



**BAYER ADVANCED COMPLETE BRAND INSECT KILLER
FOR GARDENS READY-TO-USE**

Version 2.0 / USA
102000011910

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Revision Date: 03/16/2015
Print Date: 03/16/2015

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

Product identifier

Trade name BAYER ADVANCED COMPLETE BRAND INSECT KILLER FOR
GARDENS READY-TO-USE

Product code (UVP) 06424112

SDS Number 102000011910

EPA Registration No. 432-1211-72155

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

Use Insecticide

Restrictions on use See product label for restrictions.

Information on manufacturer

Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Emergency telephone no.

**Emergency Telephone
Number (24hr/ 7 days)** 1-800-334-7577 (24 hours/day)

**Product Information
Telephone Number** 1-800-331-2867

SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200
Carcinogenicity : Category 2

Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Concentration % by weight
Carbaryl	63-25-2	0.126



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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	Wash off immediately with plenty of 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.

Most important symptoms and effects, both acute and delayed

Symptoms	This product causes reversible cholinesterase inhibition without long term effects., Symptoms of Overexposure, Nausea, Vomiting, Diarrhoea, Abdominal pain, Salivation, Blurred vision, Sweating, Respiratory disorder, Convulsions
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Indication of any immediate medical attention and special treatment needed

Treatment	In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Before antidote is administered, either clear symptoms of poisoning have to be present or the cholinesterase activity is inhibited to below 30% of normal. The following antidote is generally accepted: atropine. In case of convulsions, a benzodiazepine (e.g. diazepam) should be given according to standard regimens. Contraindications: oximes (pralidoxime, obidoxime).
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SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable	Carbon dioxide (CO ₂), Alcohol-resistant foam, Water spray
Unsuitable	None known.



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Special hazards arising from the substance or mixture	Dangerous gases are evolved in the event of a fire.
Advice for firefighters	
Special protective equipment for fire-fighters	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.
Further information	Keep out of smoke. Fight fire from upwind position. Do not allow run-off from fire fighting to enter drains or water courses.
Flash point	The product is not flammable.
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	not applicable

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. 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 Use only in area provided with appropriate exhaust ventilation. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or



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applying cosmetics. 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 original container and out of the reach of children, preferably in a locked storage area.
Protect from freezing.

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
Carbaryl (Inhalable fraction and vapor.)	63-25-2	0.5 mg/m3 (TWA)	02 2012	ACGIH
Carbaryl	63-25-2	5 mg/m3 (REL)	2010	NIOSH
Carbaryl	63-25-2	5 mg/m3 (PEL)	02 2006	OSHA Z1
Carbaryl	63-25-2	5 mg/m3 (TWA)	1989	OSHA Z1A
Carbaryl	63-25-2	5 mg/m3 (TWA)	06 2008	TN OEL
Carbaryl	63-25-2	0.5ug/m3 (AN ESL)	07 2011	TX ESL
Carbaryl	63-25-2	5ug/m3 (ST ESL)	07 2011	TX ESL
Carbaryl	63-25-2	5 mg/m3 (TWA PEL)	08 2010	US CA OEL
Carbaryl	63-25-2	0.5 mg/m3 (TWA)		OES BCS*

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

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.



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Hand protection	Chemical resistant nitrile rubber gloves
Eye protection	Safety glasses with side-shields
Skin and body protection	Wear long-sleeved shirt and long pants and shoes plus socks.
General protective measures	Do not allow children or pets to enter the treated area until it has dried. 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

Appearance	white
Physical State	liquid opaque
Odor	none
Odour Threshold	no data available
pH	3 - 4 at 100 %
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	ca. 1.00 g/cm ³ at 20 °C
Evaporation rate	no data available
Boiling Point	no data available
Melting / Freezing Point	no data available
Water solubility	soluble
Minimum Ignition Energy	not applicable
Decomposition temperature	140 °C
Partition coefficient: n-octanol/water	no data available
Viscosity	50 - 200 cps
Flash point	The product is not flammable.
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	not applicable



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SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	140 °C
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	freezing Extremes of temperature and direct sunlight.
Incompatible materials	Bases, Strong acids
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Ingestion, Inhalation, Eye contact, Skin contact

Immediate Effects

Eye	May cause eye irritation.
Skin	May cause slight irritation.
Ingestion	Harmful if swallowed.
Inhalation	Harmful if inhaled.

Information on toxicological effects

Acute oral toxicity	LD50 (rat) > 1,500 mg/kg
Acute dermal toxicity	LD50 (rabbit) > 2,000 mg/kg
Eye irritation	Mild eye irritation. (rabbit)

Assessment repeated dose toxicity

Carbaryl caused reversible cholinesterase inhibition without long term effects in animal studies.

Assessment mutagenicity

Carbaryl was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Carbaryl caused at high dose levels an increased incidence of tumours in the following organ(s): liver, Thyroid, kidneys, cardio-vascular system. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions.



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ACGIH

Carbaryl 63-25-2 Group A4

NTP

None.

IARC

Carbaryl 63-25-2 Overall evaluation: 3

OSHA

None.

Assessment toxicity to reproduction

Carbaryl did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Carbaryl did not cause developmental toxicity in rats and rabbits.

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

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 3.3 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient carbaryl.
Toxicity to aquatic invertebrates	EC50 (Daphnia magna (Water flea)) 0.0164 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient carbaryl.
Toxicity to aquatic plants	EC50 (Pseudokirchneriella subcapitata) 1.75 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient carbaryl.
Biodegradability	Carbaryl: ; rapidly biodegradable
Koc	Carbaryl: Koc: 624
Bioaccumulation	Carbaryl: Bioconcentration factor (BCF) 44; Does not bioaccumulate.
Mobility in soil	Carbaryl: Slightly mobile in soils
Environmental precautions	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. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.



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Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label instructions and applicable local guidelines. Never place unused product down any indoor or outdoor drain.
Contaminated packaging	Do not re-use empty containers. Place empty container in trash.
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
Marine pollutant	Marine pollutant
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (CARBARYL)
RQ	Reportable Quantity is reached with 7,936 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. (CARBARYL SOLUTION)

IATA

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



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(CARBARYL 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

EPA Registration No. 432-1211-72155

US Federal Regulations

TSCA list

Carbaryl 63-25-2

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

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

Carbaryl 63-25-2 1.0%

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.

Carbaryl 63-25-2

This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Carbaryl 63-25-2 Developmental toxin.
Carbaryl 63-25-2 Male reproductive toxin.

US State Right-To-Know Ingredients

Carbaryl 63-25-2 CA, CT, IL, MN, NJ, RI

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental

CERCLA

Carbaryl 63-25-2 100 lbs

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:



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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 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 by inhalation and if swallowed.
Avoid breathing spray mist.
Avoid contact with skin, eyes and clothing.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

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

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

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

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

Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

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