1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

Substance number: 000000057523
Molecular formula: $C_8H_5Cl_2O_3Na + C_{15}H_{11}F_2N_4O_3Na + C_{15}H_{18}N_6O_6S$
Chemical family: herbicide, mixture
Synonyms: sodium dicamba + sodium diflufenzopyr + nicosulfuron

2. Composition/information on ingredients

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content (W/W)</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982-69-0</td>
<td>46.6 %</td>
<td>sodium 3,6-dichloro-o-anisate</td>
</tr>
<tr>
<td>109293-98-3</td>
<td>18.1 %</td>
<td>Sodium Diflufenzopyr</td>
</tr>
<tr>
<td>111991-09-4</td>
<td>10.6 %</td>
<td>nicosulfuron</td>
</tr>
<tr>
<td></td>
<td>24.7 %</td>
<td>Proprietary ingredients</td>
</tr>
</tbody>
</table>

3. Hazard identification

Emergency overview
CAUTION: KEEP OUT OF REACH OF CHILDREN.
HARMFUL IF ABSORBED THROUGH SKIN.
HARMFUL IF SWALLOWED.
Moderately irritating to the eyes.
Avoid contact with the skin, eyes and clothing.
May produce an allergic reaction.

Potential health effects
See Product Label for additional precautionary statements.

Primary routes of exposure
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute toxicity:
Slightly toxic after single ingestion. Slightly toxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

Irritation:
May cause slight but temporary irritation to the eyes. May cause slight irritation to the skin.
Sensitization:
Caused skin sensitization in animal studies.

Repeated dose toxicity:
No known chronic effects.

Information on: crystalline silica
This product may contain greater than 0.1% crystalline silica.
Repeated exposure to high concentrations results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses.

Potential environmental effects

Aquatic toxicity:
There is a high probability that the product is not acutely harmful to fish.
Acutely harmful for aquatic invertebrates.
Very toxic (acute effect) to aquatic plants.

Terrestrial toxicity:
Acutely harmful to terrestrial organisms.
Acutely toxic to honeybees.

4. First-aid measures

General advice:
First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or physician for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary.

If on skin:
Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:
Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:
Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Note to physician
Antidote: No known specific antidote.
Treatment: Treat symptomatically.

5. Fire-fighting measures

Flash point: Not applicable

Suitable extinguishing media:
foam, dry extinguishing media, carbon dioxide, water spray

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Sulphur dioxide, Hydrocarbons, halogenated hydrocarbons, hydrogen fluoride, Hydrogen chloride,
If product is heated above decomposition temperature, toxic vapours will be released. The substances/groups of substances mentioned can be released if the product is involved in a fire.

**Protective equipment for fire-fighting:**
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**Further information:**
Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

---

### 6. Accidental release measures

#### Personal precautions:
Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

#### Environmental precautions:
Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

#### Cleanup:
Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

---

### 7. Handling and storage

#### Handling

**General advice:**
RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS & WORKERS must refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition - No smoking. Keep container tightly sealed. Protect contents from the effects of light. Protect against heat. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Avoid aerosol formation. Avoid dust formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel. Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Wear suitable personal protective clothing and equipment.

**Protection against fire and explosion:**
The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

#### Storage

**General advice:**
Keep only in the original container in a cool, dry, well-ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. The authority permits and storage regulations must be observed.
Storage incompatibility:
General: Segregate from incompatible substances. Segregate from foods and animal feeds. Segregate from textiles and similar materials.

8. Exposure controls and personal protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

Advice on system design:
Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

RECOMMENDATIONS FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS:

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:
Chemical resistant protective gloves. Protective glove selection must be based on the user’s assessment of the workplace hazards.

Eye protection:
Safety glasses with side-shields. Tightly fitting safety goggles (chemical goggles). Wear face shield if splashing hazard exists.

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:
Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Take off immediately all contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>granules</td>
</tr>
<tr>
<td>Odour</td>
<td>almost odourless</td>
</tr>
<tr>
<td>Colour</td>
<td>tan</td>
</tr>
<tr>
<td>pH value</td>
<td>5.5</td>
</tr>
<tr>
<td>Boiling point</td>
<td>approx. 155 °C (760 mmHg)</td>
</tr>
<tr>
<td>Density</td>
<td>0.53 g/cm³ (20 °C)</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.53</td>
</tr>
<tr>
<td>Partitioning coefficient n-octanol/water (log Pow)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
10. Stability and reactivity

**Conditions to avoid:**

**Substances to avoid:**
No substances known that should be avoided.

**Hazardous reactions:**
The product is chemically stable. Hazardous polymerization will not occur. No hazardous reactions if stored and handled as prescribed/indicated.

**Decomposition products:**
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated., Prolonged thermal loading can result in products of degradation being given off.

**Thermal decomposition:**
Possible thermal decomposition products: carbon monoxide, carbon dioxide, nitrogen oxide, nitrogen dioxide, Hydrogen chloride, hydrogen fluoride, Sulphur dioxide, halogenated hydrocarbons, Hydrocarbons
Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released.

