

SAFETY DATA SHEET



Revision date 08-Jul-2021

Revision Number 1

1. Identification

Product identifier

Product Name AGGRESSOR

Other means of identification

Product Code(s) 000094

Synonyms None

Registration Number(s) 42750-313

Recommended use of the chemical and restrictions on use

Recommended use Herbicide

Restrictions on use Follow label instructions

Details of the supplier of the safety data sheet

Company Address

ALBAUGH LLC
1525 NE 36th St,
Ankeny, IA 50211

Emergency telephone 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)

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by US EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. Hazard(s) identification

Classification

| | |
|---|-------------|
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Reproductive toxicity | Category 1B |
| Aspiration hazard | Category 1 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger**Hazard statements**

Harmful if swallowed
 Harmful if inhaled
 May damage fertility or the unborn child
 May be fatal if swallowed and enters airways

**Appearance** Liquid**Physical state** Liquid**Odor** Slight Pungent**Precautionary Statements - Prevention**

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Wear protective gloves/protective clothing/eye protection/face protection
 Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 IF SWALLOWED: Immediately call a POISON CENTER or doctor
 Do NOT induce vomiting
 Rinse mouth

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

May be harmful in contact with skin. Causes mild skin irritation. Very toxic to aquatic life with long lasting effects. Very toxic to aquatic life.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

| Chemical name | CAS No | Weight-% | Active Ingredient |
|---|-------------|-------------|-------------------|
| Solvent Naphtha (Petroleum), Heavy Aromatic | 64742-94-5 | 74.66-79.28 | |
| Quizalofop | 100646-51-3 | 9.8-10.8 | X |
| 1-Methyl-2-pyrrolidone | 872-50-4 | 7.60-8.40 | |
| Other Ingredients | PROPRIETARY | >75.0 | |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

| | |
|---|--|
| General advice | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. |
| Inhalation | Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Get immediate medical advice/attention. |
| Self-protection of the first aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid breathing vapors or mists. See section 8 for more information. |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--|
| Symptoms | Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Prolonged contact may cause redness and irritation. |
|-----------------|--|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|---|
| Note to physicians | Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances. |
|---------------------------|---|

5. Fire-fighting measures

| | |
|---|--|
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Large Fire | CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | No data available. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | None. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| | |
|-----------------------------|--|
| Personal precautions | Ensure adequate ventilation. Use personal protective equipment as required. Avoid breathing vapors or mists. |
| Other information | Refer to protective measures listed in Sections 7 and 8. |

Methods and material for containment and cleaning up

| | |
|--------------------------------|---|
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. |

7. Handling and storage

Precautions for safe handling

| | |
|--------------------------------|---|
| Advice on safe handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. |
|--------------------------------|---|

Conditions for safe storage, including any incompatibilities

| | |
|---------------------------|---|
| Storage Conditions | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up. Store away from other materials. |
|---------------------------|---|

8. Exposure controls/personal protection

Control parameters

| | |
|------------------------|--|
| Exposure Limits | The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here. |
|------------------------|--|

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

| Chemical name | ACGIH |
|------------------------------------|--|
| 1-Methyl-2-pyrrolidone 872-50-4 | 100 mg/L - urine (5-Hydroxy-N-methyl-2-pyrrolidone) - end of shift |

Appropriate engineering controls

| | |
|-----------------------------|---|
| Engineering controls | Showers Eyewash stations Ventilation systems. |
|-----------------------------|---|

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|--|
| Eye/face protection | Wear safety glasses with side shields (or goggles). |
| Hand protection | Wear suitable gloves. |
| Skin and body protection | Wear suitable protective clothing. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. |

9. Physical and chemical properties**Information on basic physical and chemical properties**

| | |
|-----------------------|-------------------|
| Physical state | Liquid |
| Appearance | Liquid |
| Color | light yellow |
| Odor | Slight Pungent |
| Odor threshold | No data available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|-------------------------------|-------------------------|
| pH | 5.0 - 6.0 | |
| Melting point / freezing point | No data available | |
| Boiling point / boiling range | No data available | |
| Flash point | >100°C | |
| Evaporation rate | No data available | |
| Flammability (solid, gas) | No data available | |
| Flammability Limit in Air | | |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | No data available | |
| Vapor density | No data available | |
| Relative density | No data available | |
| Water solubility | Soluble in water | |
| Solubility(ies) | No data available | |
| Partition coefficient | No data available | |
| Autoignition temperature | No data available | |
| Decomposition temperature | | |
| Kinematic viscosity | 5.6 cSt @ 20°C, 3.3 cSt @40°C | |
| Dynamic viscosity | No data available | |

Other information

| | |
|-----------------------------|---|
| Explosive properties | No data available |
| Oxidizing properties | No data available |
| Softening point | No data available |
| Molecular weight | No data available |
| VOC Content (%) | No data available |
| Liquid Density | 1.015 - 1.021 g/ml (8.47 – 8.52 lb/gal.)* |
| Bulk density | No data available |

*Listed density is an approximate value and does not necessarily represent that of a specific batch

