SAFETY DATA SHEET

Section1: Identification

1.1 Product identifier

Product name: EP 2000, Black

Product identity: EP-301-Q
EP-301-G
EP-301-F

Product type: Antifouling paint

1.2 Recommended use of the chemical and restrictions on use

Field of application: Boat/Ship hulls and shipyards.

Identified uses: Industrial applications

TSCA: Unless otherwise stated. All components are listed or exempted.
FIFRA: USEPA Registration No. 64684-6

1.3 Details of the supplier of the safety data sheet

Company details: ePAINT COMPANY
25 Research Road
East Falmouth, MA 02536
Phone number: (508) 540-4412
E-mail: epaint@epaint.net

1.4 Emergency telephone number (with hours of operation)

For Transportation Emergencies: (24 hours) CHEMTREC: **1-800-424-9300**
(Toll-free in the U.S., Canada and the U.S. Virgin Islands)
If the purchaser of this product is going to be shipping this product to other locations, the purchaser must arrange for its own Emergency Information Provider to respond to transport incidents. ePAINT's 24 hour response contract does not cover non-ePAINT shipments.

For all other information: (8 AM – 5 PM EST) In USA, call (508)540-4412

See Section 4 of the safety data sheet (first aid measures).

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Acute Tox. 4; H302 -Harmful if swallowed.
Acute Tox. 5; H313 - May be harmful in contact with skin.
Acute Tox. 4; H332 - Harmful if inhaled.

Skin Irrit. 2; H315 - Causes skin irritation.
Aquatic Acute 1; H400 Very toxic to aquatic life.
Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

HMIS Rating (U.S.A.) Health: 2 Flammability: 1 Reactivity: 0

2.2 GHS Label elements -US labeling

Hazard Pictograms:

Signal Word: **Danger**

Hazard Statements: H302- Harmful if swallowed; H315- Causes skin irritation; H335- May cause respiratory irritation;

Using the Toxicity Data listed in section 11 & 12 the product is labeled as follows.

Precautionary Statements

Prevention:
P202 - Do not handle until all safety precautions have been read and understood.
P280 - Wear protective gloves / eye protection / face protection.
P281 - Use personal protective equipment as required
H302 - Harmful if swallowed.
H313 - May be harmful in contact with skin.
H315 - Causes skin irritation.
H320 - Causes eye irritation
H335 - May cause respiratory irritation.
H400 - Very toxic to aquatic life.
H410 - Toxic to aquatic life with long lasting effects.
P260 - Do not breathe mist / vapors / spray.
P261 - Avoid breathing dust / fume / gas / mist / vapors / spray.
P262 - Do not get in eyes, on skin, or on clothing.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.

Response:
P301+310 -IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+352 -IF ON SKIN: Wash with soap and water.
P303+361+353 -IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+312 -IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+351+338 -IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P312 - Call a POISON CENTER or doctor / physician if you feel unwell.
P330 - Rinse mouth.
P331 - Do NOT induce vomiting.
P340 - Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P362 Take off contaminated clothing and wash before reuse.
P370 In case of fire: Use water spray, fog, or regular foam.
P391 Collect spillage.

Storage:
P403+233 Store in a well ventilated place. Keep container tightly closed.

Disposal: P501 Dispose of contents / container in accordance with local, regional, national, and international regulations.

2.3 Hazards not otherwise classified
None

2.4 Unknown acute toxicity (GHS-US)
None

2.5 Additional information
Not Applicable

Section 3: Composition/ information on ingredients

3.1 Substance
Not Applicable

3.2 Mixture

Ingredient/Chemical Designations	Weight %	GHS Classification*	Notes
Zinc oxide CAS Number: 0001314-13-2	35-45	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	[1] [2]
Zinc pyrithione CAS Number: 0013463-41-7	1.0-5.0	Acute Tox. 4; H302 Acute Tox. 1; H330 Skin Irrit. 2; H315 Eye Irrit. 1; H320 Aquatic Acute 1; H400	[1]
2-Pyrrolidinone, 1-methyl- CAS Number 872-50-4	5-10.0	H316 Skin irrit.; H320 Eye Irrit. H335 Resp. Irrit. H360 May dam. Unborn child	
Triethyl amine CAS Number 121-44-8	0.5-1.5	Acute oral tox. 4; Acute derm. Tox 3; Acute Inhal.tox. 3; Skin corrosion/irrit. 1A; Eye dam/irrit. 1; Sp. Target organ tox. (single exp.) 3; Sp. Target organ tox. (repeated exp.) 2	
Carbon black CAS Number: 0001333-86-4 1.0 - 10 ---- [1][2]	1.0-5.0	------	[1] [2]

