

Version 5 - This version replaces all previous versions. Revision Date 20.08.2015

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

| <b>1.1 Product identifier</b> | 1.1 | Produ | ct ide | ntifier |
|-------------------------------|-----|-------|--------|---------|
|-------------------------------|-----|-------|--------|---------|

Product name : VELOGY PLUS

Design code : A15457H

#### 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

| Company               | : Syngenta UK Limited<br>CPC4, Capital Park<br>Fulboirn<br>Cambridge CB21 5XE |
|-----------------------|---|
| Telephone             | : (01223) 883400  |
| Telefax               | : (01223) 882195  |
| Website               | : www.syngenta.co.uk  |
| 1.4 Emergency telepho | ne number   |
| Emergency tele-       | : +44 1484 538444   |

# phone number

#### **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

| Classification according to Regulation (EU) 12 | 272/2008           |      |
|--|--------------------|------|
| Acute toxicity (Oral)                          | Category 4         | H302 |
| Acute toxicity (Inhalation)                    | Category 4         | H332 |
| Skin sensitisation                             | Sub-category<br>1B | H317 |
| Serious eye damage                             | Category 1         | H318 |
| Acute aquatic toxicity                         | Category 1         | H400 |
| Chronic aquatic toxicity                       | Category 1         | H410 |

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



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#### 2.2 Label elements

Labelling: Regulation (EC) No. 1272/2008

Hazard pictograms

| Signal word                | Danger                              |  |
|----------------------------|-------------------------------------|--|
| Hazard statements          | H302 + H332<br>H317<br>H318<br>H410 | Harmful if swallowed or if inhaled<br>May cause an allergic skin reaction.<br>Causes serious eye damage.<br>Very toxic to aquatic life with long lasting effects.  |
| Precautionary statements : | P102<br>P261<br>P280                | Keep out of reach of children.<br>Avoid breathing fume/gas/mist/vapours/spray.<br>Wear protective gloves/ protective clothing/ eye pro-<br>tection/ face protection.   |
|                            | P302 + P352                         | IF ON SKIN: Wash with plenty of water.   |
|                            | P305 + P351 + P3                    | 338 IF IN EYES: Rinse cautiously with water for sev-<br>eral minutes. Remove contact lenses, if present and<br>easy to do. Continue rinsing.   |
|                            | P310                                | Immediately call a POISON CENTER/doctor  |
|                            | P391<br>P501                        | Collect spillage.<br>Dispose of contents/container to a licensed<br>hazardous-waste disposal contractor or collection<br>site except for empty clean containers which can be<br>disposed for as non-hazardous waste. |
| Supplemental information   | EUH401                              | To avoid risks to human health and the environment, comply with the instructions for use.  |

Hazardous components which must be listed on the label:

- benzovindiflupyr
- mixture of octanoic acid- decanoic acid- N,N-dimethylamide
- poly(oxy-1,2-ethanediyl), alpha-(9Z)-9-octadecenyl-omega-hydroxy-
- 2.3 Other hazards

None known.



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#### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