10. Stability and reactivity

| | |
|---|---|
| Reactivity | No data available. |
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Excessive heat. |
| Incompatible materials | None known based on information supplied. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Harmful by inhalation. (based on components). |
| Eye contact | Specific test data for the substance or mixture is not available. May cause irritation. |
| Skin contact | Repeated exposure may cause skin dryness or cracking. Specific test data for the substance or mixture is not available. Causes mild skin irritation. May be harmful in contact with skin. |
| Ingestion | Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. (based on components). |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-----------------|--|
| Symptoms | Difficulty in breathing. Coughing and/ or wheezing. Dizziness. Prolonged contact may cause redness and irritation. |
|-----------------|--|

Acute toxicity

Numerical measures of toxicity

| | |
|------------------------|---------------|
| Oral LD50 | 1,750 mg/kg |
| Dermal LD50 | > 5,000 mg/kg |
| Inhalation LC50 | > > 2.07 mg/L |

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|----------------------|----------------------|-------------------------------------|
| Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5 | > 5000 mg/kg (Rat) | > 2 mL/kg (Rabbit) | > 590 mg/m ³ (Rat) 4 h |
| Quizalofop 100646-51-3 | = 1182 mg/kg (Rat) | - | - |
| 1-Methyl-2-pyrrolidone 872-50-4 | = 3914 mg/kg (Rat) | = 8 g/kg (Rabbit) | > 5.1 mg/L (Rat) 4 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| Skin corrosion/irritation | Slightly irritating to the skin. |
| Serious eye damage/eye irritation | Causes moderate eye irritation. |
| Respiratory or skin sensitization | Did not cause sensitization on laboratory animals. |
| Germ cell mutagenicity | No data available. |
| Carcinogenicity | No data available. |
| Reproductive toxicity | Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child. |
| STOT - single exposure | No data available. |
| STOT - repeated exposure | No data available. |
| Aspiration hazard | May be fatal if swallowed and enters airways. |
| Other adverse effects | No data available. |
| Interactive effects | No data available. |

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|--|---|----------------------------|--------------------------------------|
| Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5 | EC50: =2.5mg/L (72h, Skeletonema costatum) | LC50: =19mg/L (96h, Pimephales promelas) LC50: =2.34mg/L (96h, Oncorhynchus mykiss) LC50: =1740mg/L (96h, Lepomis macrochirus) LC50: =45mg/L (96h, Pimephales promelas) LC50: =41 mg/L (96h, Pimephales promelas) | - | EC50: =0.95mg/L (48h, Daphnia magna) |
| 1-Methyl-2-pyrrolidone 872-50-4 | EC50: >500mg/L (72h, Desmodemus subspicatus) | LC50: =832mg/L (96h, Lepomis macrochirus) LC50: =1072mg/L (96h, Pimephales promelas) LC50: =1400mg/L (96h, Poecilia reticulata) LC50: =4000mg/L (96h, Leuciscus idus) | - | EC50: =4897mg/L (48h, Daphnia magna) |

Persistence and degradability No data available.

Bioaccumulation There is no data for this product.

Component Information

| Chemical name | Partition coefficient |
|---|-----------------------|
| Solvent Naphtha (Petroleum), Heavy Aromatic 64742-94-5 | 6.1 |
| 1-Methyl-2-pyrrolidone 872-50-4 | -0.46 |

Other adverse effects No data available.

13. Disposal considerations**Waste treatment methods**

| | |
|--|---|
| Waste from residues/unused products | Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
| Contaminated packaging | Do not reuse empty containers. |

14. Transport information

DOT Not regulated

15. Regulatory information**U.S. EPA Label Information**

EPA Pesticide Registration Number 42750-313

EPA Pesticide Label CAUTION. Harmful if swallowed or absorbed through skin. Causes moderate eye irritation.

International Inventories

| | |
|----------------------|-----------------|
| TSCA | Does not comply |
| DSL/NDSL | Does not comply |
| EINECS/ELINCS | Does not comply |
| ENCS | Does not comply |
| IECSC | Does not comply |
| KECL | Does not comply |
| PICCS | Does not comply |
| AICS | Does not comply |

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name | SARA 313 - Threshold Values % |
|-----------------------------------|-------------------------------|
| 1-Methyl-2-pyrrolidone - 872-50-4 | 1.0 |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

| Chemical name | California Proposition 65 |
|-----------------------------------|---------------------------|
| 1-Methyl-2-pyrrolidone - 872-50-4 | Developmental |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|------------------------------------|------------|---------------|--------------|
| 1-Methyl-2-pyrrolidone 872-50-4 | X | X | X |

16. Other information

| | | | | |
|-----------------------------------|----------------------------------|-----------------------|---------------------------|---|
| NFPA | Health hazards 2 | Flammability 0 | Instability 0 | Physical and chemical properties - |
| HMIS | Health hazards 2 * | Flammability 0 | Physical hazards 0 | Personal protection X |
| <i>Chronic Hazard Star Legend</i> | <i>* = Chronic Health Hazard</i> | | | |

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGL(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision date 08-Jul-2021
Revision Note No data available.

Disclaimer

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End of Safety Data Sheet