

## 3.0. The primary data sources used to populate the databases

We use mainly public domain sources (mainly that of regulatory bodies), peer reviewed literature and private databases with copyright/IPR permission where required.

**Note: This list is non-exclusive and just provides an example of the sources utilised.**

A	EU Regulatory & Evaluation Data as published by EC, EFSA (RAR, DAR & Conclusion dossiers), EMA (e.g.) EU Annex III PIC DGD (For example see <a href="http://ec.europa.eu/sanco_pesticides/public/index.cfm">http://ec.europa.eu/sanco_pesticides/public/index.cfm</a> or EFSA Scientific Publications <a href="https://www.efsa.europa.eu/en/publications">https://www.efsa.europa.eu/en/publications</a> )
AA	IOBC Database on classification of side effects to beneficial organisms, 2005
AC	EC Joint Research Centre ESIS European Chemical Substance Information Systems including ECHA (See <a href="https://echa.europa.eu/information-on-chemicals">https://echa.europa.eu/information-on-chemicals</a> )
AE	Joint Assessment of Commodity Chemicals ECETOC (See <a href="http://www.ecetoc.org">http://www.ecetoc.org</a> )
B	UK CRD and ACP Evaluation Documents / and other DEFRA (UK) documents (See <a href="http://www.pesticides.gov.uk/publications.asp?id=202">http://www.pesticides.gov.uk/publications.asp?id=202</a> ); Also Chemicals Regulation Division, Health and Safety Executive (HSE), UK
C	AGRITOX (See <a href="http://www.agritox.anses.fr/.dataset">http://www.agritox.anses.fr/.dataset</a> . Dataset is no longer available.
D	Agricultural Research Information System (ARIS) Database. Dataset is no longer available.
DW	Don Wauchope personal database for Pka data: Wauchope, R. D. and Edwards, J. Dissociation constants for pesticide active ingredients: a database and comparison with predicted values. Dataset is no longer available.
E	Manufacturers Safety Data Sheets
F	U.S. EPA ECOTOX database / U.S. EPA pesticide fate database / Miscellaneous WHO documents (See <a href="https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/databases-related-pesticide-risk-assessment">https://www.epa.gov/pesticide-science-and-assessing-pesticide-risks/databases-related-pesticide-risk-assessment</a> ). FAO data, IPCS INCHEM data.
G	Extension Toxicology network Database EXTOWNET (See <a href="http://extownet.orst.edu/ghindex.html">http://extownet.orst.edu/ghindex.html</a> ) Available online but no longer updated.
H	The US ARS Pesticide Properties Database (See <a href="http://www.ars.usda.gov/Services/docs.htm?docid=14199">http://www.ars.usda.gov/Services/docs.htm?docid=14199</a> ) Dataset is no longer available.
J	Pesticide Action Network Database (See <a href="http://www.pesticideinfo.org/">http://www.pesticideinfo.org/</a> )
K	Research Datasets (e.g. Pandora, Demetra these datasets no longer available). Norman Ecotoxicology database (See <a href="https://www.norman-network.com/nds/susdat/">https://www.norman-network.com/nds/susdat/</a> )
L	Pesticide manuals and hard copy reference books / other sources
M	GLEAMS Model database (Groundwater Loading Effects of Agricultural Management Systems). (See <a href="http://www.cpes.peachnet.edu/sewrl/Gleams/gleams_y2k_update.htm">http://www.cpes.peachnet.edu/sewrl/Gleams/gleams_y2k_update.htm</a> ). Dataset no longer available.
N	Various Trusts, NGOs & Charities Data
P	Other non-EU, UK or US Governments and Regulators
Q	Miscellaneous Data from On-line Sources

R	Peer Reviewed Scientific Publications
S	Expert Judgement
T	UN EPFA Database. Dataset no longer available.
U	US Dept of Agriculture National Resources Conservation Service - various datasheets, databases and online sources
V	ChemID Online Databases (See <a href="https://chem.nlm.nih.gov/chemidplus/">https://chem.nlm.nih.gov/chemidplus/</a> ); Chempider; PubChem
W	French database provided by ARVALIS-Institut du Végétal. Dataset no longer available.
X	WINPST Database (See <a href="http://www.ipm.ucdavis.edu/TOX/winpstdoc.html">http://www.ipm.ucdavis.edu/TOX/winpstdoc.html</a> ). Dataset no longer available.
Y	Germany's Federal Environment Agency (UBA) (See <a href="http://www.umweltbundesamt.de/index-e.htm">http://www.umweltbundesamt.de/index-e.htm</a> )
Z	Kingtai Chemicals Website (See <a href="http://www.kingtaichem.com/">http://www.kingtaichem.com/</a> )

## 4.0. Quality Control and Management

Data management activities involve trawling for new or previously unidentified data. Evaluating its fitness-for-purpose, undertaking quality control activities and adding it to the database. The database and website are updated several times each week.

Data is sourced globally from published scientific literature and databases, manuals, registration databases and dossiers, company technical datasheets and research projects as described above.

Prior to entry into the databases data is subject to quality control. This involves peer review, cross checking against other databases and data sources and, where doubt exists and the original reference is known, the original source is revisited and possibly the quality score (see below) adjusted.

Fitness for purpose is evaluated based on experimental conditions being appropriate for Europe, scientific protocols utilised, quality control findings and how recent the data is.

Data is then weighted 1 (low) to 5 (high) according to the confidence we have in that data. This is a subjective process and just our opinion. A high score does not necessarily mean a value is correct. Equally, a low score does not necessarily indicate incorrect data but just that we have not been able to obtain verification. Generally, as a guide the weighting scores are assigned according to the following:

1	Estimated data with little or no verification
2	Unverified data of unknown source
3	Unverified data of known source
4	Verified data
5	Verified data used for regulatory purposes.

However, confidence weightings may be adjusted if reason to doubt verified data exists or there is reason for greater confidence in an unverified value.

Once data has been accepted for inclusion into the database, data is extracted and transformed with respect to units. References are recorded and hardcopies filed.