



VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet Hi-Yield 2,4-D Selective Weed Killer

SECTION 1: Identification

GHS Product identifier

Product name	Hi-Yield 2,4-D Selective Weed Killer
Product number	21414; 21415; 21415Q; 21416
Brand	Hi-Yield

Other means of identification

EPA Reg. No. 228-238-7401

Recommended use of the chemical and restrictions on use

Herbicide.

Supplier's details

Name	Voluntary Purchasing Groups, Inc.
Address	230 FM 87 Bonham TX 75418 USA
Telephone	855-270-4776

Emergency phone number

In the event of a medical or chemical emergency contact ChemTel, Inc.
North American 1-800-255-3924 or worldwide Intl. + 01-813-248-0585

SECTION 2: Hazard identification

General hazard statement

Causes eye irritation. Harmful if swallowed. May cause damage to organs (liver, kidneys) through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2012)

- Eye damage/irritation, Cat. 2B
- Acute toxicity, oral, Cat. 4
- Specific target organ toxicity (repeated exposure), Cat. 2

GHS label elements, including precautionary statements

Pictograms

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Signal word

Warning

Hazard statement(s)

H320
H302
H373

Causes eye irritation
Harmful if swallowed
May cause damage to organs [organs] through prolonged or repeated exposure [route]
Toxic to aquatic life
Toxic to aquatic life with long lasting effects

Precautionary statement(s)

P264
P305+P351+P338

P337+P313
P270
P301+P312
P330
P501
P260
P314
P102
P103

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.
Do not eat, drink or smoke when using this product.
IF SWALLOWED: Call a POISON CENTER /doctor/...if you feel unwell, Rinse mouth.
Dispose of contents/container to ...
Do not breathe dust/fume/gas/mist/vapors/spray.
Get medical advice/attention if you feel unwell.
Keep out of reach of children.
Read label before use.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
Dma 4 (dow) 49 percent 2,4- d, dimethylamine salt (CAS no.: 2008-39-1)	11.25 - 12.5 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Trade secret	Not specified, Trade secret
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

Trade secret statement (OSHA 1910.1200(i))

Ingredients not precisely identified are proprietary or non-hazardous. Values are not products specifications.

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

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

If inhaled

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

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In case of skin contact	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
In case of eye contact	Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Eye irritation

Indication of immediate medical attention and special treatment needed, if necessary

There is no specific antidote if this product is ingested. Treat symptomatically

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Water spray, foam, dry chemical or carbon dioxide (CO₂).

Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

Specific hazards arising from the chemical

Firefighters should wear NIOSH self-contained breathing apparatus and full firefighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Special protective actions for fire-fighters

Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

Further information

Containers will burst from internal pressure under extreme fire conditions. If water is used to fight fire or cool containers, dike to prevent runoff contamination of municipal sewers and waterways. May produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental precautions

Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal. Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

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Methods and materials for containment and cleaning up

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and

contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for

more information.

Reference to other sections

Section 8.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid breathing vapors or spray mist. Do not get in eyes, on skin or on clothing. Users should wash hands before eating,

drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. Remove PPE immediately after handling this product. Wash the outside of gloves before

removing. As soon as possible, wash thoroughly and change into clean clothing.

Conditions for safe storage, including any incompatibilities

Store in original container in a dry, secured storage area. Keep container tightly closed when not in use. Store at temperatures above 32° F. If allowed to freeze, warm to at least 40° F and remix before using. Freezing does not alter the

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

SECTION 8: Exposure controls/personal protection

Control parameters

1. Dma 4 (dow) 49 percent 2,4- d, dimethylamine salt (CAS: 2008-39-1)

TWA: 10 mg/m³ (US/OSHA)

TWA: 10 mg/m³ (ACGIH)

Appropriate engineering controls

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

To avoid contact with eyes, wear chemical goggles or face shield. An emergency eyewash or water supply should be readily accessible to the work area.