#### Hazardous components

| Chemical Name   | CAS-No.<br>EC-No.<br>Registration number                      | Classification<br>(67/548/EEC) | Classification<br>(REGULATION (EC) No<br>1272/2008)                                      | Concentration |
|---|---|--------------------------------|--|---------------|
| mixture of octanoic<br>acid- decanoic<br>acid-<br>N,N-dimethylamide                         | 14433-76-2<br>1118-92-9<br>238-405-1<br>214-272-5             | Xi<br>R38<br>R41               | Skin Irrit.2; H315<br>Eye Irrit.2; H319  | 25 - 35 % W/W |
| solvent naphtha<br>(petroleum), highly<br>arom.   | 64742-94-5<br>265-198-5<br>922-153-0<br>01-2119451097-39-0002 | Xn, N<br>R51/53<br>R65<br>R66  | Asp. Tox.1; H304<br>Aquatic Chronic2; H411   | 15 - 25 % W/W |
| poly(oxy-1,2-ethan<br>ediyl), al-<br>pha-(9Z)-9-octadec<br>enyl-omega-hydrox<br>y-          | 9004-98-2   | Xi<br>R41                      | Eye Dam.1; H318  | 15 - 25 % W/W |
| benzovindiflupyr  | 1072957-71-1<br>1072957-71-1<br>01-2119929229-31-0000         | T, N<br>R23/25<br>R50/53       | Acute Tox.3; H301<br>Acute Tox.3; H331<br>Aquatic Acute1; H400<br>Aquatic Chronic1; H410 | 10.22 % W/W   |
| oleic acid  | 112-80-1<br>67701-06-8<br>204-007-1<br>266-930-6              | Xi<br>R38                      | Skin Irrit.2; H315   | 2 - 10 % W/W  |
| poly(oxy-1,2-ethan<br>ediyl), al-<br>pha-[tris(1-phenylet<br>hyl)phenyl]-omega-<br>hydroxy- | 99734-09-5<br>70559-25-0<br>99734-09-5<br>70559-25-0          | R52/53                         | Aquatic Chronic3; H412   | 1 - 5 % W/W   |

Substances for which there are Community workplace exposure limits.

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

#### **SECTION 4: FIRST AID MEASURES**

#### 4.1 Description of first aid measures

| General advice | : | Have the product container, label or Safety Data Sheet with you when calling the Syngenta emergency number, a poison control center or physician, or going for treatment.                             |
|----------------|---|---|
| Inhalation     | : | Move the victim to fresh air.<br>If breathing is irregular or stopped, administer artificial respiration.<br>Keep patient warm and at rest.<br>Call a physician or poison control centre immediately. |



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| Skin contact             | <ul> <li>Take off all contaminated clothing immediately.</li> <li>Wash off immediately with plenty of water.</li> <li>If skin irritation persists, call a physician.</li> <li>Wash contaminated clothing before re-use.</li> </ul> |
| Eye contact              | <ul> <li>Rinse immediately with plenty of water, also under the eyelids, for at least<br/>15 minutes.</li> <li>Remove contact lenses.</li> <li>Immediate medical attention is required.</li> </ul>                                 |
| Ingestion                | <ul> <li>If swallowed, seek medical advice immediately and show this container or<br/>label.</li> <li>Do not induce vomiting: contains petroleum distillates and/or aromatic<br/>solvents.</li> </ul>                              |
| 4.2 Most important sy    | mptoms and effects, both acute and delayed   |
| Symptoms                 | : Aspiration may cause pulmonary oedema and pneumonitis.   |
| 4.3 Indication of any ir | nmediate medical attention and special treatment needed  |
| Medical advice           | <ul> <li>There is no specific antidote available.</li> <li>Treat symptomatically.</li> <li>Do not induce vomiting: contains petroleum distillates and/or aromatic solvents.</li> </ul>   |

#### **SECTION 5: FIREFIGHTING MEASURES**

#### 5.1 Extinguishing media

Extinguishing media - small fires Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Extinguishing media - large fires Alcohol-resistant foam or Water spray

Do not use a solid water stream as it may scatter and spread fire.

#### 5.2 Special hazards arising from the substance or mixture

As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

#### 5.3 Advice for firefighters

Wear full protective clothing and self-contained breathing apparatus.

Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.



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#### SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Refer to protective measures listed in sections 7 and 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

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

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### 6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8. Refer to disposal considerations listed in section 13.

#### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

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

No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

#### 7.3 Specific end use(s)

Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.



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#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

| Components                                     | Exposure limit(s) | Type of expo-<br>sure limit | Source   |
|--|-------------------|-----------------------------|----------|
| benzovindiflupyr                               | 1 mg/m3           | 8 h TWA                     | SYNGENTA |
| solvent naphtha (pe-<br>troleum), highly arom. | 15 ppm, 100 mg/m3 | 8 h TWA                     | SUPPLIER |

The following recommendations for exposure controls/personal protection are intended for the manufacture, formulation and packaging of the product.

