

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

1/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name WARRANT® HERBICIDE
Product code (UVP) 62293177
SDS Number 102000039842
EPA Registration No. 524-591

Relevant identified uses of the substance or mixture and uses advised against

Use Herbicide
Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer CropScience LP
800 North Lindbergh Blvd.
St. Louis, MO 63167
USA
Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577
Product Information Telephone Number 1-866-99BAYER (1-866-992-2937)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Skin sensitisation: Category 1
Respiratory sensitisation: Category 1
Specific target organ toxicity - single exposure: Category 3
Specific target organ toxicity - repeated exposure: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200



SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

2/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

Signal word: Danger

Hazard statements

May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
May cause damage to organs (Kidney) through prolonged or repeated exposure.

Precautionary statements

Do not breathe gas/ mist/vapours/ spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
In case of inadequate ventilation wear respiratory protection.
IF ON SKIN: Wash with plenty of water/ soap.
If skin irritation or rash occurs: Get medical advice/ attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER/doctor/ physician.
Get medical advice/ attention if you feel unwell.
Wash contaminated clothing before reuse.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No health hazards not otherwise classified.
No physical hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Acetochlor	34256-82-1	33.0
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4	<3.5
Distillates (petroleum), hydrotreated light	64742-47-8	<2

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice

When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.

Inhalation

Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

3/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

Skin contact	Immediately wash with plenty of soap and water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Call a physician or poison control center immediately.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms	Breathing difficulties
Indication of any immediate medical attention and special treatment needed	
Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable	High volume water jet

Special hazards arising from the substance or mixture In the event of fire the following may be released: Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Hydrogen chloride (HCl)

Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing. Equipment should be thoroughly decontaminated after use.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Specific hazards from the substance or mixture which can increase the fire

Flash point	does not flash
Auto-ignition temperature	No data available
Lower explosion limit	Not applicable

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

4/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

Upper explosion limit No data available
Explosivity Not explosive

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Use personal protective equipment. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. If the product is accidentally spilled, do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing. Keep working clothes separately. Garments that cannot be cleaned must be destroyed (burnt).

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Keep away from direct sunlight. Protect from freezing.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

5/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Distillates (petroleum), hydrotreated light (Non-aerosol.)	64742-47-8	200 mg/m ³ (TWA)	2008	ACGIH
Distillates (petroleum), hydrotreated light	64742-47-8	100 mg/m ³ (REL)	2005	NIOSH
Distillates (petroleum), hydrotreated light (Non-aerosol.)	64742-47-8	200 mg/m ³ (TWA)	2008	ACGIH

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

Hand protection

Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)

Eye protection

Use tightly sealed goggles and face protection.

Skin and body protection

Wear long-sleeved shirt and long pants and shoes plus socks.

General protective measures

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water.
Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form	suspension
Colour	off-white
Odour	slight
Odour Threshold	No data available
pH	7.0 - 10.0 (100 %)
Melting point/freezing point	ca. 8 °C / 46.4 °F

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

6/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

Boiling Point	No data available
Flash point	does not flash
Flammability	No data available
Auto-ignition temperature	No data available
Minimum ignition energy	Not applicable
Self-accelarating decomposition temperature (SADT)	No data available
Upper explosion limit	No data available
Lower explosion limit	Not applicable
Vapour pressure	No significant volatility.
Evaporation rate	No data available
Relative vapour density	No significant volatility.
Relative density	1.098
Density	ca. 1.10 g/cm ³ (20 °C)
Water solubility	soluble
Partition coefficient: n-octanol/water	Acetochlor: log Pow: 4.14 (20 °C)
Viscosity, dynamic	100 - 250 mPa.s (10 °C)
Viscosity, kinematic	No data available
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive
Other information	Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reactions when stored and handled according to prescribed instructions.

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

7/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	No incompatible materials known.
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Skin contact, Eye contact, Inhalation
Immediate Effects	
Eye	Not expected to produce significant adverse effects when recommended use instructions are followed.
Skin	Harmful if absorbed through skin. May cause sensitisation by skin contact.
Ingestion	Not expected to produce significant adverse effects when recommended use instructions are followed.
Inhalation	Harmful if inhaled.
Information on toxicological effects	
Acute oral toxicity	LD50 (Rat) > 5,000 mg/kg
Acute inhalation toxicity	LC50 (Rat) > 5.11 mg/l Exposure time: 4 h
Acute dermal toxicity	LD50 (Rat) > 5,000 mg/kg
Skin corrosion/irritation	No skin irritation (Rabbit)
Serious eye damage/eye irritation	Slight irritant effect - does not require labelling. (Rabbit)
Respiratory or skin sensitisation	Skin: Sensitising (Guinea pig) OECD Test Guideline 406, Buehler test May cause sensitisation by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Assessment STOT Specific target organ toxicity – single exposure

Acetochlor: May cause respiratory irritation.