Skin protection

To avoid contact with skin, wear long pants, long-sleeved shirt, shoes and socks, and chemical-resistant gloves. For use according to product label, chemical-resistant gloves are not required for applicators using ground boom

equipment. Wear a chemical-resistant apron when mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate. An emergency shower or water supply should be readily accessible to the work area.

Body protection

Personal hygiene is an important work practice exposure control measure and the

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following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Respiratory protection

Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved airpurifying respirator with cartridges/canisters approved for use against pesticides.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)	Clear, colorless to dark yellow liquid
Odor	Mild phenolic amine
Odor threshold	No data available.
pH	7.93 (1% w/w dilution in DIW)
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	Not applicable due to aqueous formulation
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability or explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	1.158 @ 20° C
Solubility(ies)	Soluble
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Additional properties	
Physical state	Liquid
Color	Colorless

SECTION 10: Stability and reactivity

Reactivity

Not Reactive

Chemical stability

This material is stable under normal handling and storage conditions.

Possibility of hazardous reactions

Will not occur.

Conditions to avoid

Excessive heat. Do not store near heat or flame.

Incompatible materials

Strong oxidizing agents: bases and acids.

Hazardous decomposition products

Under fire conditions may produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

SECTION 11: Toxicological information

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Information on toxicological effects

Acute toxicity

DMA 4 (DOW) 49 PERCENT 2,4- D, DIMETHYLAMINE SALT

LD50 Oral - Rat - 625 mg/kg

LD50 Skin - Rabbit - 2115 mg/kg

IARC carcinogen

Result: Group 2B

Trade secret

LD50 Oral - Rat - > 5000 mg/kg

Skin corrosion/irritation

Causes slight irritation.

Serious eye damage/irritation

Causes moderate irritation.

Respiratory or skin sensitization

Low toxicity if inhaled. May cause upper respiratory tract irritation.

Germ cell mutagenicity

There have been some positive and some negative studies, but the weight of evidence is that 2,4-D is not mutagenic.

Carcinogenicity

Various animal cancer tests have shown no reliably positive association between 2,4-D exposure and cancer. Epidemiology studies on herbicide use have been both positive and negative with the majority being negative.

Reproductive toxicity

No impairment of reproductive function attributable to 2,4-D has been noted in laboratory animal studies.

Specific target organ toxicity (STOT) - single exposure

Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods.

Specific target organ toxicity (STOT) - repeated exposure

Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods.

Aspiration hazard

No information available.

SECTION 12: Ecological information

Toxicity

Data on 2,4-D Dimethylamine Salt:

96-hour LC50 Bluegill: 524 mg/l Bobwhite Quail Oral LD50: 500 mg/kg

96-hour LC50 Rainbow Trout: 250 mg/l Mallard Duck 8-day Dietary LC50: >5,620 ppm

48-hour EC50 Daphnia: 184 mg/l

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Persistence and degradability

In laboratory and field studies, 2,4-D DMA salt rapidly dissociated to parent acid in the environment. The typical half-life of the resultant 2,4-D acid ranged from a few days to a few weeks.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate ground water. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Packaging disposal

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

SECTION 14: Transport information

DOT (US)

<100 gallons per completed package

Non Regulated

≥ 100 gallons per completed package

UN 3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D Salt), 9, III, RQ

IMDG

Non Regulated

IATA

Non Regulated

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Water hazard class (WGK, Germany)

Chemical name: Dma 4 (dow) 49 percent 2,4- d, dimethylamine salt, cas number: 2008-39-1

WGK hazard class: WGK 2 - Hazardous to water

SARA 311/312 Hazards

Product name: Hi-Yield 2,4-D Selective Weed Killer

SARA 313 Components

Product name: Hi-Yield 2,4-D Selective Weed Killer

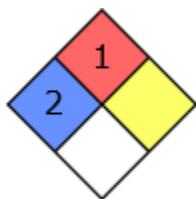
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Comprehensive Environmental Response Compensation and Liability Act (CERCLA)(401 CFR 302)

Product name: Hi-Yield 2,4-D Selective Weed Killer

NFPA Rating



SECTION 16: Other information

Further information/disclaimer

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