

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : QUINSTAR
Product code : 1001088

1.2. Other means of identification

Synonyms : Quinclorac 75 DF, Quinstar 75 WP
Registration Number : EPA Reg. No. 42750-88 /

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Herbicide
Restrictions on use : Use in accordance with label directions for use. ,It is a violation of Federal law to use this product in a manner inconsistent with its label.

1.4. Supplier's details

Albaugh, LLC
1525 NE 36th Street
Ankeny, Iowa 50021
United States
T 800-247-8013
ContactUS@albaughllc.com - albaughllc.com

1.5. Emergency phone number

Emergency number : For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident:
• Call CHEMTREC Day or Night within USA and Canada: 1-800-424-9300, Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

For Medical Emergencies Only:
• Call Albaugh LLC Day or Night within USA and Canada: 1-888-347-6732
24 hours a day, 7 days a week

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Skin sensitization, Category 1 H317 May cause an allergic skin reaction.
Full text of H statements : see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : H317 - May cause an allergic skin reaction

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Precautionary statements (GHS US) : P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
P302+P352 - If on skin: Wash with plenty of water.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS US classification |
|---|---------------------|---------------|--|
| quinclorac (ISO), 3,7-dichloroquinoline-8-carboxylic acid (Active substance (Biocide), Main constituent) | CAS-No.: 84087-01-4 | 72.75 - 77.25 | Skin Sens. 1, H317 |
| kaolin (Constituent) | CAS-No.: 1332-58-7 | 11.75 – 13 | Not classified |
| Sodium dodecyl sulphate (Constituent) | CAS-No.: 151-21-3 | 5.7 – 6.3 | Aquatic Acute 3, H402 Aquatic Chronic 3, H412 |

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse eyes with water as a precaution.
First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders. : First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure.
Symptoms/effects after skin contact : May cause an allergic skin reaction.

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Symptoms/effects after eye contact : None under normal conditions. Dust from this product may cause eye irritation.
Symptoms/effects after ingestion : None under normal conditions.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel.
Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.
Methods for cleaning up : Mechanically recover the product.
Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13.

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7 Handling and storage

7.1. Precautions for safe handling

| | |
|-----------------------------------|---|
| Precautions for safe handling | : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment. |
| Hygiene measures | : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use. |

7.2. Conditions for safe storage, including incompatibilities

| | |
|---------------------|---|
| Technical measures | : Keep in a cool, well-ventilated place away from heat. |
| Storage conditions | : Keep cool. Protect from sunlight. |
| Packaging materials | : Always store product in container of same material as original container. |

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

| QUINSTAR | |
|---|--|
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Kaolin |
| ACGIH® TLV® TWA | 2 mg/m ³ (E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica, R - Respirable particulate matter) |
| Remark (ACGIH®) | TLV® Basis: Pneumoconiosis. Notations: A4 (Not classifiable as a Human Carcinogen) |
| Regulatory reference | ACGIH 2025 |
| USA - OSHA - Occupational Exposure Limits | |
| Local name | Kaolin |
| OSHA PEL TWA | 15 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction) |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 |
| USA - Cal/OSHA - Occupational Exposure Limits | |
| Local name | Kaolin; (containing no asbestos and <1% crystalline silica) |
| Cal/OSHA PEL (OEL TWA) | 2 mg/m ³ (Respirable dust) |
| Regulatory reference | California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1) |
| USA - NIOSH - Occupational Exposure Limits | |
| Local name | Kaolin |
| NIOSH REL 10h TWA | 10 mg/m ³ (Total dust) 5 mg/m ³ (Respirable fraction) |
| Regulatory reference (US-NIOSH) | OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG)) |
| kaolin (1332-58-7) | |
| USA - ACGIH - Occupational Exposure Limits | |
| ACGIH® TLV® TWA | 2 mg/m ³ (Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica) |

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

| |
|--|
| Hand protection: |
| Protective gloves |
| Eye protection: |
| Safety glasses |
| Skin and body protection: |
| Wear suitable protective clothing |
| Respiratory protection: |
| In case of insufficient ventilation, wear suitable respiratory equipment |

Personal protective equipment symbol(s):



SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state : Solid
Appearance : Light Tan. Granular.
Color : Mixture contains one or more component(s) which have the following color(s):
White to yellow-grey
Odor : Faint
Odor threshold : No data available
pH : 4.19
Melting point : No data available
Freezing point : Not applicable
Boiling point : No data available
Flash point : Not applicable
Flammability (solid, gas) : Non flammable.
Vapor pressure : No data available
Relative vapor density at 20°C : No data available
Relative density : No data available
Density : 0.635 g/ml
Solubility : No data available
Partition coefficient n-octanol/water (Log Pow) : No data available
Auto-ignition temperature : Not applicable
Decomposition temperature : No data available
Viscosity, kinematic : Not applicable
Explosion limits : Not applicable
Explosive properties : Not Explosive.
Oxidizing properties : Not oxidising.
Particle characteristics : No data available

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

9.2. Data relevant with regard to physical hazard classes (supplemental)

VOC content : 0 %

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Sodium dodecyl sulphate (151-21-3)

| | |
|-----------------|---|
| LD50 dermal rat | > 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |
|-----------------|---|

Skin corrosion/irritation : Not classified
pH: 4.19

Sodium dodecyl sulphate (151-21-3)

| | |
|----|-----------------------------|
| pH | 9.1 Concentration: 1 other: |
|----|-----------------------------|

Serious eye damage/irritation : Not classified
pH: 4.19

Sodium dodecyl sulphate (151-21-3)

| | |
|----|-----------------------------|
| pH | 9.1 Concentration: 1 other: |
|----|-----------------------------|

Respiratory or skin sensitization : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| QUINSTAR | |
|-------------------------------------|---|
| Viscosity, kinematic | Not applicable |
| Symptoms/effects after inhalation | : None under normal conditions. Dust of the product, if present, may cause respiratory irritation after an excessive inhalation exposure. |
| Symptoms/effects after skin contact | : May cause an allergic skin reaction. |
| Symptoms/effects after eye contact | : None under normal conditions. Dust from this product may cause eye irritation. |
| Symptoms/effects after ingestion | : None under normal conditions. |

SECTION 12 Ecological information

12.1. Ecotoxicity

| | |
|---|--|
| Ecology - general | : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. |
| Hazardous to the aquatic environment, short-term (acute) | : Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified |

| Sodium dodecyl sulphate (151-21-3) | |
|------------------------------------|---|
| LC50 - Fish [1] | 29 mg/l Test organisms (species): Pimephales promelas |
| EC50 - Other aquatic organisms [1] | 11.1 mg/l Test organisms (species): other aquatic crustacea: |
| EC50 72h - Algae [1] | > 120 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| EC50 72h - Algae [2] | 53 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus) |
| NOEC chronic fish | ≥ 1.357 mg/l Test organisms (species): Pimephales promelas Duration: '42 d' |

12.2. Persistence and degradability

| QUINSTAR | |
|-------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |

| quinclorac (ISO), 3,7-dichloroquinoline-8-carboxylic acid (84087-01-4) | |
|--|------------------------|
| Persistence and degradability | Not rapidly degradable |

| Sodium dodecyl sulphate (151-21-3) | |
|------------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |

| kaolin (1332-58-7) | |
|-------------------------------|-----------------------------------|
| Persistence and degradability | Biodegradability: not applicable. |
| Chemical oxygen demand (COD) | Not applicable (inorganic) |
| ThOD | Not applicable (inorganic) |

12.3. Bioaccumulative potential

| kaolin (1332-58-7) | |
|---------------------------|------------------------------------|
| Bioaccumulative potential | No bioaccumulation data available. |

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

12.4. Mobility in soil

kaolin (1332-58-7)

| | |
|----------------|---|
| Ecology - soil | No (test)data on mobility of the substance available. |
|----------------|---|

12.5. Other adverse effects

Ozone : Not classified
Fluorinated greenhouse gases : No

SECTION 13 Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Comply with applicable regulations for solid waste disposal. Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

