

BAYTHROID® XL

Version 4.0 / USA 102000013617

Print Date: 09/29/2021

Revision Date: 09/27/2021

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

Product identifier

Trade name **BAYTHROID® XL**

Product code (UVP) 05753952

SDS Number 102000013617

EPA Registration No. 264-840

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

Use Insecticide

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

1-800-334-7577

Emergency telephone no.

Emergency Telephone

Number (24hr/ 7 days)

1-866-99BAYER (1-866-992-2937)

Product Information Telephone Number

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Aspiration hazard: Category 1 Skin sensitisation: Category 1B Eye irritation: Category 2A Carcinogenicity: Category 2

Acute toxicity(Inhalation): Category 3 Acute toxicity(Oral): Category 4 Flammable liquids: Category 4









BAYTHROID® XL

Version 4.0 / USA 102000013617

Revision Date: 09/27/2021 Print Date: 09/29/2021

Signal word: Danger

Hazard statements

May be fatal if swallowed and enters airways.

May cause an allergic skin reaction.

Causes serious eye irritation.

Suspected of causing cancer.

Causes skin irritation.

Toxic if inhaled.

Harmful if swallowed.

Combustible liquid.

Precautionary statements

Avoid breathing mist/ spray.

Use only outdoors or in a well-ventilated area.

Contaminated work clothing should not be allowed out of the workplace.

Wash thoroughly after handling.

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.

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

Keep away from open flames/hot surfaces. - No smoking.

IF SWALLOWED: Immediately call a POISON CENTER/doctor/ physician.

Do NOT induce vomiting.

Rinse mouth.

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

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

Wash contaminated clothing before reuse.

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 exposed or concerned: Get medical advice/ attention.

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

Call a POISON CENTER/doctor/physician.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

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

Store locked up.

Keep cool.

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



BAYTHROID® XL

 Version 4.0 / USA
 Revision Date: 09/27/2021

 102000013617
 Print Date: 09/29/2021

Hazardous Component Name	CAS-No.	Concentration % by weight
Beta-Cyfluthrin	1820573-27-0	12.7
Cyclohexanone	108-94-1	20.0
Naphthalene	91-20-3	1.3
Hydrocarbons, C10, aromatics, <1% naphthalene	64742-94-5	58.6
Hydrocarbons, C10, aromatics, <1% naphthalene Detergent blend (proprietary)		5.8

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 Take off contaminated clothing and shoes immediately. Wash off

immediately with plenty of water for at least 15 minutes. 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 Irritation, sensitising effects, Central nervous system depression,

Narcosis

Indication of any immediate medical attention and special treatment needed

Risks Contains hydrocarbon solvents. May pose an aspiration pneumonia

hazard.

Treatment Appropriate supportive and symptomatic treatment as indicated by the

patient's condition is recommended.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Foam, Dry chemical, Water spray

Unsuitable High volume water jet



BAYTHROID® XL

Version 4.0 / USA 102000013617

Revision Date: 09/27/2021 Print Date: 09/29/2021

Advice for firefighters

Special protective equipment for firefighters

Firefighters should wear NIOSH approved self-contained breathing

apparatus and full protective clothing.

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.

Flash point 62.8 °C / 145.04 °F
Auto-ignition temperature No data available
Lower explosion limit No data available
Upper explosion limit No data available
Explosivity No data available

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. 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. 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.

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 Handle and open container in a manner as to prevent spillage. Maintain

exposure levels below the exposure limit through the use of general and

local exhaust ventilation.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

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.



BAYTHROID® XL

Version 4.0 / USA 102000013617

5/14 Revision Date: 09/27/2021 Print Date: 09/29/2021

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

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 heat and sources of ignition.

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
Beta-Cyfluthrin	1820573-27- 0	0.01 mg/m3 (TWA)		OES BCS*
Cyclohexanone	108-94-1	20 ppm (TWA)	02 2012	ACGIH
Cyclohexanone	108-94-1	50 ppm (STEL)	02 2012	ACGIH
Cyclohexanone	108-94-1	100 mg/m3/25 ppm (REL)	2010	NIOSH
Cyclohexanone	108-94-1	200 mg/m3/50 ppm (PEL)	02 2006	OSHA Z1
Cyclohexanone	108-94-1	100 mg/m3/25 ppm (TWA)	1989	OSHA Z1A
Cyclohexanone	108-94-1	100 mg/m3/25 ppm (TWA)	06 2008	TN OEL
Cyclohexanone	108-94-1	100 mg/m3/25 ppm (TWA PEL)	08 2010	US CA OEL
Naphthalene	91-20-3	10 ppm (TWA)	02 2012	ACGIH
Naphthalene	91-20-3	50 mg/m3/10 ppm (REL)	2010	NIOSH
Naphthalene	91-20-3	75 mg/m3/15 ppm (STEL)	2010	NIOSH
Naphthalene	91-20-3	50 mg/m3/10 ppm (PEL)	02 2006	OSHA Z1
Naphthalene	91-20-3	75 mg/m3/15 ppm (STEL)	06 2008	TN OEL
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 (TWA PEL)	10 2014	US CA OEL