Assessment STOT Specific target organ toxicity – repeated exposure

Acetochlor caused specific target organ toxicity in experimental animal studies in the following organ(s):
Kidney.

Assessment mutagenicity

In vitro and in vivo mutagenicity tests do not indicate genotoxic activity.

Assessment mutagenicity

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

8/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

Acetochlor was not genotoxic based on weight of evidence analysis.

Assessment carcinogenicity

Acetochlor caused an increased incidence of tumours in rats in the following organ(s): Nasal, Thyroid.
Mode(s) of action not relevant to humans.

Acetochlor caused an increased incidence of tumours in rats, mice in the following organ(s): Liver. Only above the MTD (maximum tolerated dose). The observed effects do not appear to be relevant for humans.

Acetochlor caused lung tumours and histocytic sarcomas in mice, probably not treatment related.

ACGIH

Distillates (petroleum), hydrotreated light 64742-47-8 Group A3

NTP

None.

IARC

Distillates (petroleum), hydrotreated light 64742-47-8 Overall evaluation: 3

Assessment toxicity to reproduction

Reproductive effects in rats seen with Acetochlor are only in the presence of significant maternal toxicity.

Assessment developmental toxicity

Developmental effects in rats seen with Acetochlor are only in the presence of significant maternal toxicity.

Acetochlor did not cause developmental toxicity in rabbits. Testicular damage in dogs only in the presence of substantial systemic toxicity.

Aspiration hazard

Based on available data, the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish

LC50 (Lepomis macrochirus (Bluegill sunfish)) 1.3 mg/l
static test; Exposure time: 96 h
The value mentioned relates to the active ingredient acetochlor.

LC50 (Oncorhynchus mykiss (rainbow trout)) 0.36 - 1.2 mg/l
static test; Exposure time: 96 h
The value mentioned relates to the active ingredient acetochlor.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 8.6 - 16 mg/l static test; Exposure time: 48 h
The value mentioned relates to the active ingredient acetochlor.

Toxicity to aquatic plants

EC50 (Raphidocelis subcapitata (freshwater green alga)) 0.00027 - 0.00149 mg/l
static test; Exposure time: 96 h
The value mentioned relates to the active ingredient acetochlor.

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

9/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

Biodegradability	Acetochlor: Not rapidly biodegradable
Koc	Acetochlor: Koc: 204
Bioaccumulation	Acetochlor: Bioconcentration factor (BCF) 20
Mobility in soil	Acetochlor: Moderately persistent
Results of PBT and vPvB assessment	
PBT and vPvB assessment	Acetochlor: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Additional ecological information	No further ecological information is available.
Environmental precautions	Apply this product as specified on the label. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Do not allow to get into surface water, drains and ground water.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging	Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR	Not dangerous goods / not hazardous material
IMDG	
UN number	3082
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ACETOCHLOR SOLUTION)

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

10/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

IATA

UN number	3082
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ACETOCHLOR SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

Freight Classification: COMPOUNDS, TREE OR WEED KILLING, N.O.I. other than poison, HAVING A DENSITY OF 20 LBS OR GREATER PER CUBIC FOOT

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 524-591

US Federal Regulations

TSCA list

Water	7732-18-5
Glycerine	56-81-5
Urea	57-13-6
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4

Distillates (petroleum), hydrotreated light 64742-47-8

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Acetochlor	34256-82-1	Carcinogenic.
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US State Right-To-Know Ingredients

Glycerine	56-81-5	MN, RI
Urea	57-13-6	MN
Distillates (petroleum), hydrotreated light	64742-47-8	CT, NJ, RI

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

11/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

Environmental

CERCLA

None.

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

Yes

Acetochlor 34256-82-1

EPA/FIFRA Information:

This chemical is a pesticide product regulated 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 required on the pesticide label:

Signal word: Caution!

Hazard statements: Harmful if inhaled or absorbed through skin.
May cause allergic skin reaction.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

49CFR	Code of Federal Regulations, Title 49
ACGIH	US. ACGIH Threshold Limit Values
ATE	Acute toxicity estimate
CAS-Nr.	Chemical Abstracts Service number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EINECS	European inventory of existing commercial substances
ELINCS	European list of notified chemical substances
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
N.O.S.	Not otherwise specified
NTP	US. National Toxicology Program (NTP) Report on Carcinogens
OECD	Organization for Economic Co-operation and Development
TDG	Transportation of Dangerous Goods
TWA	Time weighted average
UN	United Nations
WHO	World health organisation

SAFETY DATA SHEET



WARRANT® HERBICIDE

Version 3.0 / USA
102000039842

12/12
Revision Date: 04/12/2022
Print Date: 04/13/2022

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 1 Instability - 1 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 2 Flammability - 1 Physical Hazard - 1 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: The following sections have been revised: Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Section 11: Toxicological information on STOT (Specific Target Organ Toxicity) and CMR (Carcinogenic, Mutagenic and toxic to Reproduction). Reviewed and updated for general editorial purposes.

Revision Date: 04/12/2022

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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