1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

PRODUCT INFORMATION
Product name : BANVEL 4 S 480 SL
Design code : A7254B
Use : Herbicide
Company : Syngenta Crop Protection AG
Postfach
CH-4002 Basel
Switzerland
Telephone : +41 61 323 11 11
Telefax : +41 61 323 12 12
Emergency telephone number : +44 1484 538444
E-mail address : safetydatasheetcoordination@syngenta.com

2. HAZARDS IDENTIFICATION

Unlikely to be hazardous.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Symbol(s)</th>
<th>R-phrase(s)</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicamba-dimethylammonium</td>
<td>2300-66-5</td>
<td>218-951-7</td>
<td>Xi</td>
<td>R36 R52/53</td>
<td>40 % W/W</td>
</tr>
</tbody>
</table>

Substances for which there are Community workplace exposure limits.
For the full text of the R-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

General advice : Have the product container, label or Material 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.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control centre immediately.
Skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Ingestion: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

Medical advice: There is no specific antidote available. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable 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

Extinguishing media which shall not be used for safety reasons: Do not use a solid water stream as it may scatter and spread fire.

Specific hazards during fire fighting: 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.

Special protective equipment for fire-fighters: Wear full protective clothing and self-contained breathing apparatus.

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Refer to protective measures listed in sections 7 and 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods for 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).

Additional advice: If the product contaminates rivers and lakes or drains inform re-
7. HANDLING AND STORAGE

HANDLING
Advice on 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.

STORAGE
Requirements for storage areas and containers: 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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>Exposure limit(s)</th>
<th>Type of exposure limit</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>dicamba</td>
<td>10 mg/m3</td>
<td>8 h TWA</td>
<td>SYNGENTA</td>
</tr>
</tbody>
</table>

ENGINEERING MEASURES
Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne dust is generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Where necessary, seek additional occupational hygiene advice.

PERSONAL PROTECTIVE EQUIPMENT

Protective measures: The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.

Respiratory protection: No personal respiratory protective equipment normally required. A particulate filter respirator may be necessary until effective technical measures are installed.

Hand protection: Chemical resistant gloves are not usually required. Select gloves based on the physical job requirements.
**Eye protection**

Eye protection is not usually required. Follow any site-specific eye protection policies.

**Skin and body protection**

No special protective equipment required. Select skin and body protection based on the physical job requirements.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Physical state**: liquid
- **Form**: liquid
- **Colour**: yellow to brownish
- **Odour**: like amine, weak
- **pH**: 5 - 9 at 1% w/v
- **Boiling point/boiling range**: 100 °C at 1,013.25 hPa
- **Oxidizing properties**: not oxidizing
- **Explosive properties**: Not explosive
- **Density**: 1.178 g/cm³ at 20 °C
- **Miscibility**: Miscible
- **Solubility in other solvents**: soluble
  - at 25 °C
- **Viscosity, dynamic**: 4.64 mPa.s at 40 °C
  - 9.21 mPa.s at 20 °C
- **Surface tension**: 65.6 mN/m at 20 °C

### 10. STABILITY AND REACTIVITY

**Hazardous decomposition products**: Combustion or thermal decomposition will evolve toxic and irritant vapors.

**Hazardous reactions**: None known.

- Hazardous polymerisation does not occur.
- Stable under normal conditions.

### 11. TOXICOLOGICAL INFORMATION

**Acute oral toxicity**

- LD50 female rat, 2,558 mg/kg
- LD50 male rat, 2,375 mg/kg

**Acute inhalation toxicity**

- LC50 rat, > 5.4 mg/l, 4 h

**Acute dermal toxicity**

- LD50 rat, > 4,000 mg/kg

**Skin irritation**

- rabbit: Non-irritating

**Eye irritation**

- rabbit: Non-irritating

**Sensitisation**

- guinea pig: not sensitizing

**Long term toxicity**

- dicamba-: Did not show carcinogenic, teratogenic or mutagenic effects in
dimethylammonium animal experiments.

12. ECOLOGICAL INFORMATION

ELIMINATION INFORMATION (PERSISTENCE AND DEGRADABILITY)

ECOTOXICITY EFFECTS

**Toxicity to fish**: LC50 Oncorhynchus mykiss (rainbow trout), > 1,000 mg/l, 96 h

**Toxicity to aquatic invertebrates**: EC50 Daphnia magna (Water flea), > 1,600 mg/l, 48 h

**Toxicity to aquatic plants**: EbC50 Pseudokirchneriella subcapitata (green algae), > 100 mg/l, 72 h

**Toxicity to bacteria**: IC50 activated sewage sludge, > 500 mg/l, 3 h

13. DISPOSAL CONSIDERATIONS

**Product**: Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated packaging**: Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

14. TRANSPORT INFORMATION

**Land transport**

*ADR/RID*: Not dangerous goods

**Sea transport**

*IMDG*: Not dangerous goods
Air transport

_IATA-DGR:_ Not dangerous goods

15. REGULATORY INFORMATION

Labelling according to EC Directives

**Note**: Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

**Special labelling of certain mixtures**: To avoid risks to man and the environment, comply with the instructions for use. Safety data sheet available on request for professional users.

16. OTHER INFORMATION

Further information

Text of R-phrases mentioned in Section 3:

- **R36**: Irritating to eyes.
- **R52/53**: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.

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

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