[1] Substance classified with a health or environmental hazard.
[2] Substance with a workplace exposure limit.

*The full texts of the phrases are shown in Section 16.

Section 4: First aid measures

4.1 Description of first aid measures

General: Remove contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean or destroy contaminated shoes.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If symptoms develop and persist, get medical attention.

Skin: In case of contact, immediately flush skin with soap and plenty of water. If symptoms develop and persist, get medical attention.

Ingestion: If swallowed, immediately contact Poison Control Center at 1-800-854-6813. DO NOT induce vomiting unless instructed to do so by medical personnel. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Overview: NOTICE: Reports have associated repeated and prolonged occupational Over-exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Avoid contact with eyes, skin and clothing.

Inhalation: Harmful if inhaled. May cause lung injury. Causes nose and throat irritation. Vapors may affect the brain or nervous system causing dizziness, headache or nausea.

Eyes: Causes severe eye irritation. Avoid contact with eyes.

Skin: Causes skin irritation. May be harmful if absorbed through the skin.

Ingestion: Harmful if swallowed. May cause abdominal pain, nausea, vomiting, diarrhea, or drowsiness.

Chronic effects: Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 2 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Not Determined

Section 5: Fire-fighting measures

5.1 Extinguishing media

Use a suitable extinguishing agent for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

In a fire or if heated, a pressure increase will occur and the container may burst.

5.3 Unsuitable extinguishing media

None known

5.4 Hazardous thermal decomposition products

Decompostion products may include the following materials: carbon dioxide, carbon monoxide, nitrogen oxides, (dense) black smoke, aldehydes, organic acids

5.5 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 without suitable training.

5.6 Special protective equipment for fire-fighters

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

5.7 Remarks

The material will not support combustion unless the water has evaporated.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For emergency personnel:

If specialized clothing is required to deal with the spillage, thae note of any information in Section 8 on suitable and unsuitable materials. See also the information in “For non-emergency personnel”.

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 protective equipment.

6.2 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)

6.3 Methods and material for containment and cleaning up

CALL CHEMTREC at (800)-424-9300 for emergency response. Isolate spill or leak area immediately for at least 25 to 50 meters (80 to 160 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. LARGE SPILLS: Consider initial downwind evacuation for at least 300 meters (1000 feet).

6.4 Reference to other sections

None

Section 7: Handling and storage

7.1 Precautions for safe handling

Protective measures:

Put on appropriate personal protective equipment (See Section 8). 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. 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.

7.2 Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 5 to 40 degrees C (41 to 104 degrees F). Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Keep container tightly closed and sealed until upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in original container, protected from direct sunlight.

Sensitive to frost.

7.3 Specific end use(s)

Close container after each use. Wash thoroughly after handling.

