



Safety Data Sheet

League® Herbicide

1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY

PRODUCT NAME: League® Herbicide
EPA REGISTRATION NUMBER: 59639-166
VC NUMBER(S): 1738
SYNONYM(S): V-10142 Ag Herbicide
PRODUCT DESCRIPTION: Selective Herbicide
League is a registered trademark of Valent U.S.A. Corporation

MANUFACTURER/DISTRIBUTOR
VALENT U.S.A. CORPORATION
P.O. Box 8025
1600 Riviera Avenue, Suite 200
Walnut Creek, CA 94596-8025

EMERGENCY TELEPHONE NUMBERS
HEALTH EMERGENCY OR SPILL (24 hr):
(800) 892-0099
TRANSPORTATION (24 hr.): CHEMTREC
(800) 424-9300 or (202) 483-7616

PRODUCT INFORMATION
AGRICULTURAL PRODUCTS: (800) 682-5368

The current SDS is available through our website (www.valent.com), or by calling the product information numbers listed above.

2. HAZARDS IDENTIFICATION

For EPA FIFRA-specific information see Section 15

Classification

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements

May be harmful in contact with skin

Precautionary Statements - Prevention

Read product label prior to using this product. For specific handling instruction refer to Section 7, Handling and Storage

Precautionary Statements - Response

See Section 4, First Aid Measures

Emergency Telephone: (800) 892-0099
REVISION NUMBER: 1

SDS NO.: 0383
REVISION DATE: 03/04/2015

Precautionary Statements - Storage

For information on Storage and Handling see Section 7.

Precautionary Statements - Disposal

For further information on product and container disposal see Section 13.

Hazards not otherwise classified (HNOC)**Other Information**

- Harmful to aquatic life
 - Harmful to aquatic life with long lasting effects
- 25% of the mixture consists of ingredient(s) of unknown toxicity

For information on Transportation requirements see Section 14.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight/ Percent	TRADE SECRET
Imazosulfuron Technical	122548-33-8	73-77	
Hydrated Amorphous Silica	112926-00-8	1.8-2.0	
Kaolin clay	1332-58-7	1.3-1.5	
Polyvinylpyrrolidone	9003-39-8	0.09-0.11	
Others	(Various CAS#s)	20.18-22.44	

Other ingredients, which may be maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identities are withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling **(800) 892-0099** at any time.

4. FIRST AID MEASURES**EMERGENCY NUMBER (800) 892-0099**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

EYE CONTACT:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

SKIN CONTACT:

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.

INGESTION:

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.

INHALATION:

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.

NOTES TO PHYSICIAN:

None

5. FIRE FIGHTING MEASURES

Flash point °F Not applicable
AUTOIGNITION: No data available
EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam, dry chemical

FLAMMABLE LIMITS IN AIR - LOWER (%): Not applicable
FLAMMABLE LIMITS IN AIR - UPPER (%): Not applicable

NFPA RATING:

Health: 1
Flammability: 1
Reactivity: 0
Special: None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

FIRE FIGHTING INSTRUCTIONS: Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse.

6. ACCIDENTAL RELEASE MEASURES

VALENT EMERGENCY PHONE NUMBER: (800) 892-0099
CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300
OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION

Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the North American Emergency Response Guidebook.

UN/NA NUMBER: Not applicable **EMERGENCY RESPONSE GUIDEBOOK NO.:** Not applicable

FOR SPILLS ON LAND:

CONTAINMENT: Reduce airborne dust. Avoid runoff into storm sewers or other bodies of water.

CLEANUP: Clean up spill immediately. Vacuum or sweep up material and place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

FOR SPILLS IN WATER:

CONTAINMENT: This material will disperse or dissolve in water. Stop the source of the release. Contain and isolate to prevent further release into soil, surface water and ground water.

CLEANUP: Clean up spill immediately. Absorb spill with inert material. Remove contaminated water for treatment or disposal.

7. HANDLING AND STORAGE

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

HANDLING:

Keep pesticide in original container. Users should wash hands thoroughly with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

STORAGE:

Keep pesticide in original container only. Do not store or transport near food or feed. Do not contaminate food or foodstuffs. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place. Product should be stored in a locked storage area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

EYES & FACE: Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

RESPIRATORY PROTECTION: Use this material only in well ventilated areas. If operating conditions result in airborne concentrations of this material, the use of an approved respirator is recommended.

