

SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 1 of 20
Print Date 08/28/2020

SAFETY DATA SHEET

EMERALD

Section 1. Identification

GHS product identifier : EMERALD
Chemical name : Mixture
CAS number : Mixture
Other means of identification : CC10287511
Product type : liquid

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications. Plastics.

Supplier's details : **Mesa Industries**
230 N 48th Avenue Phoenix, AZ 85043

(602) 269-3199

Emergency telephone number (with hours of operation) : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

This mixture has not been evaluated as a whole. Information provided on the health effects of this product is based on individual components. Some vapors may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
TOXIC TO REPRODUCTION (Fertility) - Category 1B
TOXIC TO REPRODUCTION (Unborn child) - Category 1B


GHS label elements

SAFETY DATA SHEET

EMERALD

Version Number 1.1
 Revision Date 08/04/2020

Page 2 of 20
 Print Date 08/28/2020

- Hazard pictograms** : 
- Signal word** : Danger
- Hazard statements** :
 Causes serious eye irritation.
 Causes skin irritation.
 May damage fertility or the unborn child.

Precautionary statements

- General** : Not applicable.
- Prevention** : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Wash hands thoroughly after handling.
- Response** : IF exposed or concerned: Get medical attention. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : None known.
- Hazards not otherwise classified** : None known.
 Not available.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Chemical name** : Mixture
- Other means of identification** : CC10287511

CAS number/other identifiers

Ingredient name	%	CAS number
1,2-Propanediol	10 - 25	57-55-6



SAFETY DATA SHEET

EMERALD

Version Number 1.1
 Revision Date 08/04/2020

Page 3 of 20
 Print Date 08/28/2020

Miscellaneous Compounds	10 - 25	4-90-0
Carbon black	5 - 10	1333-86-4
1-Methyl-2-pyrrolidone	3 - 5	872-50-4
Triethylamine	1 - 3	121-44-8

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious,



SAFETY DATA SHEET

EMERALD

Version Number 1.1
 Revision Date 08/04/2020

Page 4 of 20
 Print Date 08/28/2020

give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 pain or irritation
 watering
 redness
- Inhalation** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
 irritation
 redness
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

SAFETY DATA SHEET

EMERALD

Version Number 1.1
 Revision Date 08/04/2020

Page 5 of 20
 Print Date 08/28/2020

- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

- Suitable extinguishing media** : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical

- Hazardous thermal decomposition products** : In a fire or if heated, a pressure increase will occur and the container may burst.
 : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 nitrogen oxides

Special protective actions for fire-fighters

- : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

- : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 6 of 20
Print Date 08/28/2020

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

<h2>Section 7. Handling and storage</h2>
--

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- Conditions for safe storage,** : Store in accordance with local regulations. Store in original container

SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 7 of 20
Print Date 08/28/2020

including any incompatibilities

protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a well-ventilated place. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parametersOccupational exposure limits

Ingredient name	Exposure limits
Miscellaneous Compounds	None.
1,2-Propanediol	AIHA WEEL (1999-01-01) TWA 10 mg/m ³
Carbon black	OSHA PEL 1989 (1989-03-01) TWA 3.5 mg/m ³ OSHA PEL (1993-06-30) TWA 3.5 mg/m ³ NIOSH REL (1994-06-01) TWA 3.5 mg/m ³ NIOSH REL (1994-06-01) TWA 0.1 mgPAH/m ³ ACGIH TLV (2010-12-06) TWA 3 mg/m ³ Form: Inhalable fraction
1-Methyl-2-pyrrolidone	AIHA WEEL (1999-01-01) Absorbed through skin. TWA 10 ppm
Triethylamine	ACGIH TLV (2015-03-16) Absorbed through skin. TWA 0.5 ppm STEL 1 ppm OSHA PEL 1989 (1989-03-01) TWA 40 mg/m ³ 10 ppm STEL 60 mg/m ³ 15 ppm OSHA PEL (1993-06-30) TWA 100 mg/m ³ 25 ppm



SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 8 of 20
Print Date 08/28/2020

--	--

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 9 of 20
Print Date 08/28/2020

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	:	liquid [liquid]
Color	:	GREEN
Odor	:	Not available.
Odor threshold	:	Not available.
pH	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive (flammable) limits	:	Lower: Not available. Upper: Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.
Solubility in water	:	Not available.
Partition coefficient: n-octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Dynamic: Not available. Kinematic: Not available.

Aerosol product

Heat of combustion	:	Not available.
Ignition distance	:	Not available.
Enclosed space ignition - Time equivalent	:	Not available.
Enclosed space ignition - Deflagration density	:	Not available.

SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 10 of 20
Print Date 08/28/2020

Flame height : Not available.
Flame duration : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Keep away from extreme heat and oxidizing agents.

Incompatible materials : Keep away from strong acids.
Oxidizer.

