SAFETY DATA SHEET
TROW™ ARRIVE

Printed: 12/18/2024
Revision: 12/18/2024
Supersedes Revision: 07/14/2022

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2020/878 and US OSHA HCS 2015

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Code: Z-TRUROWARRIVE
Product Name: TRUROW™ ARRIVE
Trade Name: BIO-FORGE

1.2 Relevant identified uses of the substance or mixture and uses advised against:
Relevant identified uses: For agricultural use only

1.3 Details of the Supplier of the Safety Data Sheet:
Company Name: WINFIELD SOLUTIONS, LLC.
P.O. BOX 64589
St. Paul, MN 55164 USA
Information: Non-Emergency 1 (855)494-6343

1.4 Emergency telephone number:
Emergency Contact: Chemtrec 1 (800)424-9300
Medical 1 (877)424-7452

Section 2. Hazards Identification

2.1 Classification of the Substance or Mixture:
Serious Eye Damage/Eye Irritation, Category 2B
Skin Corrosion/Irritation, Category 2

2.2 Label Elements:

GHS Signal Word: **Warning**

Hazard-determining components of labelling:
Potassium hydroxide

GHS Hazard Phrases:
H315 - Causes skin irritation.
H320 - Causes eye irritation.

GHS Precautionary Phrases:
P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 - Specific treatment see ... on this label.
P332+313 - If skin irritation occurs, get medical advice/attention.
P337+313 - If eye irritation persists, get medical advice/attention.
P362+364 - Take off contaminated clothing and wash it before reuse.

GHS Storage and Disposal Phrases:

UFI:

2.3 Adverse Human Health Effects and Symptoms: Chronic: Expected toxicity hazard: slight Not known. Expected toxicity hazard: slight to moderate.

2.3.1 Inhalation: Prolonged exposure to vapors may cause sore throat and irritation of respiratory tract.

2.3.2 Skin Contact: May be harmful if absorbed through the skin.

2.3.3 Eye Contact: Contact with product may cause mild to severe irritation, blurred vision.

2.3.4 Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Section 3. Composition/Information on Ingredients

CAS #	Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
1310-58-3	Potassium hydroxide 01-2119487136-33	< 3.0 %	215-181-3 019-002-00-8	Acute Tox.(O) 4: H302 Skin Corr. 1A: H314
57-13-6	Urea 01-2119463277-33	< 5.0 %	200-315-5 NA	No GHS classifications apply.
7631-95-0	Sodium molybdate(VI) 01-2119489495-21	< 5.0 %	231-551-7 NA	No GHS classifications apply.
2223656-17-3	Cobalt EAHP	<20.0 %	NA NA	Acute Tox.(O) 4: H302 Acute Tox.(I) 5: H333

Section 4. First Aid Measures

4.1 Description of First Aid Measures: Victims of severe exposure to chemicals must be taken to health providing centers for medical attention. If necessary, also rescuers must be attended. Always bring with victim a copy of label and SDS of product to health professional.

In Case of Inhalation: Remove victim from exposure to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. Get medical attention.

In Case of Skin Contact: Immediately wash affected area with abundant soap and water. Remove contaminated clothing, taking care not to impregnate eyes. Seek medical attention if irritation occurs.

In Case of Eye Contact: Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician if irritation persists.

In Case of Ingestion: Immediately contact a physician or poison control center for treatment advice. Victim should drink milk, egg whites or large quantities of water and be induced to vomiting. Never give anything by mouth to someone who is unconscious, having convulsions or unable to swallow.

Note for the Doctor: Treat symptomatically and supportively.

Section 5. Fire Fighting Measures

5.1 Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Flammable Properties and Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Flash Point: N.A.

Explosive Limits: LEL: N.A. UEL: N.A.

Autoignition Pt: N.A.

5.3 Fire Fighting Instructions: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Section 6. Accidental Release Measures

6.1 Protective Precautions, Protective Equipment and Emergency Procedures: In case of a large spill, protect people by clearing and isolating the affected area. Such releases should be responded to by trained personnel using pre-planned procedures. In the event of an incidental release, minimum Personal Protective Equipment must be worn: latex or rubber gloves and boots, goggles or full face-shield and coveralls or long-sleeved shirt and pants.

6.2 Environmental Precautions: Do not allow to enter drains or waterways.

6.3 Methods and Material For Containment and Cleaning Up: It is necessary to contain the spill into the smallest area possible by diking, scooping, shoveling, etc., and recover liquid into an appropriate container for salvage or later use, labeling it accordingly. If product is clean, use it as intended, following original label directions; should it get contaminated, salvage for proper disposal as waste.
Absorb residual product onto dry carrier such as dirt, sand or any other absorbent material, then put in covered, labeled containers and dispose of as dry waste in accordance with Federal, State and Local waste disposal regulations.

Section 7. Handling and Storage

7.1 Precautions To Be Taken in Handling: Use with adequate ventilation. Avoid breathing dust, mist, or vapor. Avoid contact with eyes, skin, or clothing. Avoid ingestion and inhalation. Use only in a well-ventilated area. Empty containers may contain residual liquid or vapors and therefore should be handled the same as full containers. Product must be kept in its original container, if repackaging for any reason, use vented caps.

7.2 Precautions To Be Taken in Storing: We recommend storing pails a maximum of three pails high. Do not stack pallets. Store container tightly closed in a cool/well-ventilated dry place protected from sunlight above 40 F. Do not allow container to freeze. Store locked up. Inspect all incoming containers before storage to ensure all are properly labeled and not damaged. Store in a cool, dry place, away from direct sunlight, sources of intense heat or where freezing is possible. Store away from food, feed, clothing materials and living quarters. Keep away from reach of children and pets. Whenever possible, place chemicals on secondary containers or diked area. Keep containers tightly closed when not in use.

