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Notice of Weed Control Application

Date of Application: August 4 – August 31, 2026

Locations: Spray Division Crews Will Treat All Summerlin North Mini-Parks and the Two Pocket Parks Along Cielo Vista, As Needed

Reason for Application: Target weed control in landscape turf area

Product Manufacturer Name: SpeedZone EW

-EPA registration no. 2217-1053

-Active ingredients : 2,4-D, 2-ethylhexyl ester ; Mecoprop-p. DMA salt; Dicamba, DMA salt; Carfentrazone-ethyl

-Signal word: Caution

-Precautionary statement: Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals.

Product Manufacturer Name: Induce

-EPA registration no. N/A

-Active ingredients: Alkyl Aryl Polyoxylkane ethers, alkanolamides, dimethyl siloxane, and Free Fatty Acids

-Signal word: Warning

-Precautionary statement: May be harmful if swallowed. May be harmful in contact with skin. Causes serious eye irritation. Causes skin irritation.

***No applications within 25 feet of playgrounds**

***Product Label and Safety Data Sheet Following**

***Dates are subject to change due to weather**

Number of Nozzles: Use the minimum number of nozzles that provide uniform coverage.

Nozzle Type: Use a nozzle type that is designed for the intended application. With most nozzle types, narrower spray angles produce larger droplets. Consider using low drift nozzles.

Application Height: Making applications at the lowest height practical reduces exposure of spray droplets to evaporation and wind movement.

Swath Adjustment: Swath adjustment distance must increase, with increasing drift potential (higher wind, smaller drops, etc.).

Drift Reduction Technology (DRT): The EPA Drift Reduction Technology (DRT) Program was developed to encourage the manufacture, marketing, and use of spray technologies scientifically verified to significantly reduce pesticide drift. The use of DRTs should result in significantly less pesticide from spray applications drifting and being deposited in areas not targeted by those applications, compared to spray technologies that do not meet the minimum DRT standard. EPA-verified drift reduction technologies (DRTs) and their ratings will be added to the following webpage as they become available: <https://www.epa.gov/reducing-pesticide-drift/epa-verified-and-rated-drift-reduction-technologies>

Wind: Drift potential is lowest between winds speeds of 3 to 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given wind speed. Applications shall be avoided below 3 mph due to variable wind direction and high inversion potential. Do not apply this product when wind speed exceeds 10 mph. **NOTE:** Local terrain can influence wind patterns. Every applicator shall be familiar with local wind patterns and how they affect spray drift.

Temperature and Humidity: When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

Temperature Inversions: Do not apply this product during a temperature inversion because the drift potential is high. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Temperature inversions are characterized by increasing temperatures with altitude and are common on nights with limited cloud cover and light to no wind. They begin to form as the sun sets and often continue into the following morning. Their presence can be indicated by ground fog. However, if fog is not present, inversions can also be identified by the movement of smoke from a ground source or an aircraft smoke generator. Smoke that layers and moves laterally in a concentrated cloud (under low wind conditions) indicates an inversion, while smoke that moves upward and rapidly dissipates indicates good vertical air mixing.

Shielded Sprayers: Shielding the boom or individual nozzles can reduce the effects of wind. However, it is the responsibility of the applicator to verify that the shields are preventing drift and not interfering with uniform deposition of the product.

Susceptible Plants: Do not apply under circumstances where spray drift may occur to food, forage, or other plantings that might be damaged or crops thereof rendered unfit for sale, use or consumption. Susceptible crops include, but are not limited to, cotton, okra, flowers, grapes (in growing stage), fruit trees (foliage), soybeans (vegetative stage), ornamentals, sunflowers, tomatoes, beans, and other vegetables, or tobacco. Small amounts of spray drift that might not be visible may injure susceptible broadleaf plants.

8. Where To Use

• Ornamental Turfgrass sites:

- **Residential/domestic sites** including areas associated with household or home life including apartment complexes, and condominiums.
- **Ornamental turf sites** including turfgrass established around residences, parks, streets, cracks in, and the edges of, paved areas, retail outlets, cemeteries, industrial and institutional buildings, recreation areas, playgrounds, fairgrounds, and athletic fields.
- **Institutional sites** including properties or facilities providing a service to public or private organizations including, but not limited to hospitals, nursing homes, schools, museums, libraries, sport facilities, golf courses, and office buildings.
- **Non-cropland sites:** including farmyards, fencerows or fence lines, highway rights-of-way (principal, interstate, county, private, and unpaved roads): Roadsides, roadside ditches, road shoulders, road embankments, dividers, and medians; Industrial sites: Lumberyards, tank farms, fuel or equipment storage areas; Municipal, state, and federal lands: Airports and military installations; railroad rights-of-ways, railroad yards, railroad crossings and railroad bridge abutments; Utility rights-of-way: telephone, pipeline, electrical powerlines, and communication transmission lines.
- **Agricultural site:** Commercial sod production

Site Restrictions:

- Do not apply this product to bentgrass mowed under 1/4 inch, St. Augustinegrass, bahiagrass, centipedegrass, seashore paspalum, carpetgrass, dichondra, legumes, and lawns where desirable clovers are present.
- Do not apply to any body of water including lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays), or wetlands (swamps, bogs, potholes, or marshes). Do not apply to any shorelines (noncropland sites adjacent to the edges of a body of water) for lakes, streams, rivers, ponds, reservoirs, or estuaries (salt water bays).
- Do not apply to agricultural irrigation water or irrigation ditch banks and canals.

State Restrictions:

Arizona: The state of Arizona has not approved this product for use on sod farms.

9. How Much To Use

Use rates and spray volumes:

Generally, the lower application rates within the specified range will provide satisfactory control of sensitive weed species. The higher application rates within the specified range will be required for dense infestations of perennial weeds, for adverse/extreme environmental conditions, or for weeds hardened off or more mature.

Table 1. Use Rates For Ornamental Turfgrass, Sod Farms, and Non-Cropland.		
Species	Rate	Spray Volume
Cool-Season Turf		
Kentucky bluegrass, annual bluegrass, annual ryegrass, perennial ryegrass, tall fescue, red or fine leaf fescues, creeping bentgrass, colonial bentgrass (excluding golf greens)	3 to 5 pt/acre 1.1 to 1.8 fl.oz./ 1000 sq.ft.	3 to 220 gal/acre 9 fl.oz. to 5 gal/ 1000 sq.ft.
Mixtures of cool-season species in noncropland areas established for aesthetic purposes	3 to 5 pt/acre 1.1 to 1.8 fl.oz./ 1000 sq.ft.	3 to 220 gal/acre 9 fl.oz. to 5 gal/ 1000 sq.ft.
Mixtures of cool-season species in noncropland areas established for roadside vegetation management or for low maintenance. (Kentucky bluegrass, tall fescue, smooth brome grass, and orchardgrass)	3 to 5 pt/acre 1.1 to 1.8 fl.oz./ 1000 sq.ft.	3 to 220 gal/acre 9 fl.oz. to 5 gal/ 1000 sq.ft.
Warm-Season Turf		
Common Bermudagrass, hybrid Bermudagrass, zoysiagrass and buffalograss	2 to 4 pt/acre 0.75 to 1.5 fl.oz./ 1000 sq.ft.	3 to 220 gal/acre 9 fl.oz. to 5 gal/ 1000 sq.ft.
For Warm-Season turf, the lower rates listed above should be used in temperatures above 90°F.		
Note: It is impossible to test all environmental conditions for the listed turfgrasses. We suggest testing this product on a small area and observe the treated area for 30 days to determine the acceptability of turf discoloration.		
SpeedZone EW Broadleaf Herbicide for Turf should only be applied to turfgrass species that are listed in Table 1 unless trial use indicates that the turf species not listed is tolerant to SpeedZone EW Broadleaf Herbicide for Turf.		
In addition to applications to actively growing Bermudagrass, zoysiagrass, and buffalograss, fully dormant applications to these species will control winter annual broadleaf weeds. Applications during winter-to-spring and fall-to-winter transition periods are not advised.		

Limitations on broadcast treatments for Ornamental Turfgrass, Sod Farms, and Non-Cropland:

The maximum application rate is 5 pt of product per acre per application [0.79 lb 2,4-D ae, 0.26 lb MCPP-p ae, 0.075 lb dicamba ae and 0.025 lb carfentrazone per acre per application]. The maximum number of broadcast applications is limited to 2 per year with a minimum of 30 days between applications. The maximum seasonal rate is 10 pt of product per acre per year [1.59 lb 2,4-D ae, 0.53 lb MCPP-p ae, 0.15 lb dicamba ae and 0.05 lb carfentrazone per acre].

Spot Treatment with Hand Operated Sprayers (including backpack sprayers and pump-up type sprayers):

- Apply any time the emerged broadleaf weeds are actively growing.
- Spray the target weeds thoroughly and wet the entire leaf surface of the undesirable plants.
- Calibration and proper application are essential when using this product.
- Uniform applications are essential when using this product. Over application or rates above those specified on this label including excessive overlaps of this product can cause turf injury.
- Follow-up applications as spot treatments at a 30 day interval are advised for more mature weeds, for dense infestations, and for adverse environmental conditions.
- **For cool-season turfgrasses listed in Table 1:** Mix 1.1 to 1.8 fl.oz. of SpeedZone EW Broadleaf Herbicide for Turf per 1 gal of water for treatment of approximately 1000 sq.ft of turfgrass.
- **For warm-season turfgrasses listed in Table 1:** Mix 0.75 to 1.5 fl.oz. of SpeedZone EW Broadleaf Herbicide for Turf per 1 gal of water for treatment of approximately 1000 sq.ft of turfgrass. For warm-season turf, lower rates listed above should be used in temperatures above 90°F.

Limitations on spot treatments:

Spot treatment is defined as a treatment area no greater than 1000 sq.ft. per acre. The maximum application rate is 1.8 fl.oz. per 1000 sq.ft. per application. The maximum number of spot treatments is limited to 2 per year with a minimum of 30 days between applications.

Hand-held techniques: Wands fitted with flat fan nozzle tips may be used with the appropriate technique. Flat fan nozzles should not be waved in a back-and-forth motion, or in a side-to-side motion, or in a swinging arm motion. Instead the nozzle should be held stationary at the proper height. Side-to-side motions result in uneven coverage.

Issue Date 27-May-2020

Revision Date 02-Jun-2020

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier.

Product Name SpeedZone® EW Broadleaf Herbicide for Turf

Other means of identification

Product Code PBI FP 658

EPA Pesticide Registration Number 2217-1053

Recommended use of the chemical and restrictions on use

Recommended Use Herbicide

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

PBI-Gordon Corporation
P.O. Box 860350
Shawnee, KS 66286

Company Name

PBI-Gordon Corporation
P.O. Box 860350
Shawnee, KS 66286

Manufacturer

PBI-Gordon Corporation
P.O. Box 860350
Shawnee, KS 66286

Emergency telephone number

24 Hour Emergency Phone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Oral Toxicity	Category 4
Serious eye damage/eye irritation	Category 2B
Skin Sensitization	Category 1
Acute Aquatic Toxicity	Category 1
Chronic Aquatic Toxicity	Category 1

Label elements

Emergency Overview

Signal word

Warning

Hazard statements

- Harmful if swallowed
- Causes eye irritation
- May cause an allergic skin reaction
- Very toxic to aquatic life with long lasting effects



Appearance Liquid

Physical state Liquid

Odor Sweet

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing must not be allowed out of the workplace
Wear protective gloves

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of soap and water
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 skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Have the product label with you when calling a poison control center or doctor or going in for treatment. You may also contact 1-877-800-5556 for emergency medical treatment advice.

Other information

Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS-No	Weight-%
2,4-D, 2-ethylhexyl ester	1928-43-4	25.86
MCPP-p Dimethylamine Salt	66423-09-4	6.84
Dimethylamine dicamba	2300-66-5	1.91
Carfentrazone-ethyl	128639-02-1	0.57
Trade Secret	Trade secret	0 - 10%

* The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. If symptoms persist, call a physician.
Skin contact	Wash with soap and water. In the case of skin irritation or allergic reactions see a physician.
Inhalation	Remove to fresh air.
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available
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Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by skin contact.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage. Dispose of contents/container to an approved waste disposal plant.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers. Keep out of the reach of children. Keep from freezing.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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2,4-D, 2-ethylhexyl ester 1928-43-4	TWA: 10 mg/m ³ inhalable fraction S*	TWA: 10 mg/m ³	IDLH: 100 mg/m ³ , TWA: 10 mg/m ³
Carfentrazone-ethyl 128639-02-1	TWA: 1 mg/m ³ inhalable particulate matter	-	-
Trade Secret	STEL: 15 ppm TWA: 5 ppm	TWA: 10 ppm TWA: 18 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 18 mg/m ³	IDLH: 500 ppm TWA: 10 ppm TWA: 18 mg/m ³

Appropriate engineering controls

Engineering controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Hand protection Chemical resistant gloves.

Skin and body protection Wear long-sleeved shirt, long pants, socks and shoes.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Color White
Odor Sweet
Odor threshold No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6-8	
Melting point/freezing point		None known
Boiling point / boiling range	No data available	None known
Flash point	> 96 °C / 205 °F	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Specific Gravity	1.051	
Water solubility	Emulsifiable	
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known

Other Information

Liquid Density 8.75 pounds/gallon
Bulk density No information available

10. STABILITY AND REACTIVITY

Reactivity

No information available.