#### 8.2 Exposure controls

| Engineering measures   | : | Containment and/or segregation is the most reliable technical protection<br>measure if exposure cannot be eliminated.<br>The extent of these protection measures depends on the actual risks in<br>use.<br>If airborne mists or vapors are generated, use local exhaust ventilation<br>controls.<br>Assess exposure and use any additional measures to keep airborne<br>levels below any relevant exposure limit.<br>Where necessary, seek additional occupational hygiene advice.  |
|------------------------|---|---|
| Protective measures    | : | The use of technical measures should always have priority over the use of personal protective equipment.<br>When selecting personal protective equipment, seek appropriate professional advice.<br>Personal protective equipment should be certified to appropriate standards.  |
| Respiratory protection | : | A particulate filter respirator may be necessary until effective technical<br>measures are installed.<br>Protection provided by air-purifying respirators is limited.<br>Use a self-contained breathing apparatus in cases of emergency spills,<br>when exposure levels are unknown, or under any circumstances where<br>air-purifying respirators may not provide adequate protection.   |
| Hand protection        | : | Suitable material:Nitrile rubber<br>Break through time: > 480 min<br>Glove thickness: 0.5 mm<br>Chemical resistant gloves should be used.<br>Gloves should be certified to an appropriate standard.<br>Gloves should have a minimum breakthrough time that is appropriate to<br>the duration of exposure.<br>The breakthrough time of gloves varies according to the thickness, mate-<br>rial and manufacturer.<br>Gloves should be discarded and replaced if there is any indication of<br>degradation or chemical breakthrough. |



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| Eye protection           | : | If eye contact is possible, use tight-fitting chemical safety goggles and a face shield.   |
|--------------------------|---|--|
| Skin and body protection | : | Assess the exposure and select chemical resistant clothing based on the<br>potential for contact and the permeation / penetration characteristics of<br>the clothing material.<br>Wash with soap and water after removing protective clothing.<br>Decontaminate clothing before re-use, or use disposable equipment<br>(suits, aprons, sleeves, boots, etc.)<br>Wear as appropriate:<br>impervious protective suit |

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

| Physical state   | : | liquid                                  |
|--|---|---|
| Form<br>Colour   | ÷ | solution clear to slightly turbid       |
|  | ÷ | amber to light brown                    |
| Odour<br>Odour Threadald                               | ÷ | No data available                       |
| Odour Threshold  | ÷ | No data available                       |
| pH<br>Malting point/repair                             |   | 4 - 8 at 1 % w/v                        |
| Melting point/range                                    |   | No data available                       |
| Boiling point/boiling range                            |   | No data available                       |
| Flash point  |   | 101 °C at 101.9 kPa Pensky-Martens c.c. |
| Evaporation rate                                       | · | No data available                       |
| Flammability (solid, gas)                              | ÷ | No data available                       |
| Lower explosion limit                                  | ÷ | No data available                       |
| Upper explosion limit                                  | - | No data available                       |
| Vapour pressure  |   | No data available                       |
| Relative vapour density                                | ÷ | No data available                       |
| Density  |   | 0.978 g/cm3 at 25 °C                    |
| Solubility in other solvents<br>Partition coefficient: |   | No data available                       |
|  | : | No data available                       |
| n-octanol/water  |   |   |
| Auto-ignition temperature                              |   | No data available                       |
| Thermal decomposition                                  |   | No data available                       |
| Viscosity, dynamic                                     |   | 24.6 mPa.s at 40 °C                     |
|  | : | 70.7 mPa.s at 20 °C                     |
| Viscosity, kinematic                                   | : | >= 22.0 mm2/s at 40 °C                  |
| Explosive properties                                   |   | Not explosive                           |
| Oxidizing properties                                   | ÷ | •                                       |
|  | • | het oktaizing                           |
| 9.2 Other information                                  |   |   |
| Surface tension  | : | 31.3 mN/m at 20 °C                      |
|  |   |   |

#### SECTION 10: STABILITY AND REACTIVITY

#### 10.1 Reactivity

See section 10.3 "Possibility of hazardous reactions".