Section 8: Exposure controls and personal protection

8.1 Occupational Exposure Limits

Exposure

CAS No.	Ingredient	Source	Value
0001314-13-2	Zinc Oxide	OSHA	TWA 5 mg/m3 (fume); TWA 15 mg/m3 (total dust); TWA 5 mg/m3 (respirable fraction) STEL: 10 mg/m3 (fume)
		ACGIH	TWA: 2 mg/m3 (respirable fraction); STEL 10 mg/m3 (respirable fraction)
		NIOSH	TWA 5 mg/m3 (dust and fume); 10 mg/m3 STEL (fume)15 mg/m3 Ceiling (dust) 500 mg/m3 IDLH
		OHSA, CAN	TWA 2 mg/m3 (respirable); 10 mg/m3 STEL (respirable)
		Mexico	TWA LMPE-PPT: 5 mg/m3 (fume); 10 mg/m3 TWA LMPE-PPT (dust); 10 mg/m3 STEL [LMPE-CT] (fume)
0001333-86-4	Carbon Black	OSHA	TWA 3.5 mg/m3
		ACGIH	TWA 3 mg/m3 (inhalable fraction)
		NIOSH	TWA 3.5 mg/m3; TWA 0.1 mg/m3 (Carbon black in presence of Polycyclic aromatic hydrocarbons, as 1750 mg/m3 IDLH
		OHSA, CAN	TWA 3 mg/m3 (inhalable)
		Mexico	TWA 3.5 mg/m3 LMPE-PPT; 7 mg/m3 STEL [LMPE-CT]
		NIOSH	TWA 10 mg/m3 (total dust); TWA 5 mg/m3 (respirable dust)
		OHSA,CAN	TWA 10 mg/m3
0013463-41-7	Zinc Pyrithione	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	TWA 2.5 mg/m3 OEL/PBOEL; HHC

		OHSA, CAN	No Established Limit
		Mexico	No Established Limit
00872-50-4	2-Pyrrolidinone, 1-methyl-	AIHA WEEL (US)	TWA: 10 ppm 8hrs
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
		OHSA, CAN	No Established Limit
		Mexico	No Established Limit
121-44-8	Triethyl amine	OSHA PEL	(vacated) TWA 10 ppm ; (vacated) TWA 40mg/m3; (vacated) STEL: 15ppm; (vacated) STEL: 60 mg/m3; TWA: 25ppm; TWA: 100mg/m3
		ACGIH TLV	TWA: 1 ppm; STEL: 3 ppm Absorbed through Skin
		NIOSH	IDLH: 200 ppm
		Quebec	TWA: 5ppm; TWA: 20.5 mg/m3; STEL: 15ppm; STEL: 61.5 mg/m3 Skin
		Ontario TWAEV	TWA: 1ppm; STEL: 3ppm Absorbed through Skin
		Mexico OEL(TWA)	TWA: 25ppm; TWA: 100 mg/m3; STEL: 40 ppm; STEL: 160 mg/m3

8.2 Exposure controls/ Individual Protection measures

Respiratory A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever possible. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates dust, vapor, or mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH approved) during and after application. Follow respirator manufacturer's directions for respirator use. FOR USERS OF 3M RESPIRATORY PROTECTION ONLY: For information and assistance on 3M occupational health and safety products, call OH&ESD Technical Service toll free in U.S.A. 1-800-243-4630, in Canada call 1-800-267-4414. Please do not contact these numbers regarding other manufacturer's respiratory protection products. 3M does not endorse the accuracy of the information contained in this Safety Data Sheet.

Eyes Avoid contact with eyes. Wear protective chemical goggles or other appropriate eye protection. Depending on the site-specific conditions of use, safety glasses, chemical goggles, and/or head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.

Skin Depending on the site-specific conditions of use, protective gloves, apron, boots, head and face protection may be required to prevent contact. The equipment must be thoroughly cleaned, or discarded after each use.

Engineering Controls

Depending on the site-specific conditions of use, provide adequate ventilation. Facilities storing or using the material should be equipped with eyewash station and safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Other Work Practices

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use good personal hygiene practices. Wash hands before eating, drinking, using toilet facilities, etc. Promptly remove soiled clothing and wash clothing thoroughly before reuse. Shower after work using plenty of soap and water.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state :	Liquid
Color:	Black
Odor :	Slight amine odor
Odor threshold:	Not available
pH :	8 to 8.6 °F
Relative evaporation rate: (butyl acetate = 1)	Not measured
Melting point/Freezing point:	Testing not relevant or not possible due to nature of the product.
Boiling point/ boiling range :	192-396
Flash point :	Closed cup: >212°F(>100°C) (estimate)
Evaporation rate :	slower than ether
Flammability :	Not available
Upper/lower flammability or Explosive limits:	Not available
Vapor pressure:	Testing not relevant or not possible due to nature of the product.
Relative vapor density	Heavier than air
Relative density(specific gravity)	1.57 (Water = 1)
Solubility:	Partially soluble in the following materials: cold water and hot water.
Partition coefficient n-octanol/water:	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature:	Testing not relevant or not possible due to nature of the product.
Decomposition temperature:	Testing not relevant or not possible due to nature of the product.
Viscosity:	Not determined