Stability

Stable under recommended storage conditions

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Keep out of reach of children.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Causes eye irritation.
Skin contact	May be harmful in contact with skin.
Ingestion	Harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2,4-D, 2-ethylhexyl ester 1928-43-4	= 300 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.4 mg/L (Rat) 4 h
Dimethylamine dicamba 2300-66-5	= 1267 mg/kg (Rat) = 2629 mg/kg (Rat)	> 2 g/kg (Rabbit) > 2000 mg/kg (Rabbit)	-
Carfentrazone-ethyl 128639-02-1	= 5143 mg/kg (Rat)	> 4000 mg/kg (Rat)	= 5.09 mg/L (Rat) 4 h
Trade Secret	= 698 mg/kg (Rat)	= 3900 mg/kg (Rat)	= 4540 ppm (Rat) 6 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	No information available.
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Acute toxicity

Numerical measures of toxicity - Product Information

Unknown Toxicity

42 % of the mixture consists of ingredient(s) of unknown toxicity

LD50 Oral	= 1750 mg/kg (female rats)
LD50 Dermal	> 5000 mg/kg (rat)
LC50 Inhalation (DUST)	> 2.17 mg/L (rat)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Slightly irritating to the skin.

Serious eye damage/eye irritation Causes eye irritation.

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity The International Agency for Research on Cancer (IARC) lists chlorophenoxy herbicides in its Group 2B (limited evidence for Carcinogenicity in humans.) The US EPA has given the chlorophenoxy Herbicides 2,4-D, 2,4-DP, MCPP, and MCPA a Class D classification (not classifiable as to human carcinogenicity.) More current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic effects and a recent World Health Organization (WHO) review of 2,4-D toxicology has concluded that 2,4-D is not a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
2,4-D, 2-ethylhexyl ester 1928-43-4	-	Group 2B	-	X
MCPP-p Dimethylamine Salt 66423-09-4	-	Group 2B	-	-

Legend

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2,4-D, 2-ethylhexyl ester 1928-43-4	30: 120 h Pseudokirchneriella subcapitata mg/L EC50 30: 120 h Pseudokirchneriella subcapitata mg/L EC50 static	7.8: 96 h Oncorhynchus mykiss mg/L LC50 static 11.5: 96 h Lepomis macrochirus mg/L LC50 static 6 - 8.7: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	-	-
Trade Secret	9: 96 h Pseudokirchneriella subcapitata mg/L EC50	210: 96 h Poecilia reticulata mg/L LC50 static 111 - 125: 96 h Oncorhynchus mykiss mg/L LC50 120: 96 h Oncorhynchus mykiss mg/L LC50 static 127 - 349: 96 h Poecilia reticulata mg/L LC50 semi-static 396: 96 h Brachydanio rerio mg/L LC50 static	EC50 = 26.8 mg/L 15 min	88.7: 48 h Daphnia magna Straus mg/L EC50

Persistence and degradability No information available.

Bioaccumulation No information available.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

Note: Products under 44 gallons not regulated by DOT. Below are designations for products over 44 gallons. See RQ

DOT

UN/ID no.	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard class	9
Packing group	III
Reportable Quantity (RQ)	2,4-D, 2-ethylhexyl ester: RQ (lb)= 387.00=44 gallons
Special Provisions	8, 146, 173, 335, IB3, T4, TP1, TP29
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D, 2-ethylhexyl ester), 9, III, Marine pollutant

TDG

UN/ID no.	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard class	9
Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D, 2-ethylhexyl ester), 9, III

MEX

UN/ID no.	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard class	9
Special Provisions	274, 331, 335
Packing group	III
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D, 2-ethylhexyl ester), 9, III

ICAO (air)

UN/ID no.	UN3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Hazard class	9
Packing group	III
Special Provisions	A97, A158, A197
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D, 2-ethylhexyl ester), 9, III

IATA

	Limited quantity applies with an inner packaging less than 5 L or gross package weight less than 30 kg.
UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
Special Provisions	A97, A158, A197
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D, 2-ethylhexyl ester), 9, III

2-ethylhexyl ester), 9, III

IMDG

	Limited quantity applies with an inner packaging less than 5 L or gross package weight less than 30 kg.
UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
EmS-No.	F-A, S-F
Special Provisions	274, 335, 969
Description	UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D, 2-ETHYLHEXYL ESTER), 9, III, MARINE POLLUTANT

15. REGULATORY INFORMATION

U.S. EPA Label Information

EPA Pesticide Registration Number 2217-1053

Federal Insecticide, Fungicide, Rodenticide Act Regulations

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 as required on the pesticide label:

