

SAFETY DATA SHEET



Date Issued : 6/15/2015
SDS No : Gravitas
Date Revised : 1/2/2018
Revision No : 1

Gravitas

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Gravitas
CHEMICAL FAMILY: Herbicide

DISTRIBUTOR

Innvictis Crop Care, LLC
 1880 Fall River Drive
 Suite 100
 Loveland, CO 80538

24 HR. EMERGENCY TELEPHONE NUMBERS

24-Hour Emergency Assistance Call: 1-800-222-1222
 Chemical Emergency Call CHEMTREC: 1-800-424-9300

EPA REG. NO.: 89168-40-89391

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 4
 Acute Toxicity (Dermal), Category 5
 Acute Toxicity (Inhalation), Category 5
 Skin Irritation, Category 3
 Eye Irritation, Category 2B
 Carcinogenicity, Category 2
 Aspiration Hazard, Category 2
 Acute Hazards to the Aquatic Environment, Category 2

GHS LABEL



Exclamation
mark



Health
hazard

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H302: Harmful if swallowed.
 H305: May be harmful if swallowed and enters airways.
 H313: May be harmful in contact with skin.
 H316: Causes mild skin irritation.
 H320: Causes eye irritation.
 H333: May be harmful if inhaled.
 H351: Suspected of causing cancer.
 H401: Toxic to aquatic life.

PRECAUTIONARY STATEMENTS

General:

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

Prevention:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P264: Wash hands, face and other affected areas thoroughly after handling.

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

P273: Avoid release to the environment.

P281: Use personal protective equipment as required.

Response:

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P330: Rinse mouth.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.

P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

P332+P313: If skin irritation occurs: Get medical advice/attention.

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

P337+P313: If eye irritation persists: Get medical advice/attention.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P331: Do NOT induce vomiting.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to Local, State and Federal Regulations.

CARCINOGENICITY:

Naphthalene (<1%)

Test results reported for the final product take into account any acute hazards related to the naphthalene in the formulation.

Carcinogen Status

NTP: Anticipated Carcinogen

IARC: Group 2B Possible Human Carcinogen

SENSITIZATION: Not a skin sensitizer.

COMMENTS HEALTH: Read all precautions of products being handled and follow the most restrictive language for all products to provide the safest work environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
2,4-Dichlorophenoxyacetic Acid, 2-Ethylhexyl Ester	86.95	1928-43-4
Other Ingredients	13.05	Mixture

4. FIRST AID MEASURES

EYES: Hold eyes 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 eyes. Call a poison control center or doctor for treatment advice.

SKIN: 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: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. 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: Contains petroleum distillates. Vomiting may cause aspiration pneumonia. Have the product container label with you when calling a poison control center or doctor, or going for treatment.

ADDITIONAL INFORMATION: Have the product container or label with you when calling a poison control center or doctor, or going in for treatment. For emergency medical assistance call **NPCC 1-800-222-1222** or call **CHEMTREC 1-800-424-9300**.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Toxic fumes may be emitted in a fire situation.

EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce oxides of carbon, nitrogen and phosphorous.

EXPLOSION HAZARDS: No specific explosion hazards are identified or expected. Always fight fire with the implication that other volatile substances may be present.

FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

LARGE SPILL: Dike around the spill area to prevent spreading. Pick up spilled material with suitable absorbent material and place in appropriate container for disposal. Scrub the contaminated area with a detergent or soap solution. Place it and unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not contaminate any body of water.

LAND SPILL: Avoid runoff onto any adjacent land.

SPECIAL PROTECTIVE EQUIPMENT: Always wear proper protective equipment when handling this product.

7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid contact with eyes and contact with skin. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 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.

STORAGE: Storage should be under lock and key in a ventilated room and secure from access by unauthorized persons and children. Storage should be in a cool, dry area away from any heat or ignition source and away from children and animals. Mix well before using. Keep tightly closed. Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical goggles or shielded safety glasses (ANSI Z87.1 or approved equivalent) when handling and mixing product. Contact lenses should not be worn when working with chemicals.

SKIN: Wear chemical resistant gloves such as Viton or barrier laminate, Coveralls over long-sleeved shirt, long pants and chemical resistant footwear plus socks. Chemical resistant headgear for overhead exposure. When exposed to product concentrate, wear a chemical resistant apron. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

RESPIRATORY: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Wear a NIOSH/MSHA approved dust mask or filter when vapors are expected to be generated above the permissible limit.