9.2 Other information

Solvent(s) % by weight:	37.9%
Water % by weight:	33.2%
VOC content:	144 g/l

Section 10: Stability and reactivity

10.1 Reactivity

No Data available

10.2 Chemical stability

This product is stable.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

Do not store in direct sunlight or above 130°F or below 50°F.

10.5 Incompatible materials

Strong Oxidizing Agents, Ferrous metals, copper, copper alloys

10.6 Hazardous decomposition product

Carbon Monoxide, Carbon Dioxide, Oxides of Nitrogen

Section 11: Toxicological information

11.1 Information on toxicological effects

Acute Toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr
Zinc oxide - (1314-13-2)	7,950.00, Mouse- Category: 5	No Data available	No Data available	2,500, Mouse - Category: 4
Zinc pyrithione - (13463-41-7)	269, Rat- Category:4	>2,000.00, Rat - Category: 4	No data available	0.83 , Rat (male) Category: 4
Carbon black - (1333-86-4)	8,000.00, Rat - Category: NA	3,000.00, Rabbit - Category: 5	No data available	No data available
2-Pyrrolidinone, 1-methyl- (00872-50-4)	5130, Mouse; 3914, Rat	8000, Rabbit; 7000, Rat	No data available	>5.1, Rat
Triethyl amine (121-44-8)	460, Rat	415 mg/kg, Rabbit	7.1, Rat	No data available

Irritation/Corrosion

Product/Ingredient Name	Result	Species	Score	Exposure	Observation
Zinc Oxide	Skin – mild irritation Eyes	Rabbit Rabbit	- -	- -	24 hours 24 hours
Zinc pyrithione	Skin - no irritation Eyes – Corrosive	Rabbit Rabbit	- -	- -	4 hours -
Triethyl amine	Skin - Mild irritant Skin - Visible necrosis Eyes - cornea opacity	Rabbit Rabbit Rabbit	- - 3	365 milligrams 1 to 15 minutes -	- 26 hours -
2-Pyrrolidinone, 1-methyl-	Eyes – irritation, corneal clouding Skin - irritation Respiratory Tract –irritation, headache	- - -	- - -	- - -	- - -

Sensitization

Product/Ingredient Name	Route of Exposure or Test type	Species	Result
Zinc pyrithione	GPMT	Guinea Pig	Not a sensitizer
Triethyl amine	Skin	Guinea Pig	Not a sensitizer
2-Pyrrolidinone, 1-methyl-	Skin	Guinea pig	Not a sensitizer

Mutagenicity

Product/ Ingredient Name	Test	Experiment	Species	Result
Zinc pyrithione	Germ cell Mutagenicity assessment	-	Mammalian Animal	Negative
Triethyl amine	Ames Test -	Experiment: in vitro Experiment: in vivo	Bacteria Mammalian Animal	Negative Positive
2-Pyrrolidinone, 1-methyl-	Ames Test	Experiment: in vitro	Bacteria	Negative

Carcinogenicity

Component	CAS-No	IARC	NTP	ACGIH	OSHA
Zinc Oxide	1314-13-2	Not listed	Not listed	Not listed	Not listed
Zinc Pyrithione	13463-41-7	Not listed	Not listed	Not listed	Not listed
Triethylamine	121-44-8	Not listed	Not listed	Not listed	Not listed
Carbon Black	133-86-4	Group 2B		A3 Confirmed Animal Carcinogen with unknown relevance to humans	Listed
2-Pyrrolidinone, 1-methyl-	00872-50-4	Not listed	Not listed	Not listed	Not listed

Reproductive Effects

Component	Remarks
Zinc Oxide	No data available
Zinc Pyrithione	In animal testing, risk of impaired fertility was shown only after administration of very high doses of this substance
2-Pyrrolidinone, 1-methyl-	Possible effects observed
Triethylamine	Experiments have shown reproductive toxicity effects on laboratory animals
Carbon Black	No data available

Teratogenicity

Component	Remarks
Zinc Oxide	No evidence of adverse effects on development
Zinc Pyrithione	No data available
2-Pyrrolidinone, 1-methyl-	Prop. 65 max. allowable dose level for dev. Toxicity for NMP is 3200 ug/day for the inhalation route and 17.00 ug/day for the dermal route
Triethylamine	No data available
Carbon Black	No data available

Specific Target Organ Toxicity

Name	Category	Repeated/Single exposure	Target organs
Triethylamine	- -	Single Repeated	Respiratory system, Central Nervous System Liver, Kidney
2-Pyrrolidinone, 1-methyl-	Category 3	Single exposure	Respiratory tract irritation

Aspiration hazard

No data available

Information on the likely routes of exposure

No data available

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Inhalation May cause respiratory irritation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin Contact Causes skin irritation.

Ingestion Corrosive to the digestive tract. Causes burns

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact No specific data

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, dryness, cracking, reduced fetal weight, increase in fetal deaths, skeletal malformations

Ingestion Adverse symptoms may include the following: stomach pains, reduced fetal weight, increase in fetal deaths, skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

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:

Product/Ingredient	Result	Species	Dose	Exposure
Triethylamine	Sub-chronic NOAEC Inhalation Vapor	Rat	247 ppm	28 wks; 6 hours per day

General: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and /or dermatitis.

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: No known significant effects or critical hazards.

Additional Information

Zinc oxide dust or fume can irritate the respiratory tract. Prolonged skin contact can produce a severe dermatitis called oxide pox. Exposure to high levels of dust or fume can cause metallic taste, marked thirst, coughing, fatigue, weakness, muscular pain, and nausea followed by fever and chills. Severe overexposure may result in bronchitis or pneumonia with a bluish tint to the skin. Prolonged or repeated exposure can cause: reversible liver enzyme abnormalities, diarrhea. To the best of our knowledge the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological information

12.1 Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 algae mg/l	ErC50 algae mg/l
Zinc oxide-(1314-13-2)	1.10, Oncorhynchus mykiss	0.098, Daphnia magna	0.042 (72 hr), Pseudokirchneriella subcapitata
Zinc pyrithione–(13463-41-7)	0.0026, Pimephales promelas	0.0082, Daphnia magna	0.028 (96 hr), Selenastrum capricornutum
Carbon black - (1333-86-4)	42.00, Cyprinus Carpio	91.00, Daphnia magna	82.00 (72 hr), Selenastrum capricornutum
2-Pyrrolidinone, 1-methyl- (00872-50-4)	4000, Gold orfe	4897, Daphnia; >9000 Bacteria	IC50, >500mg/L (72hr)
Triethyl amine (121-44-8)	36, Fish	17, Daphnia	1.167, Algae (96 hr)

12.2 Persistence and degradability

Ingredient	Test	Result	Dose	Inoculum
2-Pyrrolidinone, 1-methyl-	301C Ready Biodegradability- Modified MITI Test (1)	73%-Readily– 28 days	-	-
Trietyl amine	OECD 301B Ready Biodegradability- CO2 Evolution Test	80%- Readily -21 days	-	-

Ingredient	Biodegradability
2-Pyrrolidinone, 1-methyl-	Readily
Trietyl amine	Readily

12.3 Bioaccumulative potential

Ingredient	LogPow	BCF	Potential/ Remarks
2-Pyrrolidinone, 1-methyl-	-0.46	0.2	low
Triethyl amine	1.45	<0.5	low
Zinc pyrithione	0.883	-	Does not bioaccumulate

12.4 Mobility in soil
No data available

12.5 Other adverse effects
No data available

12.6 PBT and vPvB assessment
This substance is not considered to be persistent, bioaccumulating and toxic (PBT)

Section 13: Disposal considerations

13.1 Waste treatment methods

Do not allow spills to enter drains or watercourses.
Dispose of in accordance with local, state and federal regulations. (Also reference RCRA information in Section 15 if listed).