SECTION 14 Transport information

| DOT | IMDG | IATA |
|---|---------------|---------------|
| No supplementary information available | | |
| 14.1. UN number | | |
| Not regulated | Not regulated | Not regulated |
| 14.2. Proper Shipping Name | | |
| Not regulated | Not regulated | Not regulated |
| 14.3. Transport hazard class(es) | | |
| Not regulated | Not regulated | Not regulated |
| 14.4. Packing group | | |
| Not regulated | Not regulated | Not regulated |
| 14.5. Environmental hazards | | |
| Not regulated | Not regulated | Not regulated |

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

IMDG
Not regulated

IATA
Not regulated

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 15 Regulatory information

15.1. Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

| Name | CAS-No. | Listing | Commercial status | Flags |
|---|------------|-------------|-------------------|-------|
| quinclorac (ISO), 3,7-dichloroquinoline-8-carboxylic acid | 84087-01-4 | Not present | - | |
| Sodium dodecyl sulphate | 151-21-3 | Not present | - | |
| kaolin | 1332-58-7 | Not present | - | |

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

FIFRA Labelling

| | |
|---|---|
| EPA Registration Number | 42750-88 |
| This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label. | |
| FIFRA Signal Word | Caution |
| FIFRA Precautionary Statement | KEEP OUT OF REACH OF CHILDREN. Hazards To Humans and Domestic Animals. |
| FIFRA Human Health Hazards | Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with skin, clothing, or eyes. Avoid breathing dust or spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. |
| FIFRA First Aid | <p>IF SWALLOWED:</p> <ul style="list-style-type: none">•Call a poison control center or doctor immediately for treatment advice.•Have person sip a glass of water if able to swallow.•Do not induce vomiting unless told to do so by a poison control center or doctor.•Do not give anything by mouth to an unconscious person. <p>IF ON SKIN OR CLOTHING:</p> <ul style="list-style-type: none">•Take off contaminated clothing.•Rinse skin immediately with plenty of water for 15-20 minutes.•Call a poison control center or doctor for treatment advice. <p>IF IN EYES:</p> <ul style="list-style-type: none">•Hold eye open and rinse slowly and gently with water for 15-20 minutes.•Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye.•Call a poison control center or doctor for treatment advice. <p>IF INHALED:</p> <ul style="list-style-type: none">•Move person to fresh air.•If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.•Call a poison control center or doctor for further treatment advice. <p>Have the product container or label with you when calling a poison control center or doctor or going for treatment.</p> |

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

| FIFRA Labelling | |
|-----------------------------|--|
| FIFRA Environmental Hazards | This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Keep out of lakes, ponds and streams. Do not apply directly to water, areas where surface water is present, or to intertidal areas below the mean high water mark, except as specified on this label for use in rice. Do not contaminate water by cleaning of equipment or disposal of rinsate. |
| FIFRA Other | <p>STORAGE AND DISPOSAL</p> <p>Do not contaminate water, food, or feed by storage or disposal.</p> <p>PESTICIDE STORAGE: Store in cool, dry and well ventilated area. Do not store containers under wet conditions.</p> <p>PESTICIDE DISPOSAL: Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility.</p> <p>CONTAINER DISPOSAL: Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.</p> <p>Triple rinse non-refillable < 50 pounds as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.</p> <p>Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.</p> |

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

No additional information available

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date : 3/4/2026

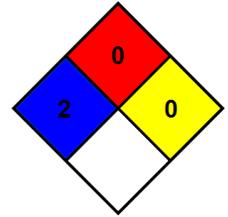
| Full text of hazard classes and H-statements | |
|--|---|
| H317 | May cause an allergic skin reaction |
| H402 | Harmful to aquatic life |
| H412 | Harmful to aquatic life with long lasting effects |

QUINSTAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



- Hazard Rating
- Health : 2 Moderate Hazard - Temporary or minor injury may occur
- Flammability : 0 Minimal Hazard - Materials that will not burn
- Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS USA-ALBAUGH

The information provided in this Safety Data Sheet is correct to the best of Albaugh, LLC 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.