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| 10.2 Chemical stability                                  |                       |
| 10.2 Chemical stability                                  |                       |

| ···- · ·····,                   | The product is stable when used in normal conditions  |
|---------------------------------|---|
| 10.3 Possibility of hazardous r | eactions  |
|                                 | No hazardous reactions by normal handling and storage according to provisions.                    |
| 10.4 Conditions to avoid        | No decomposition if used as directed.   |
| 10.5 Incompatible materials     | No substances are known which lead to the formation of hazardous substances or thermal reactions. |
| 10.6 Hazardous decomposition    | n products  |

Combustion or thermal decomposition will evolve toxic and irritant vapors.

#### SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| Acute oral toxicity                        | : | LD50 female Rat, 1,086 mg/kg  |  |  |
|--|---|---|--|--|
| Acute inhalation toxicity                  | : | LC50 Rabbit, > 2.54 mg/l , 4 h  |  |  |
| Acute dermal toxicity                      | : | LD50 male and female Rat, > 2,000 mg/kg   |  |  |
| Skin corrosion/irritation                  | : | Rabbit: Non-irritating  |  |  |
| Serious eye damage/eye irritation          | : | Rabbit: Severely Irritating   |  |  |
| Respiratory or skin sensi-<br>tisation     | : | Guinea pig: A skin sensitizer in animal tests.  |  |  |
| Germ cell mutagenicity<br>benzovindiflupyr | : | Animal testing did not show any mutagenic effects.  |  |  |
| Carcinogenicity<br>benzovindiflupyr        | : | Studies in rodents have shown no treatment-related tumour find-<br>ings of relevance to human health. |  |  |
| Reproductive toxicity<br>benzovindiflupyr  | : | Did not show reproductive toxicity effects in animal experiments.                                     |  |  |
| STOT - single exposure<br>benzovindiflupyr | : | The substance or mixture is not classified as specific target organ toxicant, single exposure.        |  |  |
| STOT - repeated exposure                   |   |   |  |  |
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| benzovindiflunvr   |     |  |
| benzovinaniapyr  | •   | No adverse effect has been observed in chronic toxicity tests.   |
| Aspiration toxicity<br>solvent naphtha (petrole-<br>um), highly arom.                  | :   | The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxic hazard.                            |
| CTION 12: ECOLOGICAL INFO  | DR  | MATION   |
| 12.1 Toxicity  |     |  |
| Toxicity to fish   | :   | LC50 Oncorhynchus mykiss (rainbow trout), 0.068 mg/l , 96 h  |
| Toxicity to aquatic inver-<br>tebrates   | :   | EC50 Daphnia magna (Water flea), 0.27 mg/l , 48 h  |
| Toxicity to aquatic plants   | :   | ErC50 Pseudokirchneriella subcapitata (green algae), 3.3 mg/l, 926   |
| 12.2 Persistence and degra<br>Biodegradability   |     |  |
| decanoic acid-<br>N,N-dimethylamide  | :   | Readily biodegradable  |
| benzovindiflupyr   | :   | Not readily biodegradable.   |
| Stability in water<br>mixture of octanoic acid-<br>decanoic acid-<br>N,N-dimethylamide | :   | Not persistent in water.   |
| Stability in soil<br>mixture of octanoic acid-<br>decanoic acid-<br>N,N-dimethylamide  | :   | Not persistent in soil.  |
| 12.3 Bioaccumulative poten   | tia | I  |
| benzovindiflupyr   | :   | Does not bioaccumulate.  |
| 12.4 Mobility in soil  |     |  |
| benzovindiflupyr   | :   | Slightly mobile in soils   |
| 12.5 Results of PBT and vPv  | /B  | assessment   |
| benzovindiflupyr   | :   | This substance is not considered to be persistent, bioaccumulating ar toxic (PBT).<br>This substance is not considered to be very persistent and very bioac cumulating (vPvB). |

#### 12.6 Other adverse effects



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None known.

#### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

| Product                | : | Do not contaminate ponds, waterways or ditches with chemical or used<br>container.<br>Do not dispose of waste into sewer.<br>Where possible recycling is preferred to disposal or incineration.<br>If recycling is not practicable, dispose of in compliance with local regula-<br>tions. |
|------------------------|---|---|
| Contaminated packaging | : | Empty remaining contents.<br>Triple rinse containers.<br>Empty containers should be taken to an approved waste handling site for<br>recycling or disposal.<br>Do not re-use empty containers.   |

#### **SECTION 14: TRANSPORT INFORMATION**

#### Land transport (ADR/RID)

| UN 3082<br>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(BENZOVINDIFLUPYR)<br>9<br>III<br>9<br>Environmentally hazardous<br>E |
|---|
|   |
| UN 3082<br>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(BENZOVINDIFLUPYR)<br>9<br>III<br>9<br>Marine pollutant               |
|   |
| UN 3082<br>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.<br>(BENZOVINDIFLUPYR)<br>9<br>III<br>9                                   |
|   |

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#### 14.6 Special precautions for user

none

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

#### SECTION 15: REGULATORY INFORMATION

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

**GHS-Labelling** 

| Hazard pictograms        |   | ¥2                                  |  |
|--------------------------|---|-------------------------------------|--|
| Signal word              | : | Danger                              |  |
| Hazard statements        | : | H302 + H332<br>H317<br>H318<br>H410 | Harmful if swallowed or if inhaled<br>May cause an allergic skin reaction.<br>Causes serious eye damage.<br>Very toxic to aquatic life with long lasting effects.  |
| Precautionary statements | : | P102<br>P261<br>P280                | Keep out of reach of children.<br>Avoid breathing fume/gas/mist/vapours/spray.<br>Wear protective gloves/ protective clothing/<br>eye protection/ face protection.   |
|                          |   | P302 + P352<br>P305 + P351 + P3     | IF ON SKIN: Wash with plenty of water.<br>IF IN EYES: Rinse cautiously with water for<br>several minutes. Remove contact lenses, if present<br>and easy to do. Continue rinsing.                                     |
|                          |   | P310                                | Immediately call a POISON CENTER/doctor  |
|                          |   | P391<br>P501                        | Collect spillage.<br>Dispose of contents/container to a licensed<br>hazardous-waste disposal contractor or collection<br>site except for empty clean containers which can<br>be disposed for as non-hazardous waste. |
| Remarks                  | : | Where the GHS co<br>been chosen.    | II GHS hazard classes and categories.<br>ontains options, the most conservative option has<br>al implementations of GHS may not implement all<br>d categories.   |

Hazardous components which must be listed on the label:

- benzovindiflupyr
- mixture of octanoic acid- decanoic acid- N,N-dimethylamide
- poly(oxy-1,2-ethanediyl), alpha-(9Z)-9-octadecenyl-omega-hydroxy-



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#### **15.2 Chemical Safety Assessment**

A Chemical Safety Assessment is not required for this substance.

#### **SECTION 16: OTHER INFORMATION**

#### Further information

#### Approval number, MAPP 17866

Use plant protection products safely. Always read the label and product information before use.

Based upon SDS release dated 20/08/2015, version 5 with local amendment.

Full text of H-Statements referred to under sections 2 and 3.

| H301 | Toxic if swallowed.                                   |
|------|---|
| H302 | Harmful if swallowed.                                 |
| H304 | May be fatal if swallowed and enters airways.         |
| H315 | Causes skin irritation.                               |
| H317 | May cause an allergic skin reaction.                  |
| H318 | Causes serious eye damage.                            |
| H319 | Causes serious eye irritation.                        |
| H331 | Toxic if inhaled.                                     |
| H332 | Harmful if inhaled.                                   |
| H400 | Very toxic to aquatic life.                           |
| H410 | Very toxic to aquatic life with long lasting effects. |
| T410 |   |

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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