

HARNESS® HERBICIDE

Version 4.0 / USA
102000039869

Revision Date: 09/16/2024
Print Date: 09/17/2024

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

Product identifier

Trade name HARNESS® HERBICIDE

Product code (UVP) 62293312

SDS Number 102000039869

EPA Registration No. 524-473

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

Use Herbicide

Restrictions on useSee 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

Acute toxicity(Inhalation): Category 4
Acute toxicity(Oral): Category 4
Eye irritation: Category 2B
Skin sensitisation: Category 1
Carcinogenicity: Category 2

Specific target organ toxicity - repeated exposure: Category 2 Specific target organ toxicity - single exposure: Category 3



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Labelling in accordance with regulation HCS 29CFR §1910.1200





Signal word: Warning

Hazard statements

Harmful if swallowed.

Harmful if inhaled.

Causes eye irritation.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause respiratory irritation.

May cause damage to organs (Kidney, Liver) through prolonged or repeated exposure.

Precautionary statements

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

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.

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.

IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

Rinse mouth.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/ attention.

IF ON SKIN: Wash with plenty of water/ soap.

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/ attention.

IF exposed or concerned: Get medical advice/ attention.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.

No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS



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CAS-No. **Hazardous Component Name** Concentration % by weight Acetochlor 34256-82-1 75.9 Furilazole 121776-33-8 2.4 Surfactant blend (proprietary) >=5 - <=10 Solvent Naphtha (petroleum), heavy aromatic 64742-94-5 5.2 Naphthalene 91-20-3 8.0

The specific chemical identity and/or concentration range is being withheld because it is trade secret information.

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.

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 May cause allergic skin reaction.

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



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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 (NOx), Hydrogen

chloride (HCI)

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 > 93.3 °C / > 199.94 °F

Auto-ignition temperatureNo data availableLower explosion limitNo data availableUpper explosion limitNo data availableExplosivityNo data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

PrecautionsUse 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.



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SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes and clothing. Ensure adequate ventilation.

Wash hands thoroughly with soap and water after handling and before **Hygiene measures**

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.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Keep away from direct sunlight.

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	1,600 mg/m3/400 ppm (TWA PEL)	09 2006	US CA OEL
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	200 mg/m3 (TWA)	03 2014	ACGIH
(Non-aerosol.)				
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	100 mg/m3 (REL)	2010	NIOSH
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5	200 mg/m3 (TWA)	01 2021	ACGIH
(Non-aerosol.)				
Naphthalene	91-20-3	10 ppm (TWA)	2008	ACGIH
Naphthalene	91-20-3	50 mg/m3/10 ppm (REL)	2005	NIOSH
Naphthalene	91-20-3	75 mg/m3/15 ppm (STEL)	2005	NIOSH
Naphthalene	91-20-3	50 mg/m3/10 ppm (PEL)	02 2006	OSHA Z1
Naphthalene	91-20-3	50 mg/m3/10 ppm (TWA)	06 2008	TN OEL
Naphthalene	91-20-3	0.5 mg/m3/0.1 ppm	10 2014	US CA OEL



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		(TWA PEL)		
Naphthalene	91-20-3	75 mg/m3/15 ppm (STEL)	01 2019	TN OEL
Naphthalene	91-20-3	10 ppm (TLV)		OES BCS*

^{*}OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

Biological occupational exposure limits

Components	CAS-No.	Parameters	Biological specimen	Sampling time	Conc.	Basis
Naphthalene	91-20-3	1-Naphthol, with hydrolysis + 2-Naphthol, with hydrolysis		Sampling time: End of shift.		ACGIH BEI

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 Tightly fitting safety goggles

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 Liquid, free from foreign matter

Colourblue to violetOdourmild, sweet

Odour Threshold No data available pH No data available



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Melting point/range Not applicable

Boiling point/boiling range

No data available

> 93.3 °C / > 199.94 °F Flash point

No data available **Flammability Auto-ignition temperature** No data available Thermal decomposition No data available

Minimum ignition energy No data available Self-accelarating No data available

decomposition temperature

(SADT)

Upper explosion limit No data available Lower explosion limit No data available

Vapour pressure No significant volatility. No data available **Evaporation rate** Relative vapour density No data available 1.1071 (20 °C) Relative density Water at 15.6 °C

ca. 1.10 g/cm³ (20 °C)

Water solubility emulsifiable

Partition coefficient: n-

octanol/water

Density

Acetochlor: log Pow: 4.14 (20 °C)

Furilazole: log Pow: 2.12 (23 °C)

Viscosity, dynamic No data available

Viscosity, kinematic Not applicable Oxidizing properties No data available **Explosivity** No data available

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.



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Possibility of hazardous

reactions

No hazardous reactions when stored and handled according to

prescribed instructions.

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, Ingestion

Immediate Effects

Eve Causes serious eye irritation.

Skin Causes skin irritation. May cause sensitisation by skin contact.

Ingestion Harmful if swallowed. Inhalation Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (female Rat) 1,849 mg/kg

Test conducted with a similar formulation.

LC50 (female Rat) 1.4 mg/l Acute inhalation toxicity

Exposure time: 4 h

Test conducted with a similar formulation.

LD50 (Rat) > 5,000 mg/kgAcute dermal toxicity

Test conducted with a similar formulation.

Skin corrosion/irritation Slight irritant effect - does not require labelling. (Rabbit)

Test conducted with a similar formulation.