Other Precautions: Do not contaminate water, food or feed by storage or disposal. Do not reuse empty container.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
1310-58-3	Potassium hydroxide	France VL	STEL: 2.0 mg/m3	
		Britain EH40	STEL: 2 mg/m3 ()	
7631-95-0	Sodium molybdate(VI)	France VL	TWA: 5 mg/m3 STEL: 10 mg/m3	

Recommended Exposure Limits: No occupational exposure limits have been established for this mixture.

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.): General ventilation is usually adequate. An eye bath and washing facilities should be readily available. General ventilation is usually adequate. Local exhaust should be used if needed for safe, comfortable working conditions.

8.2.2 Personal protection equipment:

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Waterproof gloves required for this product.

This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers.

Other Protective Clothing: Wear long sleeve shirt and long pants, waterproof gloves and shoes plus socks. Keep and wash PPE separately from other laundry.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Work/Hygienic/Maintenance Practices: Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove all dirty or contaminated clothing and wash it before reusing, as well as any other PPE.

8.2.3 Environmental Exposure Controls: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment wash water.

Exposure Scenarios:

Section 9. Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Red. Liquid.
pH:	5.0 - 7.0
Melting Point:	N.E.
Boiling Point:	N.E.
Flash Point:	N.A.
Evaporation Rate:	N.E.
Saturated Vapor Concentration:	N.E.
Flammability (solid, gas):	Non-flammable.
Explosive Limits:	LEL: N.A. UEL: N.A.
Vapor Pressure:	N.E.
Vapor Density (vs. Air=1):	N.E.

Specific Gravity (Water=1):	1.18 - 1.22
Density:	~ 1.1984 G/ML (~ 10.0 LB/GA)
Solubility in Water:	Soluble
Octanol/Water Partition Coefficient:	
Autoignition Pt:	N.A.
Decomposition Temperature:	N.E.
Viscosity:	N.E.
Explosive Properties:	Not an explosion hazard.
Information on other hazards:	Not an oxidizer.

9.2 Other Information

9.2.1 Information with regard to physical hazard classes

Information with regard to primary physical hazard:

9.2.2 Other safety characteristics

Section 10. Stability and Reactivity

10.1 Reactivity: N.A.

10.2 Stability: Unstable [ ] Stable [X]

10.3 Conditions To Avoid - Hazardous Reactions: None known.

Possibility of Hazardous Reactions: Will occur [ ] Will not occur [X]

10.4 Conditions To Avoid - Instability: High heat. Mixture with incompatible materials.

10.5 Incompatibility - Materials To Avoid: No data available.

10.6 Hazardous Decomposition or Byproducts: Ammonia gas.

Section 11. Toxicological Information

11.1 Information on Toxicological Effects:

Mutagenicity: The components of this product are not reported to produce mutagenic effects in humans. However, they are being investigated as mutagenic agents.
Embryotoxicity: The components of this product are not reported to produce embryotoxic effects in humans.
Teratogenicity: The components of this product are not reported to produce teratogenic effects in humans.
Reproductive Toxicity: The components of this product are not reported to produce toxic reproductive effects in humans. However, urea is being investigated as a reproductive effector.

Sensitization: The sensitizing properties of this product have not been thoroughly investigated.

Carcinogenicity/Other Information: The carcinogenic properties of this product have not been thoroughly investigated.

CAS# 10026-24-1: ACGIH: A3 - Confirmed animal carcinogen with unknown relevance to humans.
California: carcinogen, initial date 6/2/00.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

11.2 Information on other hazards:

Section 12. Ecological Information

12.1 Toxicity: The available data on this material does not indicate any undue hazard to the environment under anticipated use and storage. All work practices must be aimed at eliminating environmental contamination. Any waste due to spillage or leakage should be contained and disposed of accordingly, see above under Section 6 "Accidental Release Measures."

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark.

This product contains molybdenum; it is to be used only on crops that respond to molybdenum. Crops high in molybdenum are toxic to grazing animals (ruminants).

12.2 Persistence and Degradability: No data available.

12.3 Bioaccumulative Potential: No data available.

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB assessment: No data available.

12.6 Endocrine disrupting properties:

12.7 Other adverse effects:

Section 13. Disposal Considerations

13.1 Waste Disposal Method: This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local waste regulatory authority. Avoid contaminating water by disposal of equipment wash waters or other product wastes.
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Section 14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated. Trade Name: TRUROW ARRIVE
DOT Hazard Class:
UN/NA Number:

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Not Regulated. Trade Name: TRUROW ARRIVE
UN Number:
Hazard Class:

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated. Trade Name: TRUROW ARRIVE
UN Number: **Packing Group:**
Hazard Class:

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated. Trade Name: TRUROW ARRIVE
UN Number: **Packing Group:**
Hazard Class:

Additional Transport Information: Reportable Quantity: N.A.

Placards / Markings: N.A.

Emergency Response Guide Number: N.A.

Section 15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
1310-58-3	Potassium hydroxide	No	Yes NA	No
57-13-6	Urea	No	No	No
7631-95-0	Sodium molybdate(VI)	No	No	No
2223656-17-3	Cobalt EAHP	No	No	No

Regulatory Information: TSCA Inventory: In compliance with inventory requirements for commercial purposes.

15.2 Chemical Safety Assessment:

Section 16. Other Information

Revision Date: 12/18/2024

Additional Information About This Product:

Company Policy or Disclaimer: