

SAFETY DATA SHEET

Revision Date: 05/23/2019



SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Acuvant
PRODUCT CODES: D506
EPA REGISTRATION NO: not applicable

USES OF THE SUBSTANCE: Various agricultural applications
RESTRICTIONS ON USE: See product label for restrictions

INFORMATION ON SUPPLIER
SUPPLIER: CHS, Inc.
ADDRESS: 5500 Cenex Drive
Inver Grove Height, MN 55077

EMERGENCY TELEPHONE NO: CHEMTREC(800)424-9300

SECTION 2: HAZARDS IDENTIFICATION

FOR EPA FIFRA-SPECIFIC INFORMATION SEE SECTION 15

CLASSIFICATION: Not classified

LABEL ELEMENTS: None

SIGNAL WORD: None

HAZARD STATEMENTS: None

PRECAUTIONARY STATEMENTS: P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood
P261: Avoid breathing mist/vapors/spray.
P264: Wash thoroughly after handling
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves/protective clothing/eye protection/face protection
P304+340: IF INHALED: REMOVE VICTIM to fresh air and keep at rest in a position comfortable for breathing
P312: Call a POISON CENTER if you feel unwell.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P337+313: If eye irritation persists get medical advice/attention.

HAZARDS NOT OTHERWISE CLASSIFIED (HNOC): Microorganisms may have the potential to provoke sensitizing reactions
Proteins may have the potential to provoke sensitizing reactions
Preservative component may induce skin sensitization
This product has not been completely analyzed and all of the hazards may not be known. Please use caution when handling this product

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

ACTIVE INGREDIENTS:	Concentration % by weight	CAS-NO.
Fatty esters	<60-80%	N/A
Soybean Oil	<40-20%	8001-22-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: FIRST AID MEASURES

DESCRIPTION OF FIRST AID MEASURES:

GENERAL: If you feel unwell, seek medical advice

INHALATION: Move victim to fresh air. If irritation persists, contact medical personnel. If the person is not breathing, call 911 and/or ambulance and give artificial respiration.

SAFETY DATA SHEET

Revision Date: 05/23/2019



EYES: Promptly rinse eyes with plenty of water for at least 15-20 minutes. Remove contact lenses if present after 5 minutes and continue rinsing eyes. If irritation persists, seek medical attention.

SKIN: Promptly wash off with soap and plenty of water. Remove contaminated clothing and shoes, wash before reuse. If redness, itching, or burning sensation develops, seek medical attention.

INGESTION: Clean mouth with water. Call POISON CONTROL CENTER. Seek medical advice/attention if you feel unwell.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

SYMPTOMS: Not Applicable

SYMPTOMS AFTER SKIN CONTACT: Not Applicable

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED: No supplementary information available

SECTION 5: FIREFIGHTING MEASURES

EXTINGUISHING MEDIA:

SUITABLE EXTINGUISHING MEDIA: AFFF foam. BC powder. Carbon dioxide. Dry sand. Dry chemical powder. Adapt extinguishing media to the environment.

UNSUITABLE EXTINGUISHING MEDIA: Solid waterjet ineffective as extinguishing medium.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

EXPLOSION HAZARD: Not applicable

REACTIVITY: On burning: release of carbon monoxide – carbon dioxide.

FLASH POINT: 125°C (ASTM D92)

ADVICE FOR FIREFIGHTERS: No supplementary information available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

PRECAUTIONS: Mark the danger area. Exposure to heat: have neighborhood close doors and windows. Exposure to fire/heat: consider evacuation. Wash contaminated clothes.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP:

METHODS FOR CLEAN UP: Clean contaminated surfaces with an excess of water and soap solution. Take up liquid spill into inert absorbent material, e.g.: dry sand/earth/vermiculite or powdered limestone.

PERSONAL PRECAUTIONS: See "Material-Handling" to select protective clothing.

ENVIRONMENTAL PRECAUTIONS: Prevent soil and water pollution.

REFERENCE TO OTHER SECTIONS: Information regarding protective measures, see section 8".
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal see section 13.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING AND STORAGE:

HANDLING: Keep $\geq 10^{\circ}\text{C}$ above melting point

HYGIENE MEASURES: Remove Personal Protective Equipment (PPE) immediately after handling. Wash hands and other exposed areas with soap and water after handling before drinking, eating, smoking, or applying cosmetics and when leaving work.

STORAGE: Keep container in a well-ventilated place. Store at ambient temperature. Keep out of direct sunlight. Meet the legal requirements.

INCOMPATIBLE MATERIALS: KEEP SUBSTANCE AWAY FROM: ignition sources. (strong) acids. (strong) bases.

SAFETY DATA SHEET

Revision Date: 05/23/2019



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS: No additional information available

ENGINEERING CONTROLS: Ensure adequate ventilation and maintain good industrial hygiene and safety practices.

RESPIRATORY PROTECTION: None is needed under adequate ventilation conditions.

EYE PROTECTION: Wear approved safety glasses with side shields.

SKIN PROTECTION: Wear suitable protective clothing, Wear nitrile, neoprene, or rubber protective gloves. Wash hands after use.

OTHER INFORMATION: Follow manufacturer's instructions for cleaning/maintaining PPE. Wear clothing appropriate to for all working conditions and all chemicals being handled. Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear liquid, light yellow to amber

ODOR: Characteristic odor. Sweet odor.