Section 14: Transport information

14.1 UN number	UN1263
14.2 UN proper shipping name	Paint

14.3 Transport hazard class(es)

DOT (Domestic Surface Transportation):	IMO / IMDG (Ocean Transportation)
DOT Proper Shipping Name:	CONSUMER COMMODITY, ORM-D
DOT Hazard Class:	Not Regulated
UN / NA Number:	UN 1263
IMDG Packing Group:	III
DOT Packing Group:	Not Regulated
System Reference Code:	181
IMDG Hazard Class:	Not Regulated
Sub Class:	Not applicable
CERCLA/DOT RQ	61 gal. / 841 lbs.

14.4 Packing group:	**III**

14.5 Environmental hazards:

IMDG Marine Pollutant: Yes (Zinc pyrithione)

14.6 Special precautions for user

Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not Applicable

Section 15: Regulatory information

15.1 US Federal regulations

Regulatory Overview: The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

United States Inventory (TSCA 8b- (Toxic Substances Control Act): All components are listed or exempted

Clean Water Act (CWA) 311: Triethylamine

	Ingredient	**CAS#**	**%**
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Triethyl amine	121-44-8	1.6385

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

SARA 313

	Product name	CAS number	%
Form R- Reporting requirements	2-Pyrrolidinone, 1-methyl- Triethyl amine	872-50-4 121-44-8	16.981 1.6385
Supplier Notification	2-Pyrrolidinone, 1-methyl- Triethyl amine	872-50-4 121-44-8	16.981 1.6385

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

15.2 US State regulations

WHMIS Classification B2 D2B E

DOT Marine Pollutants (10%):
(No Product Ingredients Listed)

DOT Severe Marine Pollutants (1%):
(No Product Ingredients Listed)

EPCRA 311/312 Chemicals and RQs (>.1%):
(No Product Ingredients Listed)

EPCRA 302 Extremely Hazardous (>.1%):
(No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals (>.1%):
(No Product Ingredients Listed)

Mass RTK Substances (>1%):
Carbon black
Zinc oxide
2-Pyrrolidinone, 1-methyl-
Triethyl amine

NY RTK Substances (>1%):
Triethyl amine

Penn RTK Substances (>1%):
Carbon black
Zinc oxide
2-Pyrrolidinone, 1-methyl-

Penn Special Hazardous Substances (>.01%):
(No Product Ingredients Listed)

United States RCRA Toxic hazardous waste "U" list:
Ingredient: Triethlyamine; CAS # 121-44-8; Status: Listed; Reference number: U404

N.J. RTK Substances (>1%):
Carbon black)
Zinc oxide

N.J. Special Hazardous Substances (>.01%):
Carbon black
Silica, cristobalite

N.J. Env. Hazardous Substances (>.1%):
2-Pyrrolidinone, 1-methyl-
Triethly amine

Proposition 65 – Carcinogens (>0%):
Cadmium
Carbon black
Lead
Quartz

Proposition 65 - Female Repro Toxins (>0%):
Lead
2-Pyrrolidinone, 1-methyl-

Proposition 65 - Male Repro Toxins (>0%):
Cadmium
Lead
2-Pyrrolidinone, 1-methyl-

Proposition 65 - Developmental Toxins (>0%):
Cadmium
Lead

International lists

Canada inventory: All components are listed or exempted

Section 16: Other information

The full text of the phrases appearing in section 3 is:
H301 Toxic if swallowed.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.

H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Key to abbreviations:

BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and labeling of Chemicals
IBC = Intermediate Bulk container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

Procedure used to derive the classification

Classification	Justification
Repr. 1B, H360 (Unborn child)	Calculation method

Remarks:
Note: In USA, consult Code of Federal Regulations, Title 29, Labor, Parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable Federal, State or local regulations that apply to safe practices in coating operations.

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Warning! If you scrape, sand, or remove old paint, you may release lead dust. LEAD is TOXIC.

Revisions: Existing MSDS revised to new GHS format. Revision Date 08/23/2015

Notice to reader:

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