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

Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Triethylamine	LD50 Oral	Rat	460 mg/kg	-
Remarks - Inhalation:	No applicable toxicity data			
Remarks - Dermal:	No applicable toxicity data			
1-Methyl-2-pyrrolidone	LD50 Oral	Rat	3,914 mg/kg	-
Remarks - Inhalation:	No applicable toxicity data			
	LD50 Dermal	Rabbit	8,000 mg/kg	-
Carbon black	LD50 Oral	Rat	15,400 mg/kg	-
Remarks - Inhalation:	No applicable toxicity data			
Remarks - Dermal:	No applicable toxicity data			
1,2-Propanediol	LD50 Oral	Rat	20,000 mg/kg	-
Remarks - Inhalation:	No applicable toxicity data			
	LD50 Dermal	Rabbit	20,800 mg/kg	-



SAFETY DATA SHEET

EMERALD

Version Number 1.1
 Revision Date 08/04/2020

Page 11 of 20
 Print Date 08/28/2020

Miscellaneous Compounds

Conclusion/Summary : Mixture.Not fully tested.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Triethylamine	Skin - Mild irritant	Rabbit			-
1-Methyl-2-pyrrolidone	Eyes - Moderate irritant	Rabbit			-
1,2-Propanediol	Skin - Mild irritant	Woman		96 hrs	-
	Skin - Mild irritant	Human		168 hrs	-
	Skin - Moderate irritant	Human		72 hrs	-
	Eyes - Mild irritant	Rabbit			-
	Eyes - Mild irritant	Rabbit		24 hrs	-
	Skin - Moderate irritant	Child		96 hrs	-

Conclusion/Summary

Skin : Mixture.Not fully tested.
Eyes : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Sensitization

Conclusion/Summary

Skin : Mixture.Not fully tested.
Respiratory : Mixture.Not fully tested.

Mutagenicity

Conclusion/Summary

: Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary

: Mixture.Not fully tested.

Classification



SAFETY DATA SHEET

EMERALD

Version Number 1.1
 Revision Date 08/04/2020

Page 12 of 20
 Print Date 08/28/2020

Product/ingredient name	OSHA	IARC	NTP
Carbon black	-	2B	-

Reproductive toxicity

Conclusion/Summary : Mixture.Not fully tested.

Teratogenicity

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following: pain or irritation, watering, redness
- Inhalation** : Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations
- Skin contact** : Adverse symptoms may include the following: irritation, redness, reduced fetal weight, increase in fetal deaths, skeletal malformations
- Ingestion** : Adverse symptoms may include the following: reduced fetal weight, increase in fetal deaths, skeletal malformations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure



SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 13 of 20
Print Date 08/28/2020

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Mixture. Not fully tested.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : May damage the unborn child.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : May damage fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	16,929.7 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Triethylamine			
Remarks - Acute - Fish:	No applicable toxicity data		
Remarks - Acute - Aquatic invertebrates.:	No applicable toxicity data		
Remarks - Acute - Aquatic plants:	No applicable toxicity data		
Remarks - Chronic - Fish:	No applicable toxicity data		
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data		
1-Methyl-2-pyrrolidone			

SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 14 of 20
Print Date 08/28/2020

	Acute LC50 832 Mg/l Fresh water	Fish - Fish	96 h
Remarks - Acute - Fish:	Acute		
	Acute LC50 1.23 Mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
Remarks - Acute - Aquatic invertebrates.:	Acute		
Remarks - Acute - Aquatic plants:	No applicable toxicity data		
Remarks - Chronic - Fish:	No applicable toxicity data		
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data		
Carbon black			
Remarks - Acute - Fish:	No applicable toxicity data		
	Acute EC50 37.563 Mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
Remarks - Acute - Aquatic invertebrates.:	Acute		
Remarks - Acute - Aquatic plants:	No applicable toxicity data		
Remarks - Chronic - Fish:	No applicable toxicity data		
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data		
1,2-Propanediol			
	Acute LC50 710 Mg/l Fresh water	Fish - Fish	96 h
Remarks - Acute - Fish:	Acute		
	Acute EC50 > 110 Mg/l Fresh water	Aquatic invertebrates. Daphnia	48 h
Remarks - Acute - Aquatic invertebrates.:	Acute		
	Acute LC50 1,020 Mg/l Fresh water	Aquatic invertebrates. Crustaceans	48 h
Remarks - Acute - Aquatic invertebrates.:	Acute		
Remarks - Acute - Aquatic plants:	No applicable toxicity data		
Remarks - Chronic - Fish:	No applicable toxicity data		
Remarks - Chronic - Aquatic invertebrates.:	No applicable toxicity data		

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 15 of 20
Print Date 08/28/2020

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Triethylamine	1.45	0.50	low
1-Methyl-2-pyrrolidone	-0.46	-	low
1,2-Propanediol	-1.070.085	-	low

Mobility in soil

- Soil/water partition coefficient (KOC)** : Not available.
- Other adverse effects** : No known significant effects or critical hazards.

Section 13. Disposal considerations
--

- Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Listed

Ingredient	CAS #	Status	Reference number
Triethylamine	121-44-8	Listed	

Section 14. Transport information
--

U.S.DOT 49CFR : Not regulated for transportation.



