

**SAFETY DATA SHEET** according to Regulation (EC) No. 1907/2006, as amended

**SONATA**

Version 2 / GB  
102000028244

1/11

Revision Date: 12.12.2024  
Print Date: 23.01.2025

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**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

**Trade name** SONATA  
**Product code (UVP)** 80900007  
**UFI** UEW1-E0DR-K00G-K4A1 (for Northern Ireland only)

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

**Use** Fungicide

**1.3 Details of the supplier of the safety data sheet**

**Supplier** Bayer CropScience Limited  
230 Cambridge Science Park  
Milton Road  
CB4 0WB Cambridge  
United Kingdom

**Telephone** +44(0)1223 226500

**Telefax** +44(0)1223 426240

**FOR IRELAND & NORTHERN IRELAND:** Bayer CropScience Ltd  
Bayer Ltd  
1st Floor, The Grange Offices  
The Grange, Brewery Road  
Stillorgan  
Co. Dublin  
A94 H2K7  
Ireland

**Telephone** +353 1 216 3300

**Responsible Department** Email: gb-bcs-crop-regulatory-affairs@bayer.com

**1.4 Emergency telephone no.**

**Emergency telephone no.** 0330 678 3382 (24 hr)

For Medical Professionals:  
You can also contact the relevant NPIS.

For Members to the Public:  
You can contact NHS111 (for GB) or your local GP (for Northern Ireland)

National Poisons Information Centre UK: 0344 892 0111  
National Poisons Information Centre Dublin: +353 1 809 2166

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## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Not classified, the classification criteria are not met.

### 2.2 Label elements

**Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

No hazard label for supply/use required.

### 2.3 Other hazards

Micro-organisms may have the potential to provoke sensitising reactions.

Evaluation of PBT/vPvB properties is not relevant for micro-organisms.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Chemical nature

Suspension concentrate (=flowable concentrate)(SC)  
Bacillus pumilus QST2808, >= 1.0E+09 CFU/g

#### Hazardous components

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
BACILLUS PUMILUS STRAIN QST2808		Not classified	1.38

#### Further information

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### Particle characteristics

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This substance/ mixture does not contain nanoforms

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## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

<b>General advice</b>	Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.
<b>Inhalation</b>	Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately.
<b>Skin contact</b>	Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

### 4.2 Most important symptoms and effects, both acute and delayed

**Symptoms** To date no symptoms are known.

### 4.3 Indication of any immediate medical attention and special treatment needed

**Treatment** Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.

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## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

<b>Suitable</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable</b>	High volume water jet

**5.2 Special hazards arising from the substance or mixture** Dangerous gases are evolved in the event of a fire.

### 5.3 Advice for firefighters

**Further information** Use appropriate extinguishing media for material that is supplying fuel.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

**Precautions** Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

**6.2 Environmental precautions** Do not allow to get into surface water, drains and ground water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

### 6.3 Methods and materials for containment and cleaning up

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations. Clean with disinfectants.

**Additional advice** Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal.

**6.4 Reference to other sections** Information regarding safe handling, see section 7.  
Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13.

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## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

**Advice on safe handling** Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.

**Hygiene measures** Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Wash thoroughly and put on clean clothing.

### 7.2 Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers** Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Keep away from direct sunlight.

**Advice on common storage** Keep away from food, drink and animal feedingstuffs.

**Suitable materials** HDPE (high density polyethylene)

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

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No known occupational limit values.

### 8.2 Exposure controls

Refer to COSHH assessment (Control of Substances Hazardous to Health (Amendment) Regulations 2004). Engineering controls should be used in preference to personal protective equipment wherever practicable. Refer also to COSHH Essentials.

#### Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

<b>Respiratory protection</b>	Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance. Wear respirator with a particle filter mask (protection factor 20) conforming to European Norm EN149FFP3 or EN140P3 or equivalent.
<b>Hand protection</b>	Waterproof gloves
<b>Eye protection</b>	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
<b>Skin and body protection</b>	Wear long-sleeved shirt and long pants and shoes plus socks.
<b>General protective measures</b>	Use personal protective equipment as required. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Form</b>	suspension
<b>Colour</b>	light brown
<b>Odour</b>	sweet, earthy
<b>Odour Threshold</b>	No data available
<b>Melting point/ range</b>	No data available
<b>Boiling point/boiling range</b>	$\geq 100$ °C
<b>Flammability</b>	No data available
<b>Upper explosion limit</b>	No data available
<b>Lower explosion limit</b>	No data available
<b>Flash point</b>	No data available
<b>Auto-ignition temperature</b>	No data available

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<b>Minimum ignition energy</b>	Not applicable
<b>Self-accelarating decomposition temperature (SADT)</b>	No data available
<b>pH</b>	5.2 - 5.4 (100 %) (23 °C)
<b>Viscosity, dynamic</b>	5 - 120 mPa.s (21 °C)
<b>Viscosity, kinematic</b>	No data available
<b>Water solubility</b>	dispersible
<b>Partition coefficient: n-octanol/water</b>	Bacillus Pumilus: No data available
<b>Vapour pressure</b>	No data available
<b>Density</b>	ca. 1.030 g/cm <sup>3</sup> (20 °C)
<b>Relative density</b>	No data available
<b>Relative vapour density</b>	No data available
<b>Assessment nano particles</b>	This substance/ mixture does not contain nanoforms
<b>Particle size</b>	No data available
<b>9.2 Other information</b>	
<b>Explosivity</b>	Not applicable
<b>Oxidizing properties</b>	No data available
<b>Evaporation rate</b>	No data available

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**SECTION 10: STABILITY AND REACTIVITY**

<b>10.1 Reactivity</b>	Stable under normal conditions.
<b>10.2 Chemical stability</b>	Stable under recommended storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	No hazardous reactions when stored and handled according to prescribed instructions.
<b>10.4 Conditions to avoid</b>	Protect from sunlight. Do not expose to temperatures exceeding 40 °C/ 104 °F.
<b>10.5 Incompatible materials</b>	No incompatible materials known.
<b>10.6 Hazardous decomposition products</b>	No decomposition products expected under normal conditions of use.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on hazard classes as defined in regulation (EC) No 1272/2008**

<b>Acute oral toxicity</b>	LD50 (Rat) > 5,000 mg/kg
<b>Acute inhalation toxicity</b>	LC50 (Rat) 2.36 mg/l Determined in the form of liquid aerosol. Highest attainable concentration. No deaths
<b>Acute dermal toxicity</b>	LD50 (Rabbit) > 5,050 mg/kg
<b>Skin corrosion/irritation</b>	No skin irritation (Rabbit)
<b>Serious eye damage/eye irritation</b>	No eye irritation (Rabbit)
<b>Respiratory or skin sensitisation</b>	Skin: Non-sensitizing. (Guinea pig)

**Assessment STOT Specific target organ toxicity – single exposure**

Bacillus Pumilus: This information is not available.

**Assessment STOT Specific target organ toxicity – repeated exposure**

Bacillus Pumilus: This information is not available.

**Assessment mutagenicity**

Bacillus Pumilus: Test not required for microorganisms.

**Assessment carcinogenicity**

Bacillus Pumilus: Test not required for microorganisms.

**Assessment toxicity to reproduction**

Bacillus Pumilus: Test not required for microorganisms.

**Assessment developmental toxicity**

Bacillus Pumilus: Test not required for microorganisms.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Further information**

Acute toxicity studies have been bridged from a similar formulation(s).  
No further toxicological information is available.

**11.2 Information on other hazards**

**Endocrine disrupting properties**

**Assessment**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

**Toxicity to fish** LC50 (Oncorhynchus mykiss (rainbow trout)) 2.430 mg/l  
Exposure time: 30 d  
The ecological data given are those of the active ingredient.

**Toxicity to aquatic invertebrates** EC50 (Daphnia magna (Water flea)) 58 mg/l  
Exposure time: 21 d  
The ecological data given are those of the active ingredient.