ODOR THRESHOLD: No data available

PHYSICAL STATE: Liquid

pH AS SUPPLIED: 5.0-8.0

BOILING POINT: No data available

MELTING POINT: No data available

FREEZING POINT: No data available

VAPOR PRESSURE (mmHg): No data available

SPECIFIC GRAVITY (H₂O = 1): No data available

EVAPORATION RATE: No data available

SOLUBILITY IN WATER: Miscible with water

DECOMPOSITION TEMPERATURE: No data available

DENSITY: ca. 0.887- 0.899 g/cm³

PERCENT VOLATILE: No data available

VISCOSITY: No data available

FLASH POINT: No data available

AUTO-IGNITION TEMPERATURE: > 250°C

LOWER EXPLOSION LIMIT: No data available

UPPER EXPLOSION LIMIT: No data available

EXPLOSIVITY: No data available

OTHER INFORMATION: Soluble in oils/fats. Soluble in most organic solvents

VOC Content: < 1% (1999/13/EC; 2004/42/EC;2010/75/EU; SR 814.018)

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY: On burning; release of (carbon monoxide – carbon dioxide).

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: No supplementary information available.

INCOMPATIBILITY (MATERIAL/CONDITIONS TO AVOID): No supplementary information available.

POSSIBILITY OF HAZARDOUS REACTIONS: No supplementary information available.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: No supplementary information available.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Not classified

Self emulsifiable esters of rapeseed oil	
LD50 oral rat	> 2000 mg/kg Non-toxic
Fatty esters	
LD50 oral rat	> 5000 mg/kg Non-toxic

SKIN CORROSION/IRRITATION: Not classified

EYE IRRITATION: Not classified

SKIN IRRITATION: Not classified

INHALATION: Not classified

INFORMATION ON TOXICOLOGICAL EFFECTS:

GERM CELL MUTAGENICITY: Not classified

REPRODUCTIVE: No data available

SPECIFIC ORGAN TOXICITY: No data available

SAFETY DATA SHEET

Revision Date: 05/23/2019



ASPIRATION HAZARD: No data available

FURTHER INFORMATION: This product is for experimental purposes only. To the best of our knowledge, the chemical, physical, and toxicological properties have not been fully investigated.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION:

Toxicity:

Ecology-general According to literature: no environmental hazard. No data available on ecotoxicity

Ecology – air No supplementary information available.

Ecology – water No bioaccumulation data available.

Self emulsifiable esters of rapeseed oil	
LC50 fish 1	> 100 mg/l (OECD 203)
EC50 Daphnia 1	> 100 mg/l (OECD 202; 48h)
ErC50 (algae)	> 100 mg/l (OECD 201; Selenastrum Capricornutum)

PERSISTENCE AND DEGRADABILITY:

Self emulsifiable esters of rapeseed oil	
Biodegradation	> 90 % (CEC L-33-T-82)

BIOACCUMALITIVE POTENTIAL:

Fatty esters	
Log Pow	> 5

MOBILITY IN SOIL:

Self emulsifiable esters of rapeseed oil	
Ecology - soil	Biodegradability in soil: no data available.

OTHER ADVERSE EFFECTS: No additional information available

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Prevent dispersion by covering with dry absorbent, scoop solid spill into closing containers, scoop absorbed substance into closing containers. Clean contaminated surfaces with an excess of water and soap solution. Wash clothing and equipment after handling.

CONTAMINATED PACKAGING: Triple rinse containers. Do not reuse empty containers.

ECOLOGY WASTE MATERIALS: Do not discharge into drains or the environment. Remove to an authorized waste-treatment plant.

SECTION 14: TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT)

SHIPPING DATA: Not dangerous goods

CANADIAN TDG: Not dangerous goods

TRANSPORT BY SEA: No additional information available

TRANSPORT BY AIR: No additional information available

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS:

TSCA: All components of this product are exempt from listing on the United States EPA TSCA Chemical Inventory and not otherwise regulated by TSCA

SARA 302: No components of this mixture exceed the threshold reporting requirements of SARA Title III, Section 302

SARA 313: No components of this mixture with known CAS numbers are present in concentrations exceeding the threshold subject to the reporting requirements of SARA Title III, Section 313

EPA: Hazardous Substance: Not applicable
Reportable Quantity: Not applicable

US DPT OF HOMELAND SECURITY: No components of this mixture are above the Screening Threshold Quantity of the DH Chemical

SAFETY DATA SHEET

Revision Date: 05/23/2019



CALIFORNIA PROPOSITION 65: Facility Anti-Terrorism Standard.
No components of this mixture are known to the State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: OTHER INFORMATION

ABBREVIATIONS AND ACRONYMS: CAS – Chemical Abstracts Service. GHS – Globally Harmonized System. HCS – Hazard Communication Standard. OSHA – Occupational Safety and Health Administration. EPA – Environmental Protection Act.

VERSIONS 02/09/2018 –precautionary statements; 01/18/2019 – product codes

DISCLAIMER: Read and follow all label directions and precautions before using the product. These products are intended for agricultural use only. **NOT FOR HOUSEHOLD USE OR RESALE. KEEP OUT OF REACH OF CHILDREN.** While we believe that the data contained herein is factual and the opinions expressed are those of qualified experts, the data are not to be taken as a warranty or representation for which the company assumes any legal responsibility. They are offered solely for your consideration, investigation, and verification. Any use of the data and information must be determined by the user to be in accordance with the applicable Federal, State, and local laws and regulation.