BAYTHROID® XL

Version 4.0 / USA 102000013617

Revision Date: 09/27/2021 Print Date: 09/29/2021

Naphthalene	91-20-3	10 ppm (TLV)		OES BCS*
Hydrocarbons, C10, aromatics, <1% naphthalene	64742-94-5	1,600 mg/m3/400 ppm (TWA PEL)	09 2006	US CA OEL
Hydrocarbons, C10, aromatics, <1% naphthalene	64742-94-5	200 mg/m3 (TWA)	03 2014	ACGIH
(Non-aerosol.)				
Hydrocarbons, C10, aromatics, <1% naphthalene	64742-94-5	100 mg/m3 (REL)	2010	NIOSH

^{*}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
Cyclohexanone	108-94-1	Cyclohexanol , with hydrolysis	Urine	Sampling time: End of shift.	8 mg/l	ACGIH BEI
Cyclohexanone	108-94-1	1,2- Cyclohexane diol, with hydrolysis	Urine	Sampling time: End of shift at end of work week.	80 mg/l	ACGIH BEI
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.



BAYTHROID® XL

Version 4.0 / USA 102000013617

Revision Date: 09/27/2021 Print Date: 09/29/2021

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form Liquid, clear

Colour yellow to brown

Odour characteristic

Odour Threshold No data available

pH ca. 4.5 (1 %) (23 °C) (CIPAC D water (342ppm))

No data available

Melting point/rangeNo data availableBoiling PointNo data availableFlash point62.8 °C / 145.04 °FFlammabilityNo data availableAuto-ignition temperatureNo data available

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

decomposition temperature

Thermal decomposition

(SADT)

Upper explosion limit

Lower explosion limit

No data available

Vapour pressure

No data available

Evaporation rate

Relative vapour density

Relative density

No data available

Water solubility dispersible

Partition coefficient: n-

octanol/water

Beta-Cyfluthrin: log Pow: 6.18 (22 °C)

Viscosity, dynamic

Viscosity, kinematic

Oxidizing properties

Explosivity

No data available

No data available

No data available



BAYTHROID® XL

Version 4.0 / USA 102000013617

Revision Date: 09/27/2021 Print Date: 09/29/2021

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.

Conditions to avoid Heat, flames and sparks.

Incompatible materials No incompatible materials known.

Hazardous decomposition

products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Ingestion, Eye contact, Inhalation, Skin Absorption, Skin contact

Immediate Effects

Eye Causes substantial but temporary eye injury. Severe eye irritation.

SkinModerate skin irritation. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in

some individuals.

Ingestion May be fatal if swallowed.

Inhalation Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (male Rat) 647 mg/kg

LD50 (female Rat) 695 mg/kg

Acute inhalation toxicity LC50 (male Rat) 0.7 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

(actual)

LC50 (female Rat) 0.9 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

(actual)

Acute dermal toxicity LD50 (male/female combined Rabbit) > 2,000 mg/kg

Skin corrosion/irritation Moderate skin irritation. (Rabbit)

Serious eye damage/eye

irritation

Severe eye irritation. (Rabbit)

Respiratory or skin

sensitisation

Skin: Sensitising (Guinea pig)



Revision Date: 09/27/2021

Print Date: 09/29/2021

BAYTHROID® XL

Version 4.0 / USA 102000013617

Assessment STOT Specific target organ toxicity - single exposure

Beta-Cyfluthrin: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity - repeated exposure

The toxic effects of Beta-Cyfluthrin are related to transient neurobehavioral effects typical for pyrethroid neurotoxicity.

Assessment mutagenicity

Beta-Cyfluthrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Beta-Cyfluthrin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

Cyclohexanone	108-94-1	Group A3
Naphthalene	91-20-3	Group A3
Hydrocarbons, C10, aromatics, <1%	64742-94-5	Group A3
naphthalene		

NTP

Naphthalene 91-20-3

IARC

Cyclohexanone	108-94-1	Overall evaluation: 3
Naphthalene	91-20-3	Overall evaluation: 2B

OSHA

None.

