



ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
SDS Reference Number: AD12015
Issue date: 6/24/2026 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : ORCHARD STAR
Product code : 1001354,1001355

1.2. Other means of identification

Registration Number : US EPA Registration Number: 42750-19

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Herbicide
Restrictions on use : It is a violation of Federal law to use this product in a manner inconsistent with its label.

1.4. Supplier's details

Albaugh, LLC
1525 NE 36th Street
Ankeny, Iowa 50021
United States
T 800-247-8013
ContactUS@albaughllc.com - albaughllc.com

1.5. Emergency phone number

Emergency number : For Chemical Emergency Spill, Leak, Fire, Exposure, or Accident:
• Call CHEMTREC Day or Night within USA and Canada: 1-800-424-9300, Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

For Medical Emergencies Only:
• Call Albaugh LLC Day or Night within USA and Canada: 1-888-347-6732
24 hours a day, 7 days a week

SECTION 2 Hazard Identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed.
Acute toxicity (dermal), Category 4	H312	Harmful in contact with skin.
Acute toxicity (inhalation:dust,mist), Category 4	H332	Harmful if inhaled.
Serious eye damage/eye irritation, Category 1	H318	Causes serious eye damage.
Skin sensitization, Category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410	Very toxic to aquatic life with long lasting effects.

Full text of H statements : see section 16

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS US)

: P261 - Avoid breathing dust, fume, gas, mist, vapors, spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing must not be allowed out of the workplace.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.

P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.

P302+P352 - If on skin: Wash with plenty of water.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a poison center or doctor.

P312 - Call a poison center or doctor if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P330 - Rinse mouth.

P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P391 - Collect spillage.

P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

3.2. Mixtures

Name	Product identifier	%	GHS US classification
2,4-D, dimethylamine salt (Main constituent)	CAS-No.: 2008-39-1	45.4 – 48.2	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Skin Sens. 1, H317
2,4-dichlorophenoxyacetic acid (Active substance (Biocide))	CAS-No.: 94-75-7	37.75 - 40	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Acute 3, H402 Aquatic Chronic 3, H412

Full text of hazard classes and H-statements : see section 16

SECTION 4 First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.
Personal protection for first-aid responders.	: First aid workers will be equipped with suitable personal protective equipment.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: Harmful if inhaled.
Symptoms/effects after skin contact	: Harmful in contact with skin. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Harmful if swallowed.

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

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
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ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area. Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapors/spray.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions : Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

For containment : Collect spillage. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

For further information refer to section 13.

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

7.2. Conditions for safe storage, including incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Keep cool. Protect from sunlight.

Packaging materials : Always store product in container of same material as original container.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

2,4-dichlorophenoxyacetic acid (94-75-7)

USA - ACGIH - Occupational Exposure Limits

Local name	2,4-D
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ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2,4-dichlorophenoxyacetic acid (94-75-7)	
ACGIH® TLV® TWA	10 mg/m³ (Inhalable fraction)
Remark (ACGIH®)	TLV® Basis: Thyroid eff; kidney tubular dam. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	2,4-D (Dichlorophen-oxyacetic acid)
OSHA PEL TWA	10 mg/m³
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - Cal/OSHA - Occupational Exposure Limits	
Local name	2,4-D; 2,4-dichlorophenoxyacetic acid
Cal/OSHA PEL (OEL TWA)	10 mg/m³
Regulatory reference	California Division of Occupational Safety and Health (Cal/OSHA) - Permissible Exposure Limit for Chemical Contaminants (Table AC-1)
USA - NIOSH - Occupational Exposure Limits	
Local name	2,4-D (Dichlorophen-oxyacetic acid)
NIOSH REL 10h TWA	10 mg/m³
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment.

Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Liquid.
Color	: amber
Odor	: Amine-like Pungent
Odor threshold	: No data available
pH	: 7.26
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 100 °C
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 1.161 g/ml
Solubility	: In water, material is partially soluble.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: 9.925 mm²/s
Explosion limits	: No data available
Explosive properties	: Not explosive.
Oxidizing properties	: Not oxidising.
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Harmful in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

ORCHARD STAR	
ATE US (oral)	755.287 mg/kg body weight
ATE US (dermal)	1100 mg/kg body weight
ATE US (dust, mist)	1.5 mg/l/4h

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

LD50 oral rat	625 mg/kg Source: National Library of Medicine
LD50 dermal rat	6536 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	2115 mg/kg Source: National Library of Medicine
LC50 Inhalation - Rat	≥ 5 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation))
ATE US (oral)	500 mg/kg body weight

2,4-dichlorophenoxyacetic acid (94-75-7)

LD50 oral rat	375 mg/kg (Rat, Literature study, Oral)
LD50 dermal rabbit	1400 mg/kg body weight (Rabbit, Literature study, Skin)
ATE US (oral)	375 mg/kg body weight
ATE US (dermal)	1400 mg/kg body weight

Skin corrosion/irritation : Not classified
pH: 7.26

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

pH	7.5 – 9 Source: KOSHANET
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2,4-dichlorophenoxyacetic acid (94-75-7)

pH	No data available in the literature
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Serious eye damage/irritation : Causes serious eye damage.
pH: 7.26

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

pH	7.5 – 9 Source: KOSHANET
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2,4-dichlorophenoxyacetic acid (94-75-7)

pH	No data available in the literature
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Respiratory or skin sensitization : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. Current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic potential. The US EPA has given 2,4-D a Class D classification (not classifiable as to human carcinogenicity).
Based on available data, the classification criteria are not met

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ORCHARD STAR	
IARC group	2B - Possibly carcinogenic to humans
National Toxicity Program (NTP) Status	Not classified as a carcinogen.
2,4-dichlorophenoxyacetic acid (94-75-7)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified
2,4-D, dimethylamine salt (2008-39-1)	
NOAEL (animal/male, F0/P)	≈ 180 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
NOAEL (animal/female, F0/P)	≈ 30 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
STOT-single exposure	: Not classified
2,4-dichlorophenoxyacetic acid (94-75-7)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
2,4-D, dimethylamine salt (2008-39-1)	
LOAEL (oral, rat, 90 days)	100 mg/kg body weight Animal: rat, Guideline: other:
Aspiration hazard	: Not classified
ORCHARD STAR	
Viscosity, kinematic	9.925 mm ² /s
2,4-dichlorophenoxyacetic acid (94-75-7)	
Viscosity, kinematic	Not applicable (solid)
Symptoms/effects after inhalation	: Harmful if inhaled.
Symptoms/effects after skin contact	: Harmful in contact with skin. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Harmful if swallowed.

SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

2,4-D, dimethylamine salt (2008-39-1)	
LC50 - Fish [1]	> 100 mg/l Source: The ECOTOXicology database
EC50 - Crustacea [1]	4 mg/l Source: The ECOTOXicology database
LC50 - Fish [2]	168.4 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [2]	86.64 mg/l Test organisms (species): Daphnia magna
2,4-dichlorophenoxyacetic acid (94-75-7)	
LC50 - Fish [1]	358 mg/l (96 h, Pisces, Literature study)

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2,4-dichlorophenoxyacetic acid (94-75-7)

EC50 - Crustacea [1]	25 mg/l (48 h, Literature study)
EC50 96h - Algae [1]	33.8 mg/l (Literature study)

12.2. Persistence and degradability

ORCHARD STAR

Persistence and degradability	Not rapidly degradable
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2,4-D, dimethylamine salt (2008-39-1)

Persistence and degradability	Not readily biodegradable in water.
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2,4-dichlorophenoxyacetic acid (94-75-7)

Persistence and degradability	Biodegradable in the soil, Inhibition of nitrification, Readily biodegradable in water.
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12.3. Bioaccumulative potential

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

BCF - Fish [1]	0.1 (Ictalurus punctatus)
BCF - Fish [2]	0.47 (Lepomis macrochirus)
Partition coefficient n-octanol/water (Log Pow)	0.65 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

2,4-dichlorophenoxyacetic acid (94-75-7)

BCF - Fish [1]	< 10 (Other, 3 day(s), Leuciscus idus, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	2.58 – 2.83 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

2,4-dichlorophenoxyacetic acid (94-75-7)

Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.66 (log Koc, SRC PCKOCWIN v2.0, Literature study)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Ozone	: Not classified
Fluorinated greenhouse gases	: No

SECTION 13 Disposal considerations

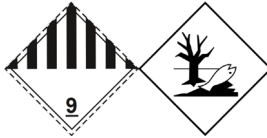
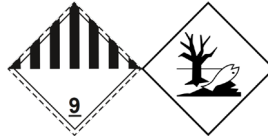
Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 14 Transport information

DOT	TDG	IMDG	IATA
NOTE: This product may be shipped as NOT REGULATED when shipped domestically by highway in non-bulk containers (< or=22 gallons). Containers > 22 gallons = UN3082, Environmentally Hazardous Substances, Liquid, n.o.s. (2,4-D salts and esters), 9, PG III, RQ (2,4-D salts and esters). NOTE: Section 1.45.1 of the TDG Regulations provides an exemption from documentation and safety marks only for this product and only when transported by a road or railway vehicle. Part 3 (Documentation) and Part 4 (Dangerous Goods Safety Marks) do not apply to substances that are classified as marine pollutants in accordance with section 2.43 of Part 2 (Classification) if they are in transport solely on land by road vehicle or railway vehicle. However, substances may be identified as marine pollutants on a shipping document and the required dangerous goods safety marks may be displayed when they are in transport by road or railway vehicle.			
14.1. UN number			
UN3082	UN3082	UN3082	UN3082
14.2. Proper Shipping Name			
Environmentally hazardous substances, liquid, n.o.s. (2,4-D, salts and esters)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D, salts and esters)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D, salts and esters)	Environmentally hazardous substance, liquid, n.o.s. (2,4-D, salts and esters)
14.3. Transport hazard class(es)			
9	9	9	9
			
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes	Dangerous for the environment: Yes

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT

UN-No. (DOT) : UN3082

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Special Provisions (49 CFR 172.102)	: 8 - A hazardous substance that is not a hazardous waste may be shipped under the shipping description "Other regulated substances, liquid or solid, n.o.s.", as appropriate. In addition, for solid materials, special provision B54 applies. 146 - This description may be used for a material that poses a hazard to the environment but does not meet the definition for a hazardous waste or a hazardous substance, as defined in 171.8 of this subchapter, or any hazard class as defined in Part 173 of this subchapter, if it is designated as environmentally hazardous by the Competent Authority of the country of origin, transit or destination. 173 - An appropriate generic entry may be used for this material. 335 - Mixtures of solids that are not subject to this subchapter and environmentally hazardous liquids or solids may be classified as "Environmentally hazardous substances, solid, n.o.s.," UN3077 and may be transported under this entry, provided there is no free liquid visible at the time the material is loaded or at the time the packaging or transport unit is closed. Each transport unit must be leak-proof when used as bulk packaging. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: 155
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 203
DOT Packaging Bulk (49 CFR 173.xxx)	: 241
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: No Limit
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: No Limit
DOT Vessel Stowage Location	: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.
TDG	
UN-No. (TDG)	: UN3082

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

TDG Special Provisions	: 16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the danger or dangers posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS,99 - (1) Mixtures of solids that are not dangerous goods and liquids or solids that are UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, may be offered for transport, handled or transported as UN3077 if there is no visible liquid when the dangerous goods are loaded into a means of containment and during transport. (2) These Regulations, except for Parts 1 and 2, do not apply to the offering for transport, handling or transport of less than 450 kg of UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S, or less than 450 L of UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, on a road vehicle or a railway vehicle. The dangerous goods must be contained in one or more small means of containment designed, constructed, filled, closed, secured and maintained so that under normal conditions of transport, including handling, there will be no release of the dangerous goods that could endanger public safety.
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E1
Emergency Response Guide (ERG) Number	: 171
IMDG	
Special provision (IMDG)	: 274, 335, 375, 969
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
Packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP29
EmS-No. (Fire)	: F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE
EmS-No. (Spillage)	: S-F - SPILLAGE SCHEDULE Foxtrot - WATER-SOLUBLE MARINE POLLUTANTS
Stowage category (IMDG)	: A
IATA	
Special provision (IATA)	: A97, A158, A197, A215
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y964
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 964
PCA max net quantity (IATA)	: 450L
CAO packing instructions (IATA)	: 964
CAO max net quantity (IATA)	: 450L

