10E+02 N	0.00E+00	0.00E+00	0.00E+00	1.00E+03 S	2.20E+02 M
Xylene (mixed)	1.33E+06	2.00E+00 I				☒	1.20E+04 N	7.30E+03 N	2.70E+03 N	1.00E+06 N	1.60E+05 N	3.20E+02 E	7.40E+01 E
Zinc	7.44E+06	3.00E-01 I					1.10E+04 N	1.10E+03 N	4.10E+02 N	6.10E+05 N	2.30E+04 N	0.00E+00	4.20E+04 E
Zinc phosphide	1.31E+06	3.00E-04 I					1.10E+01 N	1.10E+00 N	4.10E-01 N	6.10E+02 N	2.30E+01 N	0.00E+00	0.00E+00
Zineb	1.21E+07	5.00E-02 I					1.80E+03 N	1.80E+02 N	6.80E+01 N	1.00E+05 N	3.90E+03 N	0.00E+00	0.00E+00