SKIN & HAND PROTECTION: Avoid contact with skin or clothing. Skin contact can be minimized by wearing protective clothing including gloves.

EXPOSURE LIMITS

Chemical Name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Imazosulfuron Technical	None	None	None
Hydrated Amorphous Silica	10 mg/m ³ (total amorphous dust); 3 mg/m ³ (respirable nuisance particulate)	6 mg/m ³ (total dust)	None
Kaolin clay	2 mg/m ³ TWA (respirable fraction)	15 mg/m ³ TWA 5 mg/m ³ TWA	None
Polyvinylpyrrolidone	None	None	None
Others	None	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state
Appearance
Color

Solid
Granules
Light tan

Odor
Odor threshold

Odorless
No information available

PROPERTIES
pH

Values
6.7

Remarks • Method
1% suspension

Melting point/freezing point	No information available
Boiling point/boiling range	No information available
Flash point	Not applicable
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limits in Air	
Upper flammability limits	Not applicable
Lower flammability limit	Not applicable
Vapor pressure	No information available
Vapor density	No information available
Specific Gravity	No information available
Water solubility	Dispersible in water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Density	No information available
Bulk density	30.6 lb/ft ³

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable for 1 year at ambient temperature.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Oral Toxicity LD ₅₀ (rats)	3,129 mg/kg	EPA Tox Category	III
Dermal Toxicity LD ₅₀ (rabbits)	> 5,000 mg/kg	EPA Tox Category	IV
Inhalation Toxicity LC ₅₀ (rats)	> 2.11 mg/L	EPA Tox Category	IV
Eye Irritation (rabbits)	Moderately irritating	EPA Tox Category	III
Skin Irritation (rabbits)	Moderately irritating	EPA Tox Category	III
Skin Sensitization (guinea pigs)	Non-sensitizer	EPA Tox Category	Not applicable

CARCINOGEN CLASSIFICATION

Chemical Name	IARC	OSHA - Select Carcinogens	NTP Carcinogen List
Imazosulfuron Technical	Not listed	Not listed	Not listed
Hydrated Amorphous Silica	Group 3	Not listed	Not listed
Kaolin clay	Not listed	Not listed	Not listed
Polyvinylpyrrolidone	Group 3	Not listed	Not listed
Others	Not listed	Not listed	Not listed

TOXICITY OF IMAZOSULFURON TECHNICAL

CHRONIC/CARCINOGENICITY: No oncogenic effects were observed with Imazosulfuron Technical in a 2-year rat or 18-month mouse study. The liver was the primary target organ in long term, high dose studies. The liver was the primary target organ in long term, high dose studies.

DEVELOPMENTAL TOXICITY: Imazosulfuron Technical did not produce birth defects in tests with laboratory animals.

REPRODUCTION: Imazosulfuron Technical did not produce adverse effects in a reproduction study with rats.

MUTAGENICITY: Imazosulfuron Technical was negative in the following tests for mutagenicity: Ames Assay, DNA repair assay, in vitro chromosomal aberration test and micronucleus test in mice.

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

12. ECOLOGICAL INFORMATION

AVIAN TOXICITY:

Based upon EPA designation, Imazosulfuron Technical is practically non-toxic to avian species. The following results were obtained from studies with Imazosulfuron Technical:

Oral LD₅₀ bobwhite quail: greater than 2250 mg/kg
 Oral LD₅₀ mallard duck: greater than 2250 mg/kg
 Dietary LC₅₀ bobwhite quail: greater than 5620 ppm
 Dietary LC₅₀ mallard duck: greater than 5620 ppm

AQUATIC ORGANISM TOXICITY: Based upon EPA designation, Imazosulfuron Technical is slightly toxic to fish and aquatic invertebrate species. Test results include:

LC₅₀ (96 hr) Bluegill Sunfish: greater than 74 mg/L
 LC₅₀ (96 hr) Rainbow Trout: greater than 69 mg/L
 LC₅₀ (96 hr) Common Carp: greater than 100 mg/L
 LC₅₀ (96 hr) Sheepshead Minnow: greater than 94 mg/L
 EC₅₀ (48 hr) Daphnia magna: greater than 91 mg/L
 LC₅₀ (96 hr) Mysid Shrimp: greater than 79 mg/L
 EC₅₀ (96 hr) Oyster Shell Deposition: = 62 mg/L
 EC₅₀ (96 hr) Blue-green algae: = 13 mg/L
 EC₅₀ (96 hr) Green algae: greater than 6 mg/L
 EC₅₀ (96 hr) Freshwater diatom: greater than 100 mg/L
 EC₅₀ (96 hr) Duckweed: 0.5 µg/L

OTHER NON-TARGET ORGANISM TOXICITY:

The acute contact toxicity for Imazosulfuron Technical in honeybees was an LD₅₀ greater than 20 µg/bee.

