

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/21/2023

Reviewed on 04/21/2023

1 Identification

- **Product identifier**

- **Trade name:** Green Bean Clean®

- **Article number:** 308468

- **Application of the substance / the mixture**

- **Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier:**

Dayton® Superior
4226 Kansas Avenue
Kansas City, KS 66106

Tel.: (866) 329-8724

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call international number, +1 703 741-5970. Collect calls are accepted.

- **Information department:** Environmental, Health, and Safety department.

2 Hazard(s) identification

- **Classification of the substance or mixture**

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Repr. 1B H360 May damage fertility or the unborn child.

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS07 GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

N-methyl-2-pyrrolidone

- **Hazard statements**

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May damage fertility or the unborn child.

May cause respiratory irritation.

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/21/2023

Reviewed on 04/21/2023

Trade name: Green Bean Clean®

(Contd. of page 1)

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	1	Fire = 1
PHYSICAL HAZARD	0	Reactivity = 0

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

872-50-4	N-methyl-2-pyrrolidone	≥10-≤40%
----------	------------------------	----------

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
In the event of persistent symptoms receive medical treatment.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
In case of unconsciousness place patient stably in side position for transportation.
Immediately move exposed person to fresh air. If breathing difficulty persists or develops get prompt medical attention.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Immediately call a doctor.
Seek medical treatment.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

US

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/21/2023

Reviewed on 04/21/2023

Trade name: Green Bean Clean®

(Contd. of page 2)

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:**
Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:** cool and dry
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

872-50-4 N-methyl-2-pyrrolidone

WEEL	Long-term value: 10 ppm
	Skin

(Contd. on page 4)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/21/2023

Reviewed on 04/21/2023

Trade name: Green Bean Clean®

(Contd. of page 3)

· Ingredients with biological limit values:
872-50-4 N-methyl-2-pyrrolidone

BEI	100 mg/L
	Medium: urine
	Time: end of shift
	Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone

· **Additional information:** The lists that were valid during the creation were used as basis.

· Exposure controls
· Personal protective equipment:
· General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Suitable respiratory protective device recommended.

· Protection of hands:


Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:** Wear appropriate eye protection to prevent eye contact.

9 Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
· Appearance:

Form: Liquid

Color: Yellow

· **Odor:** Mild

· **Odor threshold:** Not determined.

· **pH-value at 20 °C (68 °F):** 8.1

· Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: >148.9 °C (>300 °F)

· **Flash point:** >93.3 °C (>199.9 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 270 °C (518 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· Explosion limits:

Lower: 1.3 Vol %

Upper: 9.5 Vol %

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/21/2023

Reviewed on 04/21/2023

Trade name: Green Bean Clean®

(Contd. of page 4)

· Vapor pressure at 20 °C (68 °F):	0.3 hPa (0.2 mm Hg)
· Density at 20 °C (68 °F):	1 g/cm ³ (8.345 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	40.0 %
Solids content:	0.0 %
· Other information	No further relevant information available.
· Volatile Organic Compounds:	<600 g/L

10 Stability and reactivity

- **Reactivity** No decomposition if stored and applied as directed.
- **Chemical stability** No decomposition if stored and applied as directed
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Keep away from heat and sources of ignition.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

872-50-4 N-methyl-2-pyrrolidone

Oral	LD50	3,914 mg/kg (rat)
Dermal	LD50	8,000 mg/kg (rabbit)

- **Primary irritant effect:**
- **on the skin:** May cause skin irritation.
- **on the eye:**
Strong irritant with the danger of severe eye injury.
Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
Irritant

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/21/2023

Reviewed on 04/21/2023

Trade name: Green Bean Clean®

(Contd. of page 5)

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

- **Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Persistence and degradability** No further relevant information available.

- **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.

- **Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**

- **Recommendation:**

It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to Federal, State, and Local regulations.

- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **UN-Number**

- **DOT, ADR, ADN, IMDG, IATA**

Not Regulated

- **UN proper shipping name**

- **DOT, ADR, ADN, IMDG, IATA**

Not Regulated

- **Transport hazard class(es)**

- **DOT, ADR, ADN, IMDG, IATA**

- **Class**

Not Regulated

- **Packing group**

- **DOT, ADR, IMDG, IATA**

Not Regulated

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/21/2023

Reviewed on 04/21/2023

Trade name: Green Bean Clean®

(Contd. of page 6)

· Environmental hazards:	
· Marine pollutant:	No
· Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· U.S. Domestic Ground Shipments:	Not Regulated by D.O.T.
· U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:	Same as listed for Standard Shipments above.
· Emergency Response Guide (ERG) Number:	Not determine
· UN "Model Regulation":	Not Regulated

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredient is listed.

· **Section 313 (Specific toxic chemical listings):**

This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.

872-50-4	N-methyl-2-pyrrolidone	≥10-≤40%
----------	------------------------	----------

· **TSCA (Toxic Substances Control Act):**

872-50-4	N-methyl-2-pyrrolidone	ACTIVE
627-93-0	dimethyl adipate	ACTIVE
67784-80-9	Soybean oil, methyl esters	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to the State of California (Prop. 65) to cause cancer:**

872-50-4	N-methyl-2-pyrrolidone
----------	------------------------

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

872-50-4	N-methyl-2-pyrrolidone
----------	------------------------

· **Carcinogenity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/21/2023

Reviewed on 04/21/2023

Trade name: Green Bean Clean®

(Contd. of page 7)

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS07 GHS08

· **Signal word** Danger

· **Hazard-determining components of labeling:**

N-methyl-2-pyrrolidone

· **Hazard statements**

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May damage fertility or the unborn child.

May cause respiratory irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Call a poison center/doctor if you feel unwell.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Environmental, Health & Safety Department

· **Contact:** Environmental, Health & Safety Manager

· **Date of preparation / last revision** 04/21/2023 / 45

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Printing date 04/21/2023

Reviewed on 04/21/2023

Trade name: Green Bean Clean®

(Contd. of page 8)

*PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**NIOSH: National Institute for Occupational Safety**OSHA: Occupational Safety & Health**TLV: Threshold Limit Value**PEL: Permissible Exposure Limit**REL: Recommended Exposure Limit**BEI: Biological Exposure Limit**Acute Tox. 4: Acute toxicity – Category 4**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A**Repr. 1B: Reproductive toxicity – Category 1B**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

US