Assessment toxicity to reproduction

Beta-Cyfluthrin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Beta-Cyfluthrin is related to parental toxicity.

Assessment developmental toxicity

Beta-Cyfluthrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Beta-Cyfluthrin are related to maternal toxicity.

Aspiration hazard

May be fatal if swallowed and enters airways.

Further information

Acute toxicity studies have been bridged from a similar formulation(s).

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

SECTION 12: ECOLOGICAL INFORMATION



BAYTHROID® XL

Version 4.0 / USA 102000013617

Revision Date: 09/27/2021 Print Date: 09/29/2021

Exposure time: 96 h

The value mentioned relates to the active ingredient beta-cyfluthrin.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 0.00029 mg/l

Exposure time: 48 h

The value mentioned relates to the active ingredient beta-cyfluthrin.

Toxicity to aquatic plants IC50 (Desmodesmus subspicatus (green algae)) > 0.01 mg/l

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient beta-cyfluthrin.

No acute toxicity was observed at its limit of water solubility.

BiodegradabilityNo data available **Biodegradability**Beta-Cyfluthrin:

Not rapidly biodegradable

Koc Beta-Cyfluthrin: Koc: 508 - 3179

Bioaccumulation No data available

Bioaccumulation Beta-Cyfluthrin: Bioconcentration factor (BCF) 506

Does not bioaccumulate.

Mobility in soil No data available

Mobility in soil Beta-Cyfluthrin: Immobile in soil

Distribution among environmental compartments

No data available

Results of PBT and vPvB assessment

No data available

PBT and vPvB assessment Beta-Cyfluthrin: 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).

Environmental precautions 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 apply when weather conditions favor runoff or drift.

Drift and runoff from treated areas may be hazardous to aquatic

organisms in adjacent sites.

Do not apply this product or allow it to drift to blooming crops or weeds if

bees are visiting the treatment area.

Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods



BAYTHROID® XL

 Version 4.0 / USA
 Revision Date: 09/27/2021

 102000013617
 Print Date: 09/29/2021

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

NA-Number 1993 Packaging group III

Proper shipping name COMBUSTIBLE LIQUID, N.O.S.

(BETA-CYFLUTHRIN, CYCLOHEXANONE, NAPHTHALENE)

RQ Reportable Quantity is reached with 7,692 lb of product.

IMDG

UN number 3082
Class 9
Packaging group III
Marine pollutant YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(BETA-CYFLUTHRIN, CYCLOHEXANONE SOLUTION)

IATA

UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(BETA-CYFLUTHRIN, CYCLOHEXANONE 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: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN

POISON

SECTION 15: REGULATORY INFORMATION



12/14

BAYTHROID® XL

 Version 4.0 / USA
 Revision Date: 09/27/2021

 102000013617
 Print Date: 09/29/2021

EPA Registration No. 264-840

US Federal Regulations

TSCA list

Hydrocarbons, C10, aromatics, <1% 64742-94-5

naphthalene

Cyclohexanone 108-94-1 Naphthalene 91-20-3

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

Yes Yes

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.

Naphthalene 91-20-3

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

US State Right-To-Know Ingredients

Hydrocarbons, C10, aromatics, <1% 64742-94-5 CT, NJ, RI

naphthalene

Cyclohexanone 108-94-1 CA, CT, IL, MN, NJ, RI

Beta-Cyfluthrin 1820573-27-0 NJ, RI

Naphthalene 91-20-3 CA, CT, IL, MN, NJ, RI

Environmental

CERCLA

Yes

Cyclohexanone 108-94-1

Listed

Yes

Naphthalene 91-20-3

Listed.

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 registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification



13/14

BAYTHROID® XL

 Version 4.0 / USA
 Revision Date: 09/27/2021

 102000013617
 Print Date: 09/29/2021

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: RESTRICTED USE PESTICIDE due to toxicity to fish and aquatic

organisms.

Causes substantial but temporary eye injury.

May be fatal if swallowed.

Harmful if inhaled or absorbed through skin.

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

NFPA 704 (National Fire Protection Association):

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

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

Health - 2 Flammability - 2 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 6. Accidental Release Measures. Section 8: Exposure Controls / Personal Protection. Section 11: Toxicological Information. Section 12. Ecological information. Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

Revision Date: 09/27/2021



BAYTHROID® XL

Version 4.0 / USA 102000013617

14/14Revision Date: 09/27/2021
Print Date: 09/29/2021

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

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.