EPA Pesticide Label

Caution

Keep out of reach of children

Hazards to Humans and Domestic Animals. CAUTION: Causes moderate eye irritation. Harmful if swallowed. Avoid contact with eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Environmental Hazards: This pesticide is toxic to fish and aquatic invertebrates and may adversely affect non-target plants. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate. 2,4-D and Mecoprop-p have properties and characteristics associated with chemicals detected in groundwater. The use of these chemicals in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater. **Fish Advisory Statement:** This product may be hazardous to aquatic organisms, particularly in clear, shallow water bodies that are adjacent to treated areas. Transport to water by runoff or spray drift of this product in areas where surface water is present, or intertidal areas below the mean high water mark, should be avoided. Do not contaminate water when disposing of equipment wash water or rinsate. **Non-target Organism Advisory Statement:** This product is toxic to plants and may adversely impact the forage and habitat of non-target organisms, including pollinators, in areas adjacent to the treated site. Protect the forage and habitat of non-target organisms by minimizing spray drift.

International Inventories

TSCA	Not Listed
DSL/NDSL	Not Listed
EINECS/ELINCS	Not Listed
ENCS	Not Listed
IECSC	Not Listed
KECL	Not Listed
PICCS	Not Listed
AICS	Not Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
2,4-D, 2-ethylhexyl ester 1928-43-4	100 lb	-	-	-
Trade Secret	1000 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
2,4-D, 2-ethylhexyl ester 1928-43-4	100 lb	-
Trade Secret	1000 lb	-

US State Regulations

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
2,4-D, 2-ethylhexyl ester 1928-43-4	X	-	-
Trade Secret	X	-	X
Dimethylamine dicamba 2300-66-5	X	-	-
Trade Secret	X	X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
<u>HMIS</u>	Health hazards 2	Flammability 1	Physical hazards 0	Personal protection X

Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of PBI Gordon Corporation's knowledge, information and belief at the date of this publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process, unless specified in the text. PBI GORDON CORPORATION MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. Given the variety of factors that can affect the use and application of this product, some of which are

uniquely within the user's knowledge and control, it is essential that the user evaluate the product to determine whether it is fit for a particular purpose and suitable for user's method of use or application. Each user is also responsible for evaluating the conditions of use and designing the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. PBI Gordon Corporation assumes no responsibility for injury to the recipient or third persons, or for any damage to any property resulting from misuse of the product.

End of Safety Data Sheet



A Nonionic Low Foam Wetter/Spreader Adjuvant

*ACTIVE INGREDIENTS:

Alkyl Aryl Polyoxylkane ethers, alkanolamides, dimethyl siloxane, and Free Fatty Acids	90.0%
Components ineffective as adjuvant	10.0%
TOTAL	100.0%
Surfactant Content:	70.0%

*All ingredients are accepted for use under CFR 40, 180.

KEEP OUT OF REACH OF CHILDREN

WARNING

May be harmful if swallowed
May be harmful in contact with skin
May be harmful if inhaled
Causes serious eye irritation
Causes skin irritation



NET CONTENTS: ☐ 1 Gallon (3.785 Liters)
☐ 2.5 Gallons (9.46 Liters)
☐ 30 Gallons (113.55 Liters)
☐ 55 Gallons (208.18 Liters)
☐ 250 Gallons (946.25 Liters)

SN 031115

MANUFACTURED FOR
HELENA CHEMICAL COMPANY
225 SCHILLING BOULEVARD, SUITE 300
COLLIERVILLE, TN 38017
901-761-0050

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING

BEFORE USING THIS PRODUCT, READ ALL PRECAUTIONS, DIRECTIONS FOR USE, CONDITIONS OF SALE, LIMITED WARRANTY, AND LIMITATIONS OF LIABILITY AND REMEDIES.

May be harmful if swallowed. May be harmful in contact with skin. May be harmful if inhaled. Causes serious eye irritation. Causes skin irritation. Keep product locked up and out of the reach of children. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or smoking tobacco. Remove and wash contaminated clothing before reuse. Do not take internally. Avoid contact with or inhalation of spray application mist if present. Do not apply this product in such a manner as to directly expose workers or other persons. If product is being mixed with pesticides and or spray adjuvants, follow all precautionary statements on the accompanying product(s) labeling. Not for human or animal consumption.