PROTECTIVE CLOTHING: Eye protection, long sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

OTHER USE PRECAUTIONS: Avoid contact with skin, eyes, and clothing. Avoid breathing vapors. Wash thoroughly after handling product. Eye wash fountains and drench showers should be located within 100 feet or a 10 second walk from the work area per ANSI Z358.1-1990

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Mild

APPEARANCE: Liquid

COLOR: Yellow

pH: ~ 3.15

PERCENT VOLATILE: Not Established

FLASH POINT AND METHOD: > (230 °F)

FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: Not Established

VAPOR DENSITY: Not Established

BOILING POINT: Not Established

FREEZING POINT: Not Established

MELTING POINT: Not Established

POUR POINT: Not Established

THERMAL DECOMPOSITION: Not Established

SOLUBILITY IN WATER: Not Available

EVAPORATION RATE: Not Established

DENSITY: 9.26 per gal.

SPECIFIC GRAVITY: Not Established

VISCOSITY: Not Established

MOLECULAR WEIGHT: Not Established

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: May cause mild irritation

DERMAL LD₅₀: > 2000 mg/kg (Rabbit)

SKIN ABSORPTION: Not classified as a skin sensitizer.

ORAL LD₅₀: ~ 1380 mg/kg (Rat)

INHALATION LC₅₀: > 5.12 mg/L (Rat)(4-Hour)

EYE EFFECTS: Causes eye irritation.

SKIN EFFECTS: Causes skin irritation.

CHRONIC: 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.

CARCINOGENICITY

Notes: 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 EFFECTS: No impairment of reproductive function attributable to 2,4-D have been noted in laboratory animal studies.

COMMENTS: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: This pesticide is toxic to fish and aquatic invertebrates. 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. 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.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state, and federal regulations.

PRODUCT DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal Law. 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.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: < 12 gallons per complete package Non Regulated – See 49 CFR 173.132(b)(3) & 172.101 Appendix A

= 12 but < 119 gallons per complete package UN 3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D Ester), 9, III, RQ

= 119 gallons per complete package UN 3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D Ester), 9, III, RQ, Marine Pollutant

TECHNICAL NAME: 2,4-D Ester

PRIMARY HAZARD CLASS/DIVISION: 9

UN/NA NUMBER: 3082

PACKING GROUP: III

NAERG: 171

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 100 Lbs.

PLACARDS: Class 9

MARINE POLLUTANT #1: 2,4-D Ester

AIR (ICAO/IATA)

SHIPPING NAME: UN 3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D Ester), 9, III, Marine Pollutant

TECHNICAL NAME: 2,4-D Ester

UN/NA NUMBER: 3082

PRIMARY HAZARD CLASS/DIVISION: 9

Gravitas

PACKING GROUP: III**ERG:** 171**VESSEL (IMO/IMDG)****SHIPPING NAME:** UN 3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D Ester), 9, III, Marine Pollutant**TECHNICAL NAME:** 2,4-D Ester**UN/NA NUMBER:** 3082**PRIMARY HAZARD CLASS/DIVISION:** 9**PACKING GROUP:** III**MARINE POLLUTANT #1:** 2,4-D Ester**PLACARDS:** Class 9 & Marine Pollutant**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****FIRE:** No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes**313 REPORTABLE INGREDIENTS:** 2,4-D Ethylhexyl Ester (CAS #1928-43-4)**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)****CERCLA RQ:** None Specified.**TSCA (TOXIC SUBSTANCE CONTROL ACT)****TSCA REGULATORY:** Exempt from TSCA, subject to FIFRA.**CALIFORNIA PROPOSITION 65:** Not Listed**FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):****Labeling Information:**

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION / PRECAUCION Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. PERSONAL

16. OTHER INFORMATION**REASON FOR ISSUE:** New Revision**REVISION SUMMARY:** This SDS replaces the 9/29/2015 SDS. Revised: **Section 1: REASON FOR ISSUE.****GENERAL STATEMENTS: DISCLAIMER AND LIMITATION OF LIABILITY**

This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and ALTITUDE CROP INNOVATIONS, LLC, disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.