MATERIAL SAFETY DATA SHEET

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

MRS-850-B

HMIS CODES

Health	2
Flammability	1
Reactivity	0

PRODUCT NAME

Black Water Based Primer

MANUFACTURER'S NAME
Rubber-Seal Products
5751 N. Webster Street
Dayton, OH 45414
www.rubber-seal.com

EMERGENCY TELEPHONE NO.
CHEMTREC:
800-424-9300 (Within USA)
001-703-527-3887 (Outside the USA)
INFORMATION TELEPHONE NO.
(937) 890-6547

Section 2 -- HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE:

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

EFFECTS OF OVEREXPOSURE:

Irritation of eyes, skin and upper respiratory system. May cause nervous system depression. Extreme overexposure may result in unconsciousness and possibly death.

SIGNS AND SYMPTOMS OF OVEREXPOSURE:

Headache, dizziness, nausea, and loss of coordination are indications of excessive exposure to vapors or spray mists. Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

None generally recognized.

CANCER INFORMATION:

FOR COMPLETE DISCUSSION OF TOXICOLOGY DATA REFER TO SECTION 11.

Section 3 -- COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Ingredient % by weight	CAS Number	Vapor Pressure	
2-Butoxyethanol			
5 - 20%	111-76-2	.08	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	50 ppm
		OSHA STEL	
		NIOSH	5 ppm
Dipropylene Glycol Methyl Ether			
0.1 - 1%	34590-94-8	0.5	
		ACGIH TLV	100
		ACGIH STEL	150
		OSHA PEL	100
		OSHA STEL	N/E
		NIOSH	TWA 100
		NIOSH	STEL 150
		NIOSH	IDLH 600
2,4,7,9-Tetramethyl-5-decyne-4,7-diol			
0.1 - 1%	126-86-3	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Carbon Black			
0.1 - 1%	1333-86-4	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Talc			
5 - 20%	14807-96-6	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Water			
20 - 50%	7732-18-5	N/A	
		ACGIH TLV	
		ACGIH STEL	
		OSHA PEL	N/E
		OSHA STEL	N/E
		NIOSH	N/E
		NIOSH	N/E
N-Methyl-2-Pyrrolidone (NMP)			
1 - 5%	872-50-4	0.029	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Barium Sulfate			
1 - 5%	7727-43-7	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Chlorite-group minerals			

0.1 - 1%	1318-59-8	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Silicon dioxide			
0.1 - 1%	112945-52-5	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Tremolite (Non-asbestiform)			
0.1 - 1%	14567-73-8	10	
		ACGIH TLV	150
		ACGIH STEL	200
		OSHA PEL	150
		OSHA STEL	N/E
		NIOSH	REL-150
		NIOSH	STEL: 200
		NIOSH	IDLH 1700
Polyoxyethylene (5) nonylphenylether, branched			
0.1 - 1%	68412-54-4	.01	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	1
		OSHA STEL	5
		NIOSH	REL C- 5
		NIOSH	IDLH 1700
Sodium Nitrite			
0.1 - 1%	7632-00-0	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E
Sufactant			
0.1 - 1%	9003-11-6	N/A	
		ACGIH TLV	N/E
		ACGIH STEL	N/E
		OSHA PEL	N/E
		OSHA STEL	N/E

Section 4 -- FIRST AID MEASURES

If INHALED:

If affected, remove from exposure. Restore breathing. Keep warm and quiet.

If on SKIN:

Wash affected area thoroughly with soap and water. Remove contaminated clothing and launder before re-use.

If in EYES:

Flush eyes with large amounts of water for 15 minutes. Get medical attention.

If SWALLOWED:

Do not induce vomiting.Get medical attention immediately.

Section 5 -- FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL
104 F	1.1	11.9

EXTINGUISHING MEDIA:

Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical, or universal aqueous film forming foam) designed to extinguish NFPA Class IB flammable liquid fires. Water spray may be ineffective. Water spray may be used to cool closed containers to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Containers may explode when exposed to extreme heat. Application to hot surfaces requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

SPECIAL FIRE FIGHTING PROCEDURES:

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool closed containers to prevent pressure build-up and possible auto ignition or explosion when exposed to extreme heat.

Section 6 -- ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Provide maximum ventilation. Only personnel equipped with proper respiratory, skin, and eye protection should be permitted in the area. Remove all sources of ignition. Take up spilled material with sand, vermiculite, or other noncombustible absorbent material and place in clean, empty containers for disposal. Only the spilled material and the absorbent should be placed in this container.

Section 7 -- HANDLING RELEASE MEASURES

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively. During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters - Turn off stoves, electric tools and appliances, and other sources of ignition. Consult NFPA Code. Use approved bonding and grounding procedures. Do not expose to temperature above 120F. Heat from sunlight, radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children.

Section 8 -- EXPOSURE CONTROLS / PERSONAL PROTECTION

PRECAUTIONS TO BE TAKEN IN USE:

Use only with adequate ventilation. Avoid contact with skin and eyes. Avoid breathing vapor and spray mist. Wash hands after using. This coating may contain materials classified as nuisance particulates (listed "as Dust" in section 2) which may be present at hazardous levels only during sanding or abrading of the dried film. If no specific dusts are listed in section 2, the applicable limits for nuisance dust are ACGIII TLV 10 mg/m3 (total dust), 3 mg/m3 (respirable fraction), OSHA PEL 15 mg/m3 (total

dust), 5 mg/m3 (respirable fraction). Removal of old paint by sanding, scraping, or other means may generate dust or fumes that contain lead.

VENTILATION:

Local exhaust preferable. General exhaust acceptable if the exposure to materials in section 2 is maintained below applicable exposure limits. Refer to OSHA Standards 1910.94, 1910.107, 1910.108, and complete an industrial hygiene study to analyze specific working conditions.

RESPIRATORY PROTECTION:

If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH/MSHA for protection against materials in section 2. When sanding or abrading the dried film, wear a dust/mist respirator approved by NIOSH/MSHA for dust which may be generated from this product, underlying paint, or the abrasive.

PROTECTIVE GLOVES:

None required for normal application of these products where minimal skin contact is expected. For prolonged repeated contact, wear chemical resistant gloves.

EYE PROTECTION:

Wear safety spectacles with unperforated side shields.

OTHER PRECAUTIONS:

Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT WEIGHT	10.140 lb/gal	1216 g/l
SPECIFIC GRAVITY	1.220	
BOILING POINT	148 - 608 F	
	64 - 320 C	
VOLATILES	49.0 % by wt	60.7 % by vol
EVAPORATION RATE	Same as ether	
VAPOR DENSITY	Heavier than air	
REGULATORY VOC	2.06 lb/gal	246 g/l

ACTUAL VOC	1.10	lb/gal	132 g/l

Section 10 -- STABILITY AND REACTIVITY

STABILITY:
This product is normally stable and will not undergo hazardous reactions.

CONDITIONS TO AVOID:
None Known.

INCOMPATIBILITY:
Avoid contact with strong alkalies, strong mineral acids, or strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon monoxide, carbon dioxide, oxides of sulfur, oxides of barium, lowers molecular weight polymer fractions.

HAZARDOUS POLYMERIZATION:
None Known.

Section 11 -- TOXICOLOGICAL INFORMATION

CAS No. Ingredient Name

111-76-2 2-Butoxyethanol

IARC Classification Group 3
Acute toxicity:

Oral LD50
LD50 Oral - rat - 470 mg/kg

Inhalation LC50
LC50 Inhalation - rat - 4 h - 450 ppm
Remarks: Behavioral: Ataxia. Nutritional and Gross Metabolic: Weight loss or decreased weight gain

Dermal LD50
LD50 Dermal - rabbit - 220 mg/kg

Other information on acute toxicity:

LD50 Intraperitoneal - rat - 220 mg/kg
LD50 Intravenous - rat - 307 mg/kg

Skin corrosion/irritation:
Skin - rabbit - Open irritation test

Serious eye damage/eye irritation:
Eyes - rabbit - Moderate eye irritation - 24 h

Respiratory or skin sensitization:

No data available

Germ cell mutagenicity:
No data available

Carcinogenicity:

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Butoxyethanol)

NTP: No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity:

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Teratogenicity:
No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No data available

Aspiration hazard:
No data available

Potential health effects:

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: Harmful if swallowed.

Skin: Harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Signs and Symptoms of Exposure:
Human exposure above 200 ppm can be expected to cause narcosis, damage to the kidney and liver and present an abnormal blood picture showing erythropenia, reticulocytosis, granulocytosis, leukocytosis, and would be likely to cause fragility of erythrocytes and hematuria. Swallowing of 2-butoxyethanol results in a sour taste that turns to a burning sensation and is followed by numbness of the tongue which indicates paralysis of the sensory nerve endings, central nervous system depression, Headache, narcosis

Synergistic effects:
No data available

Additional Information:
RTECS: KJ8575000

34590-94-8 Dipropylene Glycol Methyl Ether

IARC Classification Not Established
Acute toxicity
LD50 Oral - rat - 5,152 mg/kg
Skin corrosion/irritation
Serious eye damage/eye irritation
Eyes - rabbit - Mild eye irritation - 24 h
Respiratory or skin sensitization
no data available
Germ cell mutagenicity
no data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,
possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or
anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
no data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available
Aspiration hazard
no data available
Potential health effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Additional Information
RTECS: JM1575000

126-86-3 2,4,7,9-Tetramethyl-5-decyne-4,7-diol

IARC Classification Not Established
Acute toxicity
no data available
Skin corrosion/irritation
no data available
Serious eye damage/eye irritation
no data available
Respiratory or skin sensitization
no data available
Germ cell mutagenicity
no data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,
possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or
anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
no data available
Specific target organ toxicity - single exposure (GHS)
no data available
Specific target organ toxicity - repeated exposure (GHS)
no data available
Aspiration hazard
no data available
Potential health effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

1333-86-4 Carbon Black

IARC Classification Group 2B
RTECS#:
CAS# 1333-86-4: FF5800000
LD50/LC50:
CAS# 1333-86-4:
Oral, rat: LD50 = >15400 mg/kg;
Skin, rabbit: LD50 = >3 gm/kg;

Carcinogenicity:
CAS# 1333-86-4:
l ACGIH: Not listed.
l California: carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size
l NTP: Not listed.
l IARC: Group 2B carcinogen
Epidemiology: No data available.
Teratogenicity: No information found
Reproductive Effects: No information found
Mutagenicity: See actual entry in RTECS for complete information.
Neurotoxicity: No information found
Other Studies: No information found

14807-96-6 Talc

IARC Classification Group 2B
Acute toxicity
Oral LD50
No data available
Inhalation LC50
Dermal LD50
No data available
Other information on acute toxicity
No data available
Skin corrosion/irritation
Skin - Human - Mild skin irritation - 3 h
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitization
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
Carcinogenicity - rat - Inhalation
Tumorigenic: Carcinogenic by RTECS criteria. Lungs, Thorax, or Respiration: Bronchiogenic carcinoma.
Endocrine: Tumors.
Carcinogenicity - rat - Inhalation
Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrous magnesium silicate)
1 - Group 1: Carcinogenic to humans (Hydrous magnesium silicate)
IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrous magnesium silicate)
1 - Group 1: Carcinogenic to humans (Hydrous magnesium silicate)
NTP: No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
No data available
Teratogenicity
No data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No data available
Aspiration hazard
No data available
Potential health effects
Inhalation: Toxic if inhaled- May cause respiratory tract irritation.
Ingestion: May be harmful if swallowed.
Skin: May be harmful if absorbed through skin- May cause skin irritation.
Eyes: May cause eye irritation.
Signs and Symptoms of Exposure
Prolonged inhalation of crystalline silica may result in silicosis, a disabling pulmonary fibrosis characterized by fibrotic changes and miliary nodules in the lungs, a dry cough, shortness of breath, emphysema, decreased chest expansion, and increased susceptibility to tuberculosis.
Advanced stages; Loss of appetite, pleuritic pain, and total incapacity to work. Advanced silicosis may result in death due to cardiac failure or destruction of lung tissue. Crystalline silica is classified as group 1 "known to be carcinogenic to humans" by IARC and "sufficient evidence" of carcinogenicity by the NTP., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Synergistic effects
No data available
Additional Information
RTECS: WW2710000