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ERG code (IATA)

: 9L

SECTION 15 Regulatory information

15.1. Federal regulations

ORCHARD STAR

CERCLA RQ	100 lb 2,4-D, salts and esters
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Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
2,4-D, dimethylamine salt	2008-39-1	Not present	-	
2,4-dichlorophenoxyacetic acid	94-75-7	Present	Active	

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

2,4-dichlorophenoxyacetic acid	CAS-No. 94-75-7	37.75 - 40%
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2,4-dichlorophenoxyacetic acid (94-75-7)

Listed on EPA Hazardous Air Pollutant (HAPS)

Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens

Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits

CERCLA RQ	100 lb
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FIFRA Labelling

EPA Registration Number	42750-19
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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 as required on the pesticide label.

FIFRA Signal Word	Danger
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FIFRA Precautionary Statement	KEEP OUT OF REACH OF CHILDREN. Hazards To Humans and Domestic Animals.
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FIFRA Human Health Hazards	Corrosive. Causes irreversible eye damage. Harmful if swallowed. Do not get in eyes or on clothing. Avoid contact with skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
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ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

FIFRA Labelling	
FIFRA First Aid	IF IN EYES: •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 poison control center or doctor for treatment advice. IF ON SKIN OR CLOTHING: •Take off contaminated clothing. •Rinse skin immediately with plenty of water for 15-20 minutes. •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. IF INHALED: •Move person 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 poison control center or doctor for further treatment advice. NOTE TO PHYSICIAN - Probable mucosal damage may contraindicate the use of gastric lavage.
FIFRA Environmental Hazards	This pesticide may be toxic to fish and aquatic invertebrates. Do not apply directly to water, or 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 washwaters or rinsate. Apply this product only as directed on label. This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical 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. Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

FIFRA Labelling

FIFRA Other

STORAGE AND DISPOSAL

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

PESTICIDE STORAGE: Open dumping is prohibited. Do not store this product near fertilizers, seeds, insecticides, or fungicides. Reclose all partially used containers by thoroughly tightening screw cap. Absorb any spill with a suitable clay absorbent and dispose of as indicated under "Pesticide Disposal."

Protect from freezing. If stored below freezing, the product must be warmed to at least 70°F and agitated before using. This does not affect the efficiency of this product.

For safety and prevention of unauthorized use, all pesticides should be stored in locked facilities. To prevent accidental misuse, different pesticides should be stored in separate areas with enough distance between to provide clear identification.

Opened, partially used pesticides should be stored in original labeled containers when possible. When transfer to another container is necessary because of leakage or damage, carefully mark and identify contents of the new container.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. 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.

CONTAINER DISPOSAL: Non-refillable containers (1, 2.5, 30 & 55 gallon): Do not reuse or refill this container. Offer for recycling, if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

(non-refillable <5 gallons): 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 ¼ 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.

(non-refillable >5 gallons): Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use for disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

15.2. International regulations

CANADA

2,4-dichlorophenoxyacetic acid (94-75-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

ORCHARD STAR

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

National regulations

2,4-dichlorophenoxyacetic acid (94-75-7)

Listed on IARC (International Agency for Research on Cancer)
Listed on EPA HAPs Chronic Dose Response Assessment List - Carcinogens
Listed on EPA HAPs Acute Dose Response Assessment List – Exposure limits
Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16 Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date : 6/24/2026

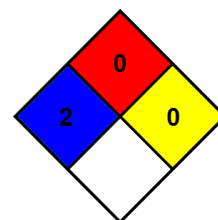
Full text of hazard classes and H-statements

H302	Harmful if swallowed
H312	Harmful in contact with skin
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H332	Harmful if inhaled
H335	May cause respiratory irritation
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS USA-ALBAUGH

The information provided in this Safety Data Sheet is correct to the best of Albaugh, LLC knowledge, information and belief at the date of its publication. The information given is designed only as a 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 process, unless specified in the text.