PERSONAL PROTECTIVE EQUIPMENT

Applicators and other handlers must wear:

- Long sleeved shirt and long pants
- Chemical-resistant gloves, such as barrier laminate, butyl rubber, nitrile rubber or viton
- Shoes plus socks
- Protective eyewear

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

FIRST AID

IF IN EYES:	• Rinse cautiously with water for several minutes. • Remove contact lenses, if present and easy to do. Continue rinsing. • Call a poison control center or doctor for treatment advice.
IF SWALLOWED:	• Call a POISON CENTER or doctor immediately. • Rinse mouth. Do NOT induce vomiting. • Do not give anything by mouth to an unconscious person. • Immediately call a POISON CENTER or doctor.
IF INHALED:	• Move person to fresh air and keep at rest in a position comfortable for breathing if they feel unwell. • If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if

Disclaimer: Always refer to the label on the product before using Helena or any other product.

	possible. • Call a POISON CENTER or doctor for treatment advice.
IF ON SKIN OR HAIR:	• Take off immediately all contaminated clothing. Rinse skin with water or shower. • Get medical attention if irritation develops or persists. • Wash contaminated clothing before reuse.

HOT LINE NUMBER

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store in original container only. Keep container tightly closed. Do not allow water to be introduced into the contents of this container. Do not store near heat or open flame. Do not store with oxidizing agents or ammonium nitrate.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Do not contaminate water sources by runoff from cleaning of equipment, disposal of cleaning equipment wash waters, or spray waste.

CONTAINER DISPOSAL: Do not reuse empty container. Triple rinse (or equivalent) during mixing and loading and add rinse water to spray tank. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at www.acrcycle.org. Decontaminated containers may also be disposed of in a sanitary landfill.

For help in chemical emergencies involving spill, leak, fire or exposure, call toll free 1-800-424-9300.

GENERAL INFORMATION

INDUCE® is a blend of nonionic surfactants, deposition agents, humectants, and defoamers. INDUCE® incorporates the properties of a wetter/spreader surfactant when used in spray mixtures. INDUCE® is designed to quickly wet and spread a more uniform spray deposit over leaf and stem surfaces and improve spray mix deposition. INDUCE® can positively affect pesticide spray application and pesticide efficacy. INDUCE® is recommended for use with those pesticides whose label recommends a non-ionic wetter/spreader-type adjuvant.

DIRECTIONS FOR USE

FOR USE WITH PRODUCTS REGISTERED FOR: AGRICULTURAL, AQUATIC, FORESTRY, INDUSTRIAL, MUNICIPAL, NON-CROPLAND, ORNAMENTAL, RIGHTS-OF-WAY, TURF AND OTHER USES.

The addition of an adjuvant to some pesticides or pesticide tank mix combinations may cause phytotoxicity to the foliage and/or fruit of susceptible crops. Prior to the addition of INDUCE® to spray tank mixes, the user or application advisor must have experience with the combination or must have conducted a phytotoxicity trial or must take the recommendations from the labels of the products to be tank mixed.

INDUCE® may be applied by Ground, CDA, Aerial, or Aquatic spray equipment. For most applications, use enough INDUCE® to allow for uniform wetting and deposition of the spray onto leaf surfaces without undue runoff.

Ground, Aerial, CDA: Use 1-4 pints per 100 gallons of spray or 0.125-0.50% by volume.

Aquatic: Use 1-4 pints per 100 gallons of spray or 0.125-0.50% by volume.

*Note: The above use recommendations are considered to be adequate for most uses. Some pesticides however, may require higher or lower rates for optimum effect. Follow the pesticide(s) label(s) directions when this occurs.

For improved water penetration of hard-to-wet soils and the uniform distribution of applied moisture:

Lawns and Turf: Use INDUCE® at .50% v/v concentration.

Greens and Tees: Use INDUCE® at .125-.25% v/v concentration.

Deep Feeding Trees: Use INDUCE® at .25-.50% v/v concentration.

Application of INDUCE® through irrigation systems are possible provided that recommended use rates and dilutions are maintained and local, state, and federal guidelines are followed.

MIXING

Prior to any pesticide application all spray mixing and application equipment must be cleaned. Carefully observe all cleaning directions of the pesticide(s) label(s).

Fill spray tank one-half full with water and begin agitation. Add pesticides as directed by labeling or in the following sequence:

1. Dry flowables or water dispersible granules.
2. Wettable powders
3. Flowables
4. Solutions
5. Emulsifiable concentrates

and continue filling. Add INDUCE® last and continue agitation.

**CONDITIONS OF SALE—LIMITED WARRANTY AND
LIMITATIONS OF LIABILITY AND REMEDIES**

Read the Conditions of Sale—Warranty and Limitations of Liability and Remedies before using this product. If the terms are not acceptable, return the product, unopened, and the full purchase price will be refunded.