**Corrosion to metals:**
Corrosive effects to metal are not anticipated. Not corrosive to: mild steel

11. Toxicological information

**Acute toxicity**

**Oral:**
LD50/rat: > 2,000 mg/kg

**Inhalation:**
LC50/rat: > 5 mg/l / 4 h

**Dermal:**
LD50/rat: > 2,000 mg/kg

**Skin irritation:**
rabbit: non-irritant (FHSA Guideline)

**Eye irritation:**
rabbit: Slightly irritating.

**Sensitization:**
Skin sensitization test/guinea pig: Caused skin sensitization in animal studies.

**Genetic toxicity:**
Information on: dicamba
Results from a number of mutagenicity studies with microorganisms, mammalian cell culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic.
Safety data sheet
CELEBRITY PLUS HERBICIDE

Information on: Diflufenzopyr
No mutagenic effect was found in various tests with microorganisms and mammals.
Information on: Nicosulfuron
No data available.

Carcinogenicity:
Information on: dicamba
In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.
Information on: Diflufenzopyr
In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.
Information on: Nicosulfuron
No data available.

Reproductive toxicity:
Information on: dicamba
The results of animal studies gave no indication of a fertility impairing effect.
Information on: Diflufenzopyr
The results of animal studies gave no indication of a fertility impairing effect.
Information on: Nicosulfuron
No data available.

Developmental toxicity/teratogenicity:
Information on: dicamba
In animal studies the substance showed a developmental toxic effect in high doses which were maternally toxic.
Information on: Diflufenzopyr
No indications of a developmental toxic / teratogenic effect were seen in animal studies.
Information on: Nicosulfuron
No data available concerning teratogenic effects.

12. Ecological information

Information on: dicamba
Information on: Diflufenzopyr
Information on: Nicosulfuron
Evaluation: Not readily biodegradable (by OECD criteria).

Environmental toxicity

Information on: dicamba
Acute and prolonged toxicity to fish:
Rainbow trout/LC50: 177 mg/l

Information on: Diflufenzopyr
Acute and prolonged toxicity to fish:
Rainbow trout/LC50 (96 h): 106 mg/l
sunfish, bluegill/LC50: > 135 mg/l

Information on: Nicosulfuron
Acute and prolonged toxicity to fish:
static
sunfish, bluegill/LC50 (96 h): > 1,000 mg/l
static
Rainbow trout/LC50 (96 h): > 1,000 mg/l
Information on: dicamba

Information on: Diflufenpyr
Acute toxicity to aquatic invertebrates:
Daphnia magna/EC50 (48 h): 15 mg/l

Information on: Nicosulfuron
Acute toxicity to aquatic invertebrates:
static
Daphnia magna/EC50 (48 h): > 1,000 mg/l

Information on: dicamba
Toxicity to aquatic plants:
green algae/EC50: > 3.7 mg/l

Information on: Diflufenpyr
Toxicity to aquatic plants:
green algae/EC50 (48 h): 0.11 mg/l

Information on: Nicosulfuron
Toxicity to aquatic plants:
static
swollen duckweed/EC50: 0.009 mg/l

Information on: dicamba
Other terrestrial non-mammals:
bobwhite quail/LD50: 216 mg/kg
mallard duck/LD50: 1,373 mg/kg
bobwhite quail/LC50: > 10,000 ppm
mallard duck/LC50: > 10,000 ppm
Honey bee/LD50: 100 ug/bee

Information on: Diflufenpyr
Other terrestrial non-mammals:
bobwhite quail/LD50: > 2,250 mg/kg
With high probability not acutely harmful to terrestrial organisms.
bobwhite quail/LC50: > 5,620 ppm
With high probability not acutely harmful to terrestrial organisms.
mallard duck/LC50: > 5,620 ppm
With high probability not acutely harmful to terrestrial organisms.
Honey bee/LD50: > 25 ug/bee
Acutely harmful to honeybees.

Information on: Nicosulfuron
Other terrestrial non-mammals:
mallard duck/LC50: > 5,620 ppm
bobwhite quail/LD50: > 2,250 mg/kg
Honey bee/LC50: > 1,000 ppm
Honey bee/LC50: > 20 ug/bee

Other ecotoxicological advice:
The ecological data given are those of the active ingredient. Do not release untreated into natural waters.

13. Disposal considerations

Waste disposal of substance:
Pesticide wastes are regulated.
Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law.
If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container disposal:**
Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

**RCRA:**
This product is not regulated by RCRA.

### 14. Transport information

Reference Bill of Lading

### 15. Regulatory information

**Federal Regulations**

**Registration status:**
TSCA, US released / exempt

**OSHA hazard category:**
IARC 1, 2A or 2B carcinogen, NTP listed carcinogen, Chronic target organ effects reported, OSHA PEL established, ACGIH TLV established

<table>
<thead>
<tr>
<th>CERCLA RQ</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000 LBS</td>
<td>1310-73-2; 1918-00-9; 25155-30-0</td>
<td>Sodium Hydroxide; dicamba; sodium dodecylbenzenesulphonate, pure</td>
</tr>
</tbody>
</table>

**SARA hazard categories (EPCRA 311/312):** Reactivity, Acute, Fire

**SARA 313:**

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-56-1</td>
<td>Methanol</td>
</tr>
<tr>
<td>1918-00-9</td>
<td>dicamba</td>
</tr>
</tbody>
</table>

**State regulations**

**CA Prop. 65:**
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

### 16. Other information

Refer to product label for EPA registration number.

Recommended use: herbicide

**Local contact information**
Product Stewardship
919 547-2000
IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN
ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR
GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE,
WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR
YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER
EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A
PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR
INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE
USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE
SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A
PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND
AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY BASF
HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE
DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH
BEING GIVEN AND ACCEPTED AT YOUR RISK.
END OF DATA SHEET