13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

PRODUCT DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. Triple rinse as follows: Empty the remaining contents into 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 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.

DISPOSAL METHODS: Check government regulations and local authorities for approved disposal of this material. Dispose of in accordance with applicable laws and regulations.

14. TRANSPORTATION INFORMATION

DOT (ground) SHIPPING NAME: Not regulated for domestic ground transport by U.S. DOT

EMERGENCY RESPONSE

GUIDEBOOK NO.: Not applicable

ICAO/IATA SHIPPING NAME: UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Imazosulfuron), 9, III, Marine Pollutant

REMARKS: Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from Dangerous Goods regulations -- see UN Special Provision 375.
For U.S. shipping, Emergency Response Guidebook No. 171.

IMDG SHIPPING NAME: UN 3077, Environmentally Hazardous Substance, Solid, N.O.S. (Imazosulfuron), 9, III, Marine Pollutant

EMS NO.: F-A, S-F

15. REGULATORY INFORMATION**EPA-FIFRA LABEL INFORMATION THAT DIFFERS FROM OSHA-GHS REQUIREMENTS:**

This material is a pesticide product registered by the EPA under FIFRA and is subject to certain labeling requirements under federal pesticide law. These requirements may differ from the classification criteria and hazard information required by OSHA GHS for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the FIFRA pesticide label:

EPA FIFRA SIGNAL WORD: CAUTION

- **Harmful if swallowed, inhaled or absorbed through skin.**
- **Avoid contact with eyes, skin and clothing**
- **Causes moderate eye irritation**
- **Avoid breathing dust or spray mist**
- **Keep out of reach of children.**

PESTICIDE REGULATIONS: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

U.S. FEDERAL REGULATIONS: Ingredients in this product are reviewed against an inclusive list of federal regulations. Therefore, the user should consult appropriate authorities. The federal regulations reviewed include: Clean Water Act, SARA, CERCLA, RCRA, DOT, TSCA and OSHA. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

Kaolin clay

TSCA Inventory List -	Present
-----------------------	---------

Polyvinylpyrrolidone

TSCA Inventory List -	Listed
-----------------------	--------

SARA (311, 312):

Immediate Health:	Yes
Chronic Health:	Yes
Fire:	Yes
Sudden Pressure:	No
Reactivity:	No

STATE REGULATIONS: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 8 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed under U.S. Regulations above. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

Hydrated Amorphous Silica

MA Right To Know	Present
NJ Right To Know	3510
PA Right To Know	Present
RI Right To Know	Listed
MN Hazardous Substance	Present

Kaolin clay

MA Right To Know	Present
NJ Right To Know	4016
PA Right To Know	Present
RI Right To Know	Listed
MN Hazardous Substance	Present

Polyvinylpyrrolidone

California - Directors List of Hazardous Substances	Present
---	---------

For information regarding potential adverse health effects from exposure to this product, refer to Sections 2 and 11.

16. OTHER INFORMATION

REASON FOR ISSUE:	Updated information to meet OSHA Hazcom 2012 (GHS) regulations.
SDS NO.:	0383
EPA REGISTRATION NUMBER:	59639-166
REVISION NUMBER:	1
REVISION DATE:	03/04/2015
SUPERCEDES DATE:	None
RESPONSIBLE PERSON(S):	Valent U.S.A. Corporation, Corporate EH&S, (925) 256-2803

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products is regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling. All necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of federal law to use a pesticide product in any manner not prescribed on the EPA-approved label.

The information in this SDS is based on data available to us as of the revision date given herein, and believed to be correct. Contact Valent U.S.A. Corporation to confirm if you have the most current SDS.

Judgments as to the suitability of information herein for the individual's own use or purposes are necessarily the individual's own responsibility. Although reasonable care has been taken in the preparation of such information, Valent extends no warranties, makes no representations, and assumes no responsibility as to the accuracy or suitability of such information for application to the individual's purposes or the consequences of its use.

2015 Valent U.S.A. Corporation