The directions on this label are believed to be reliable and must be followed carefully. Insufficient control of pests and/or injury to the crop to which the product is applied may result from the occurrence of extraordinary or unusual weather conditions or the failure to follow the label directions or good application practices, all of which are beyond the control of Helena Chemical Company (the "Company") or seller. In addition, failure to follow label directions may cause injury to crops, animals, man or the environment. The Company warrants that this product conforms to the chemical description on the label and is reasonably fit for the purpose referred to in the directions for use subject to the factors noted above which are beyond the control of the Company. The Company makes no other warranties or representations of any kind, express or implied, concerning the product, including no implied warranty of merchantability or fitness for any particular purpose, and no such warranty shall be implied by law.

The exclusive remedy against the Company for any cause of action relating to the handling or use of this product shall be limited to, at Helena Chemical Company's election, one of the following:

1. Refund of the purchase price paid by buyer or user for product bought, or
2. Replacement of the product used

To the extent allowed by law, the Company shall not be liable and any and all claims against the Company are waived for special, indirect, incidental, or consequential damages or expense of any nature, including, but not limited to, loss of profits or income. The Company and the seller offer this product and the buyer and user accept it, subject to the foregoing conditions of sale and limitation of warranty, liability and remedies.

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INDUCE® is a registered trademark of Helena Holding Company.



Safety Data Sheet

Report Date 04-Aug-15

Page 1 of 4

1. Identification

Product Name : INDUCE
Synonyms : None
Product Use : Nonionic Low Foam Wetter/Spreader Adjuvant
Manufacturer/Supplier : Helena Chemical Company
Address : 225 Schilling Blvd. Collierville, TN 38017
General Information : 901-761-0050
Transportation Emergency Number : CHEMTREC:800-424-9300

2. Hazard Identification



Signal Word : Warning
Skin Irritation : Moderately irritating
Eye Irritation : Severely irritating in non-washed eye (35.8); moderately irritating in washed eye (16.3); Injury was reversible.
Acute Toxicity Oral : LD50 >4,000 mg/kg (rat)
Acute Toxicity Dermal : LD50 >2,000 mg/kg (rat)
Hazard Categories : Oral/Dermal/Inhalation Toxicity - 5/5/5; Eye Irritation - 2A; Skin Irritation - 2
Hazard Statement : May be harmful if swallowed
May be harmful in contact with skin
Causes serious eye irritation
Causes skin irritation
May be harmful if inhaled

3. Composition / Information on Ingredients

Component	CAS Number	Weight %
Alkyl Aryl Polyoxylkane ethers, alkanolamides, dimethyl siloxane, and free fatty acids.	Proprietary	90.00
Components ineffective as adjuvant.	Nonhazardous	10.00

4. First Aid Measures

Eye : Immediately flush eyes with water for at least 15 minutes. See a physician.
Skin : Remove contaminated clothing and wash skin with soap and water. Call a physician if irritation persists.
Inhalation : Move victim to fresh air. Give artificial respiration if needed. See a physician.
Ingestion : Give a large amount of water to drink, induce vomiting and immediately call a physician. Do not induce vomiting or give anything by mouth to an unconscious person.
Indication of Immediate Medical Attention and Special Treatment Needed : If contact is made with the spray solution containing pesticides, refer to the "Statement of Practical Treatment/First Aid" on the pesticide label(s). Otherwise, treat symptomatically.

5. Fire Fighting Measures

Extinguishing Media : Use dry chemical, water spray, water fog, carbon dioxide, foam, or sand/earth.



Safety Data Sheet

Report
Date 04-Aug-15

Page 2 of 4

Specific Hazards Arising from the Chemical : Water spray be ineffective. Cool fire-exposed containers with water. Fog nozzles are preferable. Closed containers may rupture or explode when exposed to extreme heat.

Special Fire Fight Proc : Wear self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

Personal Precautions : Keep unprotected and unnecessary personnel out of spill area.

Protective Equipment : Splashproof goggles or face shield, chemical-resistant gloves, impervious apron and footwear. Eyewash should be available in work area. Use NIOSH-approved respirator with organic vapor cartridge if PEL exceeded.

Emergency Procedures : Prevent spreading of spilled material into any waterways, drains or sewers.

Methods and Materials for Containment and Cleanup : Absorb with an inert material such as sand, soil or vermiculite. Sweep up and dispose of in accordance with Federal, State and Local regulations.