SAFETY DATA SHEET

EMERALD

Version Number 1.1
 Revision Date 08/04/2020

Page 16 of 20
 Print Date 08/28/2020

Ground/Air/Water

International Air : Consult mode specific transport rules
 ICAO/IATA

International Water : Consult mode specific transport rules
 IMO/IMDG

Section 15. Regulatory information

- U.S. Federal regulations** :
- United States - TSCA 12(b) - Chemical export notification:** None of the components are listed.
 - United States - TSCA 4(a) - Final Test Rules:** Not listed
 - United States - TSCA 4(a) - ITC Priority list:** Not listed
 - United States - TSCA 4(a) - Proposed test rules:** Not listed
 - United States - TSCA 4(f) - Priority risk review:** Not listed
 - United States - TSCA 5(a)2 - Final significant new use rules:** Not listed
 - United States - TSCA 5(a)2 - Proposed significant new use rules:** Not listed
 - United States - TSCA 5(e) - Substances consent order:** Not listed
 - United States - TSCA 6 - Final risk management:** Not listed
 - United States - TSCA 6 - Proposed risk management:** Not listed
 - United States - TSCA 8(a) - Chemical risk rules:** Not listed
 - United States - TSCA 8(a) - Dioxin/Furane precursor:** Not listed
 - United States - TSCA 8(a) - Chemical Data Reporting (CDR):** Not determined
 - United States - TSCA 8(a) - Preliminary assessment report (PAIR):** Not listed
 - United States - TSCA 8(c) - Significant adverse reaction (SAR):** Not listed
 - United States - TSCA 8(d) - Health and safety studies:** Not listed
 - United States - EPA Clean water act (CWA) section 307 - Priority pollutants:** Listed Phthalocyanine green
Copper
 - United States - EPA Clean water act (CWA) section 311 - Hazardous substances:** Listed
 - United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances:** Not listed
 - United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances:** Not listed
 - United States - Department of commerce - Precursor chemical:**



SAFETY DATA SHEET

EMERALD

Version Number 1.1
 Revision Date 08/04/2020

Page 17 of 20
 Print Date 08/28/2020

Not listed

- Clean Air Act Section 112(b) : Listed
- Hazardous Air Pollutants (HAPs)
- Clean Air Act Section 602 Class I Substances : Not listed
- Clean Air Act Section 602 Class II Substances : Not listed
- DEA List I Chemicals (Precursor Chemicals) : Not listed
- DEA List II Chemicals (Essential Chemicals) : Not listed

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

SARA 311/312

- Classification** : SKIN IRRITATION - Category 2
 EYE IRRITATION - Category 2A
 TOXIC TO REPRODUCTION - Fertility - Category 1B
 TOXIC TO REPRODUCTION - Unborn child - Category 1B

Composition/information on ingredients

Name	%	Classification
Miscellaneous Compounds	>= 10 - <= 25	TOXIC TO REPRODUCTION - Category 1B
1-Methyl-2-pyrrolidone	>= 3 - <= 5	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2A
Carbon black	>= 5 - <= 10	CARCINOGENICITY - Category 2
1,2-Propanediol	>= 10 - <= 25	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2B
Triethylamine	>= 1 - <= 3	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY - oral - Category 4

SARA 313

Form R - Reporting requirements



SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 18 of 20
Print Date 08/28/2020

Product name	CAS number	%
1-Methyl-2-pyrrolidone	872-50-4	>= 3 - <= 5
Triethylamine	121-44-8	>= 1 - <= 3

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

- Massachusetts** : None of the components are listed.
- New York** : The following components are listed:
Triethylamine
- New Jersey** : The following components are listed:
1,2-Propanediol
Carbon black
Phthalocyanine green
1-Methyl-2-pyrrolidone
Triethylamine
- Pennsylvania** : The following components are listed:
1,2-Propanediol

Carbon black

Phthalocyanine green

1-Methyl-2-pyrrolidone

Triethylamine

California Prop. 65

WARNING: This product can expose you to chemicals including Carbon black, which is known to the State of California to cause cancer, and 1-Methyl-2-pyrrolidone, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
1-Methyl-2-pyrrolidone	-	Yes.
Carbon black	-	-

United States inventory (TSCA 8b) : All components are active or exempted.



SAFETY DATA SHEET

EMERALD

Version Number 1.1
 Revision Date 08/04/2020

Page 19 of 20
 Print Date 08/28/2020

Canada inventory : Not determined.

International regulations

Inventory list

- Australia : Not determined.
- Canada : Not determined.
- China : Not determined.
- Europe inventory : Not determined.
- Japan : Not determined.
- New Zealand : Not determined.
- Philippines : Not determined.
- Republic of Korea : Not determined.
- Taiwan : Not determined.
- Turkey : Not determined.
- United States : All components are active or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

History

- Date of printing : 08/28/2020
- Date of issue/Date of revision : 08/04/2020
- Date of previous issue : 01/28/2020
- Version : 1.1

Key to abbreviations

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association



SAFETY DATA SHEET

EMERALD

Version Number 1.1
Revision Date 08/04/2020

Page 20 of 20
Print Date 08/28/2020

IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations
: Not available.

References

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.