**Toxicity to aquatic plants** EC50 (algae) > 100 mg/l  
Exposure time: 72 h  
The ecological data given are those of the active ingredient.

### 12.2 Persistence and degradability

**Biodegradability** Evaluation of biodegradability is not relevant for micro-organisms.

**Koc** Bacillus Pumilus: No data available

### 12.3 Bioaccumulative potential

**Bioaccumulation** Evaluation of bioaccumulation is not relevant for micro-organisms.

### 12.4 Mobility in soil

**Mobility in soil** Evaluation of mobility in soil is not relevant for micro-organisms.

### 12.5 Results of PBT and vPvB assessment

**PBT and vPvB assessment** Evaluation of PBT/vPvB properties is not relevant for micro-organisms.

### 12.6 Endocrine disrupting properties

**Assessment** The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

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## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product** In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

**Contaminated packaging** Not completely emptied packagings should be disposed of as hazardous waste.

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## SECTION 14: TRANSPORT INFORMATION

According to ADN/ADR/UK 'Carriage' Regulations/RID/IMDG/IATA not classified as dangerous



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**goods.**

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

**14.1 – 14.5** Not applicable.

**14.6 Special precautions for user**

See sections 6 to 8 of this Safety Data Sheet.

**14.7 Transport in bulk according to IMO instruments**

No transport in bulk according to the IBC Code.

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**SECTION 15: REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**UK and Northern Ireland Regulatory References**

This material may be subject to some or all of the following regulations (and any subsequent amendments). Users must ensure that any uses and restrictions as indicated on the label and/or leaflet are followed.

**Transport**

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No 1348)

Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 (SI 1997 No 2367)

Air Navigation Dangerous Goods Regulations 2002 (SI 2002 No 2786)

**Supply and Use**

Chemical (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No 716)

Chemical (Hazard Information and Packaging for Supply) (Northern Ireland) Regulations 2009

Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No 2677)

EH40 Occupational Exposure Limits - Table 1 List of approved workplace exposure limits

Control of Pesticide Regulations 1986

Dangerous Substances and Explosive Atmospheres Regulations 2002

**Waste Treatment**

Environmental Protection Act 1990, Part II

Environmental Protection (Duty of Care) Regulations 1991

The Waste Management Licensing Regulations 1994 (as amended)

Hazardous Waste Regulations 2005 (Replacing Special Waste Regulations 1996 as amended)

Landfill Directive

Regulation on Substances That Deplete the Ozone Layer 1994 (EEC/3093/94)

Water Resources Act 1991

Anti-Pollution Works Regulations 1999

**Further information**

WHO-classification: U (Unlikely to present acute hazard in normal use)

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## SECTION 16: OTHER INFORMATION

### Text of the hazard statements mentioned in Section 3

#### Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
Conc.	Concentration
EC-No.	European community number
ECx	Effective concentration to x %
EH40 WEL	Worker Exposure Limit
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
EN	European Standard
EU	European Union
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
ICx	Inhibition concentration to x %
IMDG	International Maritime Dangerous Goods
LCx	Lethal concentration to x %
LDx	Lethal dose to x %
LOEC/LOEL	Lowest observed effect concentration/level
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships
N.O.S.	Not otherwise specified
NOEC/NOEL	No observed effect concentration/level
OECD	Organization for Economic Co-operation and Development
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SI	Statutory Instrument
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

The above information is intended to give general health and safety guidance on the storage and transport of the product.

It is not intended to apply to the use of the product for which purposes the product label and any appropriate technical usage literature available should be consulted and any relevant licenses, consents or approvals complied with.

The requirements or recommendations of any relevant site or working procedure, system or policy in force or arising from any risk assessment involving the substance or product should take precedence over any of the guidance contained in this safety data sheet where there is a difference in the information given.

The information provided in this safety data sheet is accurate at the date of publication and will be updated as and when appropriate.

No liability will be accepted for any injury, loss or damage resulting from any failure to take account of information or advice contained in this safety data sheet.

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Changes since the last version are highlighted in the margin. This version replaces all previous versions.