7. Handling and Storage

Precautions for Safe Handling : Keep out of reach of children. Keep container tightly closed. Do not contaminate water sources by runoff from cleaning of equipment, disposal of equipment wash waters or spray waste.

Conditions for Safe Storage : Do not store with food, feed or other material to be used or consumed by humans or animals. Store in original container only. Do not allow water to be introduced into the contents of this container.

8. Exposure Controls / Personal Protection

TLV/PEL : PEL 100 mg/m³.

Appropriate Engineering Controls : Mechanical exhaust system

Personal Protective Equipment : Splashproof goggles or face shield, chemical-resistant gloves, impervious apron and footwear. Eyewash should be available in work area. Use NIOSH-approved respirator with organic vapor cartridge if PEL exceeded.

9. Physical and Chemical Properties

Odor/Appearance : Clear-slightly hazy colorless to yellow liquid.

Flash Point, °F : >200 Degrees F.

Boiling Point, °F : >250 Degrees F.

Melting Point(Freezing point), °C : Not applicable

Vapor Pressure, mm Hg @ 20 °C : Not established

Vapor Density : 2.1

Solubility in Water : Dispersible

Molecular Formula : Not applicable, formulated mixture.

Density, g/mL @ 25 °C : 0.956-1.033

Evaporation Rate(Butyl Acetate = 1) : Not applicable

Octanol/Water Partition Coefficient : No information found

pH : 4-5.0

Flammable Limits (approximate volume % in air) : No information found

Auto-ignition Temperature : >750 Degrees F.

Decomposition temperature : No information found



Safety Data Sheet

Report Date **04-Aug-15**

Page 3 of 4

10. Stability and Reactivity

- Reactivity : No information found
- Chemical Stability : Stable
- Hazardous Decomposition : Carbon monoxide and carbon dioxide under fire conditions.
- Products
- Hazardous Polymerization : Will not occur
- Conditions to Avoid : Excessive heat and open flames.
- Incompatible Materials : Do not mix with strong oxidizers such as hydrogen peroxide, bromine and chromic acid.

11. Toxicological Information

- Acute Toxicity (Oral LD50) : >4,000 mg/kg (rat)
- Acute Toxicity (Dermal LD50) : >2,000 mg/kg (rat)
- Acute Toxicity Inhalation LC50 : 2.02 mg/L (vapor limit)
- Likely Routes of Exposure : Eyes, skin.
- Skin Irritation : Moderately irritating.
- Eye Irritation : Severely irritating in non-washed eyes (35.8), moderately irritating in washed eyes (16.3). Injury was reversible.
- Skin Sensitization : Not listed as a sensitizer.
- Carcinogenic : Not listed by IARC, NTP or OSHA.
- Chronic Effects : None currently known.
- Other Hazards : May contain components which, in laboratory tests, have been toxic to the fetus only at doses toxic to the mother.

12. Ecological Information

- Ecotoxicity : No information found
- Persistence and Degradability : No information found
- Bioaccumulative Potential : No information found
- Mobility in Soil : No information found
- Other Adverse Effects : Contains Alcohol C-12-C-16 Poly (1-6) Ethoxylate - a marine pollutant.

13. Disposal Considerations

- Waste Disposal Method : This material must be disposed of according to Federal, State or Local procedures under the Resource Conservation and Recovery Act.

14. Transport Information

- UN Proper Shipping Name : Not regulated by DOT in non-bulk packages. Regulated in bulk or if shipped by air (IATA) or vessel (IMDG) as Environmentally Hazardous Substance, Liquid, n.o.s., (Alcohol C12-C16 Poly (1-6) Ethoxylate)
- Transport Hazard Class : Class 9 (bulk/IATA/IMDG)
- UN Identification Number : 3082(bulk/IATA/IMDG)
- Packaging Group : PG III (bulk/IATA/IMDG)
- Environmental Hazards : Marine Pollutant
- Transport in Bulk : Marine Pollutant
- Special Precautions for Transportation : No information found



Safety Data Sheet

Report
Date 04-Aug-15

Page 4 of 4

Freight Classification : Adhesives, Adjuvants, Spreaders or Stickers, N.O.I. (NMFC Item 42652, Class 60)

15. Regulatory Information

**National Fire Protection
Association Rating :**

Health: 1 Fire: 1 Reactivity: 0
Rating Level: (4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

**S.A.R.A Title III Hazard
Classification (Yes/No) :**

Immediate(Acute) Health: Y
Delayed (Chronic) Health: N
Sudden Release of N
Pressure:
Fire: N
Reactive: N

16. Other Information

Data of Preparation/Revision : 04-August-2015