

2.0. Explanation of the Terms and Parameters Used

2.1. General chemical status information – descriptors and registration

Parameter	Explanation
Summary	This is a short paragraph picking out the key parameters providing an overview of the pesticide substance and its chemical and (eco)toxicological properties.
Alias's/synonyms	Other names by which the substance is known. These are enabled in the various database search facilities.
Description	General description of the major uses of the substance.
Example pests controlled	A non-exhaustive list of pests that the substance controls.
Example hosts	A non-exhaustive list of application situations.
Efficacy & activity	Information on the efficacy and activity of the pesticide towards the pest the substance is intended to control.
Introduction	Year (and country where known) of introduction, registration or discovery.
EU approval	Provides an indication of where the active substance has been authorised for agricultural use within the EU. Please check with the relevant national authority before relying on this data.
EC Directive status (PPDB/BPDB only)	Status of the chemical in the EU peer review process EC directive 1107/2009 (repealing 91/414) of pesticide/biopesticide active substances.
EU Candidate for substitution (CfS)	These are pesticide active substances identified during the EU regulatory assessment process as having a less favourable toxicological or environmental profile but which still satisfy the criteria for approval. Article 24 of Regulation (EC) No. 1107/2009 states that candidates for substitution (CfS) are approved for a period not exceeding seven years. The criteria for selection includes, for example, substances which are carcinogenic, those which have negative effects on reproduction and those that are a high risk to groundwater whilst also showing a toxic effect of concern.
Also registered in	Other countries where we believe the substance is used. Please check with the relevant national authority before relying on this data.
Pesticide or veterinary substance type	The specific type of substance described according to the type of pest or disease they control e.g. Insecticide, Herbicide, Fungicide, Acaricide, Antiparasitic, Anthelmintic etc.
Chemical group	Chemical classification group based on the chemical structure.
Taxonomic classification (BPDB only)	A description of the natural substance according to its scientific taxonomy e.g. Kingdom, class, order, family, genus and species.
Isomerism	This is a description of the isomeric nature of the substance.
Mode of action	The mechanism by which the substance performs its main function.
Target pest and host (BPDB only)	The pest or disease the substance is used to control and the crops it is used on.
Species treated (VSDB only)	Examples of the species which the drug may be used for.

Parameter	Explanation
Therapeutic class (VSDB only)	Description of the drugs activity according to its therapeutic activity.
Molecular target (VSD only)	This is the key molecule involved in a particular metabolic or signaling pathway that is specific to the disease condition or pathology or to the infectivity or survival of a microbial pathogen.
Metabolite type	General description of the host process that creates the metabolite e.g. soil, water, animal, plant, groundwater.
Other constituent type	General description of the purpose of the constituent in the formulation i.e. solvent, wetter, carrier etc.
CAS RN	Chemical Abstracts Service Registry Number - a unique identify for the chemical.
EC number	The unique reference number for the chemical in the European Chemical Substances Information System (EINECS) or European List of Notified Chemicals (ELINCS).
CIPAC number	The CIPAC code number system is a simple approach for an unambiguous coding of chemicals. CIPAC, FAO, WHO and the EU are the main users of this system.
US EPA chemical code (PPDB/BPDB only)	The U.S. Environmental Protection Agency (U.S. EPA) assigns a unique reference number to individual pesticide active ingredients to assist in their identification. This code is sometimes referred to as the Shaugnessy Number.
ATCVet code (VSDB only)	A classification system is used to classify the drug/treatment according to its therapeutic action. This is similar to that used for human medicine.
Chemical formula	This is a concise way of expressing information about the atoms that constitute the chemical.
Canonical SMILES	The S implified M olecular I nput L ine E ntry S pecification (SMILES) is a specification for describing the structure of chemical molecules using short ASCII strings. SMILES strings can be imported by most molecule editors for conversion back into drawings or models of the molecules. Canonical SMILES are those used by the most common applications and omits isotopic and chiral information.
Isomeric SMILES	SMILES as above but including isotopic and chiral information.
InChIKey	IUPAC I nternational C hemical I dentifier. This is a textual identification for chemical substances, that provides a standard, readable way of encoding molecular information and to facilitate the search for such information in databases and on the web. This parameter is a condensed version of the InChI Identified described below.
InChI Identifier	IUPAC I nternational C hemical I dentifier. This is a textual identification for chemical substances, that provides a standard, readable way of encoding molecular information and to facilitate the search for such information in databases and on the web.
Structure diagram available	Either Yes or No. If Yes is stated this will be a link to a separate window displaying the structure diagram.
Molecular mass	The relative molecular mass (molecular weight) of a chemical is the mass of a molecule of the chemical relative to the mass of a carbon atom taken as exactly 12.

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Chemical name	Name of the chemical according to the nomenclature rules of IUPAC or CAS. Where this is not available or does not apply a generic name is given.
Other status information	<p>This will display information relating to the status of the substance with respect to other legislation, international conventions and information regarding phase out. Including:</p> <p>PIC Annex 1 chemicals: The Rotterdam Convention on Prior Informed Consent (PIC). The Convention covers pesticides and industrial chemicals that have been banned or severely restricted for health or environmental reasons by parties and which have been notified for inclusion in the PIC procedure by those parties. One notification from each of two specified regions triggers consideration of addition of a chemical to Annex III of the Convention. Severely hazardous product formulations that present a hazard under conditions of use in developing may also be nominated for inclusion in Annex III.</p> <p>POP chemicals: The Stockholm Convention on Persistent Organic Pollutants (POP). POPs are exceedingly toxic chemicals that are extremely persistent in the environment, travel long distances on wind and water currents, and concentrate up the food chain to accumulate in our bodies. They also have serious health implications and can cause cancer, neurological and learning disabilities, and subtle changes to human reproductive and immune systems. The Stockholm Convention bans or severely restricts the most hazardous POPs, and establishes an international, science-based process for adding other POPs to the treaty. Those listed in this database also include chemicals that are new POP candidates proposed by other organisations including the WWF.</p> <p>VOC chemicals: Volatile organic compounds (VOCs) are organic chemical compounds that have high enough vapour pressures under normal conditions to significantly vaporise and enter the atmosphere.</p> <p>The term VOC may have special legal meanings in some countries.</p> <p>LRTAP Chemicals: The Convention on Long-range Transboundary Air Pollution (LRTAP): The aim of the Convention is that Parties seek to limit and, as far as possible, gradually reduce and prevent air pollution including long-range transboundary air pollution. Chemicals considered to be the most serious problem are assigned to Annex 1.</p> <p>PAN Dirty Dozen / PAN Bad Actor: The Pesticide Action Network (PAN) have identified these chemicals as being particularly harmful.</p> <p>OSPAR: OSPAR Convention for the Protection of the Marine Environment: pfa - priority substances for action, soc - substances of concern.</p> <p>WFD: Water Framework Directive 2000/60/EC: phs - priority hazardous substance, pps - possible priority substance, other - other substance of concern.</p> <p>Groundwater contaminant: substance is known to have polluted groundwaters and is a substance of concern.</p>
Relevant environmental water quality standards	This field gives an indication of the quality standards in place for the protection of aquatic life.
Resistance code (PPDB/BPDB only)	This is the HRAC, IRAC or FRAC code that denotes their resistance classification and can be used in resistance management programmes.

Parameter	Explanation
Physical state	Provides an indication of the physical state of the material – solid, liquid or gas and its general appearance. This normally applies to the active substance in its pure state unless stated otherwise.