7732-18-5 Water

IARC Classification Not Established
LD50/LC50:
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg;
Carcinogenicity:
CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Epidemiology: No Data.
Teratogenicity: No information found.
Reproductive Effects: No information found.

Neurotoxicity: No information found.
Mutagenicity: No information found.
Other Studies: See actual entry in RTECS for complete information.

872-50-4 N-Methyl-2-Pyrrolidone (NMP)

IARC Classification Not Established
Product Summary
N-methyl pyrrolidone (NMP) is of slight acute toxicity. Liquid NMP is a moderate to severe eye irritant and mildly irritating to
skin but is not a skin sensitizer. It is readily absorbed after ingestion, inhalation and skin contact. Repeated inhalation
exposure may cause reversible irritation at the site of initial contact, and transient CNS effects have also been observed.
Repeated long term ingestion was associated with an increased severity of spontaneous progressive nephropathy in male
rats, and increased liver weight and increased hepatic cell hypertrophy in male and female mice. It is not genotoxic in vitro or
in vivo. No increase in tumors was seen in rats exposed by inhalation or via feed for two years, however an increase in liver
tumors was noted in mice over a similar period. The relevance of these findings to humans appears doubtful, however,
since liver tumors are commonly reported when non-genotoxic chemicals are tested in the mouse bioassay. Adverse
effects on reproduction have been reported in rats after ingestion of amounts of NMP which also caused mild generalized changes in the parental animals. Fetal effects have been noted in pregnant animals exposed by ingestion, inhalation and skin contact, and occurred both in the presence and absence of maternal toxicity.

Material Safety Data Sheet
MSDS No.:
Variant:
Version No:
Validation Date:
BE1006
Asia-EN
1.1
15.12.2004
N METHYL PYRROLIDONE
Page 6 of 8
COMPONENT INFORMATION
• N-Methyl-2-pyrrolidinone 872-50-4
Acute Toxicity - Lethal Doses
LC50 (Inhl) Rat > 5.0 MG/L
(AEROSOL)
4 HOURS
LD50 (Oral) Rat 4150 MG/KG BWT
LD50 (Skin) Rat 7000 MG/KG BWT
Irritation
Skin Contact may cause mild skin irritation.

Eye Moderate to severe eye irritant.

Target Organ Effects
Eye. Skin. Respiratory system. Mucous membrane irritant. CNS depressant.

Reproductive Effects
NMP may adversely affect reproduction in the rat after ingestion, although fertility is unaltered. These effects occurred at exposures which also caused mild generalized effects in the parental animals. It is therefore unclear if NMP specifically targets the reproductive system or whether these changes were secondary to other systemic effects. The relevance of these findings to humans is unknown. Fetal effects (including delayed development and the occurrence of soft tissue and skeletal variations)were observed in pregnant animals exposed by ingestion, inhalation and skin contact. While these events generally occurred in the presence of maternal toxicity, mild fetotoxicity was sometimes present in the absence of maternal effects. The relevance of these findings to humans is unknown.

Carcinogenicity
No increase in tumors in rats exposed by inhalation or via feed for 2 years. A dietary study found increased liver tumors in male and female mice given 1100 and 1400 mg/kg bwt/day for 18 months, respectively. Since liver tumors are commonly reported when non-genotoxic chemicals are tested in the mouse bioassay, the relevence of these findings to humans appears doubtful.

7727-43-7 Barium Sulfate

IARC Classification Not Established
No information available.

1318-59-8 Chlorite-group minerals

IARC Classification Not Established
Chemical Stability: Stable under normal conditions.

Chemical Stability: Conditions to Avoid: None.

Incompatibility: None identified.

Hazardous Decomposition: None identified.

Hazardous Polymerization: Will not occur.

112945-52-5 Silicon dioxide

IARC Classification Not Established
Product Acute oral toxicity: LD50 Rat: > 10000 mg/kg
Method: literature

Product Acute inhalation toxicity: LC50 Rat: 0.139 mg/l 4 h

Method: literature
(Maximum concentration attainable in experiments)
No deaths occurred.

Product Acute dermal toxicity: LD50 Rabbit: >5000 mg/kg
Method: literature

Product Skin irritation: Rabbit Not irritating.
Method: literature

Product Eye irritation: Rabbit Not irritating.
Method: literature

Product Repeated dose toxicity: Oral no negative effects.
Inhalation: No irreversible changes and no indication on silicosis.

Product Mutagenicity assessment: No evidence of mutagenic effects reported in literature.

Product Carcinogenicity: No negative effects.

Product Toxicity to reproduction: No negative effects.

Product Human experience: Silicosis or other specific illnesses of the respiratory tract have not been reported.

14567-73-8 Tremolite (Non-asbestiform)

IARC Classification Not Established
Acute oral toxicity: LD50 Rat: 10.8 g/kg
Acute inhalation toxicity: LC50 Rat: 160mh/l, 4h
Acute dermal toxicity: LD50 Rabbit: 17,600 mg/kg

68412-54-4 Polyoxyethylene (5) nonylphenylether, branched

IARC Classification Not Established
Acute toxicity
Oral LD50
LD50 Oral - rat - 4,000 mg/kg
Inhalation LC50
no data available
Dermal LD50
no data available
Other information on acute toxicity
no data available
Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available
Respiratory or skin sensitization
no data available
Germ cell mutagenicity
no data available
Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,
possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or
anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
no data available
Teratogenicity
no data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available
Aspiration hazard
no data available
Potential health effects
Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. Causes skin irritation.
Eyes Causes eye irritation.
Signs and Symptoms of Exposure
Nausea, Headache, Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Synergistic effects
no data available
Additional Information
RTECS: Not available

carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
no data available
Teratogenicity
no data available
Specific

7632-00-0 Sodium Nitrite

IARC Classification Not Established

Acute toxicity
Oral LD50
LD50 Oral - rat - 157.9 mg/kg
LD50 Oral - mouse - 175 mg/kg
Remarks: Vascular:BP lowering not charactertized in autonomic section. Vascular:Regional or general arteriolar or
venous dilation.
Inhalation LC50
no data available
Dermal LD50
no data available
Other information on acute toxicity
no data available
Skin corrosion/irritation
Skin - rabbit - No skin irritation - 48 h - OECD Test Guideline 404
Serious eye damage/eye irritation
Eyes - rabbit - Moderate eye irritation - 24 h - OECD Test Guideline 405
Respiratory or skin sensitization
no data available
Germ cell mutagenicity
no data available
Carcinogenicity
IARC: 2A - Group 2A: Probably carcinogenic to humans (Sodium nitrite)
2A - Group 2A: Probably carcinogenic to humans (Sodium nitrite)
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or
anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity
no data available
Teratogenicity
no data available
Specific target organ toxicity - single exposure (Globally Harmonized System)
no data available
Specific target organ toxicity - repeated exposure (Globally Harmonized System)
no data available
Aspiration hazard
no data available
Potential health effects
Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion Toxic if swallowed.
Skin May be harmful if absorbed through skin. Causes skin irritation.
Eyes Causes eye irritation.
Signs and Symptoms of Exposure
Headache, Nausea, Incoordination., Absorption into the body leads to the formation of methemoglobin which in sufficient
concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer.
Synergistic effects