Serious eye damage/eye

irritation

Irritating to eyes. (Rabbit)

Test conducted with a similar formulation.

Respiratory or skin Skin: Sensitising (Guinea pig)

sensitisation OECD Test Guideline 406, Buehler test Test conducted with a similar formulation.

Assessment STOT Specific target organ toxicity - single exposure

Acetochlor: May cause respiratory irritation.

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

Assessment STOT Specific target organ toxicity - repeated exposure

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

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



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Assessment mutagenicity

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

Assessment mutagenicity

Acetochlor was not genotoxic based on weight of evidence analysis.

Furilazole 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. Furilazole caused an increased incidence of tumours in rats, mice in the following organ(s): Liver. Only at doses that caused significant hepatotoxicity. Questionable relevance to humans.

Furilazole caused an increased incidence of tumours in mice in the following organ(s): Lungs. Only at doses that caused chronic inflammation. Questionable relevance to humans.

Furilazole caused an increased incidence of tumours in rats in the following organ(s): forestomach. Only at doses that caused substantial irritation. The observed effects do not appear to be relevant for humans.

Naphthalene caused an increased incidence of tumours after chronic inhalation of high vapour concentrations in the following organ: Respiratory Tract. The tumours seen with naphthalene were caused through a non-genotoxic mechanism, which is not relevant at low doses.

ACGIH

Naphthalene	64742-94-5 91-20-3	Group A3 Group A3
NTP		
Naphthalene	91-20-3	
IARC		
Solvent Naphtha (petroleum), heavy aromatic Solvent Naphtha (petroleum), heavy aromatic Solvent Naphtha (petroleum), heavy aromatic Naphthalene	64742-94-5 64742-94-5 64742-94-5 91-20-3	Overall evaluation: 3 OCGEN Overall evaluation: 3 OCGEN Overall evaluation: 3 OCGEN Overall evaluation: 2B

Assessment toxicity to reproduction

Reproductive effects in rats seen with Acetochlor are only in the presence of significant maternal toxicity. Furilazole did not cause reproductive toxicity in laboratory animals.

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.

Furilazole did not cause developmental toxicity in rabbits. The developmental effects seen with Furilazole are related to maternal toxicity.

Aspiration hazard



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

Further information

Information given is based on data obtained from similar substances.

The non-acute information pertains to the active ingredient(s).

No further toxicological information is available.

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.

LC50 (Oncorhynchus mykiss (rainbow trout)) 6.2 mg/l

static test; Exposure time: 96 h

The value mentioned relates to the safener furilazole. LC50 (Lepomis macrochirus (Bluegill sunfish)) 4.6 mg/l

static test; Exposure time: 96 h

The value mentioned relates to the safener furilazole.

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.

EC50 (Daphnia magna (Water flea)) 26 mg/l static test; Exposure time:

48 h

The value mentioned relates to the safener furilazole.

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.

EbC50 (Raphidocelis subcapitata (freshwater green alga)) 34.8 mg/l

static test; Exposure time: 72 h

The value mentioned relates to the safener furilazole.

Biodegradability Acetochlor:

Not rapidly biodegradable

Furilazole: 1 %, Exposure time: 28 d

Not readily biodegradable.

Koc Acetochlor: Koc: 204

Furilazole: Koc: 56 - 341

Bioaccumulation Acetochlor: Bioconcentration factor (BCF) 20

Furilazole:



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No significant accumulation in organisms.

Mobility in soil Acetochlor: Moderately persistent

Furilazole: 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).

Furilazole: 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 other effects to be mentioned.

Environmental precautions Do not allow to get into surface water, drains and ground water.

Do not contaminate surface or ground water by cleaning equipment or

disposal of wastes, including equipment wash 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

UN number 3082
Class 9
Packaging group III

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID,

N.O.S.

(NAPHTHALENE)

RQ Reportable Quantity is reached with 12,500 lb of product.

IMDG

UN number 3082
Class 9
Packaging group III



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Marine pollutant YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(ACETOCHLOR SOLUTION)

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.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 524-473

US Federal Regulations

TSCA list

Solvent Naphtha (petroleum), heavy 64742-94-5

aromatic

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

WARNING: This product contains a chemical known to the State of California to cause cancer. For more

information go to www.P65Warnings.ca.gov.

Acetochlor34256-82-1CancerogenicFurilazole121776-33-8CancerogenicNaphthalene91-20-3Cancerogenic

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

harm.

US State Right-To-Know Ingredients

Solvent Naphtha (petroleum), heavy 64742-94-5 CT, IL, NJ, RI

aromatic

Environmental

CERCLA



13/14

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Yes

Solvent Naphtha (petroleum), heavy 64742-94-5

aromatic

Clean Water Section 307(a)(1)

Yes

Naphthalene 91-20-3
Safe Drinking Water Act Maximum Contaminant Levels

Yes

Naphthalene 91-20-3

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: Warning!

Hazard statements: Causes substantial but temporary eye and skin irritation.

Harmful if swallowed. Harmful if inhaled.

May cause allergic skin reaction.

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



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NFPA 704 (National Fire Protection Association):

Health - 3 Flammability - 1 Instability - 0 Others - none

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

Health - 2* Flammability - 1 Physical Hazard - 0 PPE -

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

* = chronic health 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. Section 16: Other Information. Reviewed and updated for general editorial purposes.

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

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