 SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product Name: CRUSADE DF
EPA Reg. No. 62562-8-71058

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: Integrated Agribusiness Professionals
Address: 7108 N Fresno St., Ste 150, Fresno, CA 93720
Telephone: (559) 440-1980
Fax: (559) 440-1984
Website: www.iapros.com

1.4. Emergency telephone number
24 Hour Emergency Phone Number
CHEMTREC: (800) 424-9300

 SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EU) 1272/2008
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Classification according to EU Directives 67/548/EEC or 1999/45/EC
Not classified according to EU legislation

2.2. Label elements
Labelling: Regulation (EC) No. 1272/2008
Precautionary statements: P270 Do not eat, drink or smoke when using this product.
P102 Keep out of reach of children.
Supplemental information: EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
Additional Labelling: To avoid risks to man and the environment, comply with the instructions for use.
Safety data sheet available on request for professional users.

2.3. Other hazards
May form flammable dust-air mixture.

 SECTION 3: Composition/information on ingredients

3.2. Mixtures
Chemical Name (IUPAC): Sulphur
CAS Nº: 7704-34-9
Classification (67/548/EEC): R38
Classification (REGULATION (EC) No 1272/2008): Skin Irrit.2, H315
Concentration: 80 % w/w

 SECTION 4: First aid measures

4.1 Description of first aid measures
General advice: Have the product container, label or Material Safety Data Sheet with you when calling the Quimetal emergency number, a poison control center or physician, or going for treatment.

Inhalation: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician or poison control centre immediately.
Skin contact: Take off all contaminated clothing immediately. Wash the affected area with soap and water. If skin irritation persists, call a physician.
Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Ingestion: Clean mouth with water and if you are fully conscious give plenty of water. Seek medical attention immediately. Do NOT induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed
Symptoms: No information available.

4.3. Indication of any immediate medical attention and special treatment needed
Medical advice: There is no specific antidote available. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Use water fog, foam, dry chemical, for localized foci of fire use carbon dioxide or sand. Do not use water jet.

5.2. Special hazards arising from the substance or mixture
Take precautions by the emission of toxic gases (sulfur dioxide). Exposure to decomposition products may be a hazard to health.

5.3. Advice for firefighters
Wear suitable protective clothing and breathing apparatus in positive pressure. Do not allow run-off from fire fighting to enter drains or watercourses. Cool closed containers exposed to fire with water spray.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Isolate and ventilate the area. Turn off all sources of ignition. Prevent the spill from spreading. Do not generate dust

6.2. Environmental precautions
Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up
This operation must be performed only by trained personnel. Pick up with suitable tools without raising dust; place in appropriate containers, labelled and close to final destination.

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
Avoid contact with eyes and skin. Handle only in well ventilated. For personal protection see section 8. This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Do not eat or drink while handling the product, change clothes once the working day.

7.2. Conditions for safe storage, including any incompatibilities
Store in a safe, cool and dry, having good ventilation at all times. Use original containers that will maintain the product isolated from the environment and humidity.

7.3. Specific end use(s)
For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters
The following recommendations for exposure controls/personal protection are intended for the manufacture and packaging of the product.

8.2. Exposure controls
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.
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: If there are problems with dust, use approved filter mask.

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

Eye protection: Wear eye protection to guard against dust, or as the case full-face mask.

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

Ventilation: There should be a place where it is vented at all times, whether natural or forced.

Hygiene measures: Keep away from food, wash hands before breaks and at end of work. No smoking, eating, drinking in the areas of work. Save your work clothes separately.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>solid</td>
</tr>
<tr>
<td>Form</td>
<td>granules</td>
</tr>
<tr>
<td>Colour</td>
<td>light brown to dark brown</td>
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<tr>
<td>Odour</td>
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</tr>
<tr>
<td>Odour Threshold</td>
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<tr>
<td>pH</td>
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</tr>
<tr>
<td>Melting point/range</td>
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</tr>
<tr>
<td>Boiling point/boiling range</td>
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</tr>
<tr>
<td>Flash point</td>
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</tr>
<tr>
<td>Evaporation rate</td>
<td>no data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
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</tr>
<tr>
<td>Lower explosion limit</td>
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</tr>
<tr>
<td>Upper explosion limit</td>
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</tr>
<tr>
<td>Vapour pressure</td>
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<tr>
<td>Relative vapour density</td>
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<tr>
<td>Density</td>
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<tr>
<td>Solubility in other solvents</td>
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</tr>
<tr>
<td>Partition coefficient n-octanol/water</td>
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</tr>
<tr>
<td>Autoignition temperature</td>
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<td>Thermal decomposition</td>
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<tr>
<td>Viscosity, kinematic</td>
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</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>not oxidizing</td>
</tr>
</tbody>
</table>

9.2. Other information

Miscibility: disperseable in water
SECTION 10: Stability and reactivity

10.1. Reactivity: No information available.
10.2. Chemical stability: The product is stable when stored and handled according to the recommendations given.
10.3. Possibility of hazardous reactions: Not known. Hazardous polymerisation does not occur.
10.4. Conditions to avoid: Excessive heat, ignition sources, moisture.
10.5. Incompatible materials: No information available.
10.6. Hazardous decomposition products: No information available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Short-term toxicity: Irritating to eyes, skin and respiratory, oral rat LD50 => 5,000 mg / kg, rat dermal LD50 => 2,000 mg / kg
Long term toxicity: Not reported to cause cancer risk, are not teratogenic, no reproductive effects and is not mutagenic.
Local or systemic effects: No adverse effect has been observed in chronic toxicity tests.
Allergic sensitization: No information available.

SECTION 12: Ecological information

12.1. Toxicity
Toxicity to fish: LC50 Cyprinus carpio (Carp), > 5,000 mg/l , 96 h
Toxicity to aquatic invertebrates: EC50 Daphnia magna Straus, > 1,000 mg/l , 48 h
Toxicity to aquatic plants: EbC50 Pseudokirchneriella subcapitata (green algae), 290 mg/l , 72 h
12.3. Bioaccumulative potential: Does not bioaccumulate.
12.4. Mobility in soil: Moderately mobile in soils.
12.5. Results of PBT and vPvB assessment: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT). This substance is not considered to be very persistent nor very bioaccumulating (vPvB).
12.6. Other adverse effects: Not known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Product: Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. If recycling is not practicable, dispose of in compliance with local regulations.
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse empty containers.

SECTION 14: Transport information

Land transport (ADR/RID), Sea transport (IMDG), Air transport (IATA-DGR): Not dangerous goods

14.1. UN number: Not applicable.
14.2. UN proper shipping name: Not applicable.
14.3. Transport hazard class (es) : Not applicable.
14.4. Packing group: Not applicable.
14.5. Environmental hazards: Not applicable.
14.6. Special precautions for user: none
14.7. Transport in bulk according to Annex II of MARPOL73/78 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
Precautionary statements: P102 Keep out of reach of children.
P270 Do not eat, drink or smoke when using this product.
Supplemental information: EUH401 To avoid risks to human health and the environment, comply with the instructions for use.
Remarks: Classified using all GHS hazard classes and categories. Where the GHS contains options, the most conservative option has been chosen. Regional or national implementations of GHS may not implement all hazard classes and categories.

15.2. Chemical safety assessment
A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Further information

Full text of R-phrases referred to under sections 2 and 3: R38 Irritating to skin.
Full text of H-Statements referred to under sections 2 and 3: H315 Causes skin irritation.

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