no data available
Additional Information
RTECS: RA1225000

9003-11-6 Sufactant

IARC Classification Not Established
Routes of Entry: Inhalation. Ingestion.
Toxicity to Animals: Acute oral toxicity (LD50): 9380 mg/kg [Rat].
Chronic Effects on Humans: Not available.
Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans:
May contain trace amounts of Ethylene oxide, and 1,4-Dioxane which may cause cancer. May contain trace amounts of
Ethylene oxide which may cause adverse reproductive effects.
Special Remarks on other Toxic Effects on Humans: Not available.

IARC Reference
IARC Group 1: The agent is *carcinogenic to humans*
This category is used when there is *sufficient evidence of carcinogenicity* in humans. Exceptionally, an agent may be placed in this category when evidence of carcinogenicity in humans is less than *sufficient* but there is *sufficient evidence of carcinogenicity* in experimental animals and strong evidence in exposed humans that the agent acts through a relevant mechanism of carcinogenicity.

IARC Group 2A: The agent is *probably carcinogenic to humans*.
This category is used when there is *limited evidence of carcinogenicity* in humans and *sufficient evidence of carcinogenicity* in experimental animals. In some cases, an agent may be classified in this category when there is *inadequate evidence of carcinogenicity* in humans and *sufficient evidence of carcinogenicity* in experimental animals and strong evidence that the carcinogenesis is mediated by a mechanism that also operates in humans. Exceptionally, an agent may be classified in this category solely on the basis of *limited evidence of carcinogenicity* in humans. An agent may be assigned to this category if it clearly belongs, based on mechanistic considerations, to a class of agents for which one or more members have been classified in Group 1 or Group 2A.

IARC Group 2B: The agent is *possibly carcinogenic to humans*.
This category is used for agents for which there is *limited evidence of carcinogenicity* in humans and less than *sufficient evidence of carcinogenicity* in experimental animals. It may also be used when there is *inadequate evidence of carcinogenicity* in humans but there is *sufficient evidence of carcinogenicity* in experimental animals. In some instances, an agent for which there is *inadequate evidence of carcinogenicity* in humans and less than *sufficient evidence of carcinogenicity* in experimental animals together with supporting evidence from mechanistic and other relevant data may be placed in this group. An agent may be classified in this category solely on the basis of strong evidence from mechanistic and other relevant data.

IARC Group 3: The agent is *not classifiable as to its carcinogenicity to humans*.
This category is used most commonly for agents for which the evidence of carcinogenicity is *inadequate* in humans and *inadequate* or *limited* in experimental animals. Exceptionally, agents for which the evidence of carcinogenicity is *inadequate* in humans but *sufficient* in experimental animals may be placed in this category when there is strong evidence that the mechanism of carcinogenicity in experimental animals does not operate in humans. Agents that do not fall into any other group are also placed in this category. An evaluation in Group 3 is not a determination of non-carcinogenicity or overall safety. It often means that further research is needed, especially when exposures are widespread or the cancer data are consistent with differing interpretations.

IARC Group 4: The agent is *probably not carcinogenic to humans*.
This category is used for agents for which there is *evidence suggesting lack of carcinogenicity* in humans and in experimental animals. In some instances, agents for which there is *inadequate evidence of carcinogenicity* in humans but *evidence suggesting lack of carcinogenicity* in experimental animals, consistently and strongly supported by a broad range of mechanistic and other relevant data, may be classified in this group.

