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BAYER ADVANCED WEED KILLER FOR LAWNS CONCENTRATE

Version 2.0 / USA Revision Date: 04/29/2015 102000012501 Print Date: 04/29/2015

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

Product identifier

Trade name BAYER ADVANCED WEED KILLER FOR LAWNS CONCENTRATE

Product code (UVP) 06533310

SDS Number 102000012501

EPA Registration No. 72155-4

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

Use Herbicide

Restrictions on useSee 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

1-800-334-7577 (24 hours/day)

Number (24hr/ 7 days)

Product Information

1-800-331-2867

Telephone Number

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

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Eye irritation : Category 2B
Signal word: Warning

Hazard statementsCauses eye irritation.

Precautionary statements

Wash thoroughly after handling.

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.

Other hazards

No other hazards known.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component NameCAS-No.Concentration % by weight2,4-D, dimethylamine salt2008-39-17.59Mecoprop-P-dimethylamine salt66423-09-41.83Dicamba, dimethylamine salt2300-66-50.84

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 To date no symptoms are known.

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. There is no specific antidote.

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

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. 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

Autoignition temperature

no data available no data available

> 93.3 ℃

Lower explosion limit 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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, Methods for cleaning up

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

in area provided with appropriate 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

applying cosmetics.

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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. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

2,4-D, dimethylamine salt	2008-39-1	20ug/m3 (ST ESL)	07 2011	TX ESL
2,4-D, dimethylamine salt	2008-39-1	2ug/m3 (AN ESL)	07 2011	TX ESL

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 nitrile rubber gloves

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

Appearance light brown

Physical State liquid, clear

Odor characteristic

Odour Threshold no data available

pH 7.0 - 8.5 at 100 %

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Vapor Pressure no data available
Vapor Density (Air = 1) no data available

Density ca. 1.03 g/cm³ at 20 ℃

Evapouration rateno data availableBoiling Pointno data availableMelting / Freezing Pointno data available

Water solubility soluble

Minimum Ignition Energynot applicableDecompositionnot applicabletemperature

Partition coefficient: n-

octanol/water

no data available

Viscosity

no data available

Flash point $> 93.3 \,^{\circ}$

Autoignition temperatureno data availableLower explosion limitno data availableUpper explosion limitno data availableExplosivitynot applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition not applicable

Chemical stability Stable under recommended storage conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Extremes of temperature and direct sunlight.

Incompatible materials Acids

Hazardous decomposition

products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Skin contact, Eye contact, Inhalation, Ingestion

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Immediate Effects

Eye Moderate eye irritation.

Skin May cause skin irritation.

Ingestion Harmful if swallowed.

Information on toxicological effects

Acute oral toxicity LD50 (rat) > 2,000 mg/kg

Acute inhalation toxicity

no data available

Acute dermal toxicity LD50 (rat) > 2,000 mg/kg

Assessment repeated dose toxicity

2,4-D dimethylamine salt did not cause specific target organ toxicity in experimental animal studies. Mecoprop-P did not cause specific target organ toxicity in experimental animal studies. Dicamba did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

2,4-D dimethylamine salt was not mutagenic or genotoxic in a battery of in vitro and in vivo tests. Mecoprop-P was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Dicamba was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

2,4-D was not carcinogenic in lifetime feeding studies in rats and mice.

Mecoprop-P caused an increased incidence of tumours in in the following organ(s): . The mechanism that triggers these tumours is not relevant to humans.

Dicamba was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH
None

None.

NTP

None.

IARC None.

OSHA

None.

Assessment toxicity to reproduction

2,4-D did not cause reproductive toxicity in a two-generation study in rats. Mecoprop-P did not cause reproductive toxicity in a two-generation study in rats. Dicamba did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

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2,4-D dimethylamine salt caused developmental toxicity only at dose levels toxic to the dams. Mecoprop-P caused developmental toxicity only at dose levels toxic to the dams. Mecoprop-P caused a delayed foetal growth.

Dicamba did not cause developmental toxicity in rats and rabbits.

Further information

No data is available on the product itself.

The information is derived from the properties of the individual components.

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

SECTION 12: ECOLOGICAL INFORMATION

Biodegradability 2,4-D dimethylamine salt: ; not rapidly biodegradable

Mecoprop-P: ; rapidly biodegradable Dicamba: ; not rapidly biodegradable

Koc 2,4-D dimethylamine salt: Koc: 72 - 471

Mecoprop-P: Koc: 20 - 43

Dicamba: Koc: 5.1

Bioaccumulation 2,4-D dimethylamine salt: Bioconcentration factor (BCF) 0.1; Does not

bioaccumulate.

Mecoprop-P: Bioconcentration factor (BCF) 0.02; Does not

bioaccumulate.

Dicamba: ; Does not bioaccumulate.

Mobility in soil 2,4-D dimethylamine salt: Moderately mobile in soils

Mecoprop-P: Mobile in soils Dicamba: Highly mobile in soils

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.

Drift and runoff from treated areas may be hazardous to aquatic

organisms in adjacent sites.

Do not apply when weather conditions favor runoff or drift.

Apply this product as specified on the label.

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.

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Contaminated packaging Do not re-use empty containers.

Place empty container in trash.

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.

(2,4-D DIMETHYLAMINE SALT)

RQ Reportable Quantity is reached with 1,317 lb of product.

IMDG Not dangerous goods / not hazardous material

IATA Not dangerous goods / not hazardous material

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. 72155-4

US Federal Regulations

TSCA list

None.

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

Dicamba, dimethylamine salt 2300-66-5 1.0%

US States Regulatory Reporting

CA Prop65

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

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

US State Right-To-Know Ingredients

2,4-D, dimethylamine salt 2008-39-1 CT, IL, RI Dicamba, dimethylamine salt 2300-66-5 NJ, RI

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental CERCLA

2,4-D, dimethylamine salt 2008-39-1

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

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 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 swallowed.

Moderate eye irritation.

Avoid contact with skin, eyes and clothing.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

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

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

Health - 1 Flammability - 1 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)

Bayer Environmental Science SAFETY DATA SHEET



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