Section 12 -- ECOLOGICAL INFORMATION

CAS No. Ingredient Name

111-76-2 2-Butoxyethanol

Toxicity:

Toxicity to fish: LC50 - other fish - 220 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 1,815 mg/l - 24 h

Persistence and degradability:
No data available

Bio accumulative potential:
No data available

Mobility in soil:
No data available

PBT and vPvB assessment:
No data available

Other adverse effects:
No data available

34590-94-8 Dipropylene Glycol Methyl Ether

Toxicity
Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - > 10,000 mg/l - 96 h
Toxicity to daphnia
and other aquatic invertebrates.
EC50 - Daphnia magna (Water flea) - 1,919 mg/l - 48 h
Persistence and degradability
Biodegradability
Bioaccumulative potential
no data available
Mobility in soil
no data available
PBT and vPvB assessment
no data available
Other adverse effects
no data available

126-86-3 2,4,7,9-Tetramethyl-5-decyne-4,7-diol

Toxicity
no data available
Persistence and degradability
no data available
Bioaccumulative potential
no data available
Mobility in soil
no data available
PBT and vPvB assessment
no data available
Other adverse effects
no data available

1333-86-4 Carbon Black

No information available.

14807-96-6 Talc

No data available.

7732-18-5 Water

Ecotoxicity: No data available. No information available.
Environmental: Expected to evaporate.
Physical: No information available.
Other: No information available.

872-50-4 N-Methyl-2-Pyrrolidone (NMP)

Ecotoxicity
This material is expected to be non-hazardous to aquatic species. See component summary.
Environmental Fate and Pathway
This material is not expected to persist in the environment. It is water soluble and is expected to have low volatility. It is expected to be poorly adsorbed onto soils or sediments. Hydrolysis is not expected to be an important factor in the environmental fate process for this material. See component summary.

COMPONENT INFORMATION
Ecotoxicity
This material is expected to be non-hazardous to aquatic species.
Acute toxicity to fish
LC50 / 96 HOURS bluegill. 832 mg/l
LC50 / 96 HOURS fathead minnow 1,072 mg/l
LC50 / 96 HOURS rainbow trout. 3,048 mg/l
Acute toxicity to aquatic invertebrates
EC50 / 24 HOURS Daphnia magna. > 1,000 mg/l
Toxicity to aquatic plants
EC50 / 72 HOURS Green algae (Scenedesmus subspicatus). > 500 mg/l

Environmental Fate and Pathway
This material is not expected to persist in the environment. It is water soluble and is expected to have low volatility. It is expected to be poorly adsorbed onto soils or sediments. Hydrolysis is not expected to be an important factor in the environmental fate process for this material.

Persistance and Degradability
Biodegradation: BOD (Modified MITI Method) = 73% (28 days). BOD (Modified MITI Method) = 92% (14 days). This
material is expected to be readily biodegradable.
Bioaccumulation: BCF = 0.16. This material is not expected to bioaccumulate.

7727-43-7 Barium Sulfate

No information available.

1318-59-8 Chlorite-group minerals

No information available for this product.

112945-52-5 Silicon dioxide

Ecotoxicity effects
Toxicity to fish: LC50 (Brachydanio rerio): > 10,000 mg/l
96 H (Method: OECD 203)

Toxicity to daphnia: EC50 (Daphnia magna): > 10,000 mg/l

24 H (Method: OECD 202)

14567-73-8 Tremolite (Non-asbestiform)

Aquatic toxicity
Acute and Prolonged Toxicity to Fish: No data available
Acute Toxicity to Aquatic Invertebrates: No data available
Environmental fate and pathways: No data available

68412-54-4 Polyoxyethylene (5) nonylphenylether, branched

Toxicity
Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - > 10 mg/l - 96 h
Persistence and degradability
Bioaccumulative potential
Indication of bioaccumulation.
Mobility in soil
no data available
PBT and vPvB assessment
no data available
Other adverse effects
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life.

7632-00-0 Sodium Nitrite

Toxicity
Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 0.94 - 1.92 mg/l - 96.0 h
mortality NOEC - Oncorhynchus mykiss (rainbow trout) - 0.54 mg/l - 96.0 h
Toxicity to daphnia
and other aquatic
invertebrates.
EC50 - Daphnia magna (Water flea) - 12.5 mg/l - 48 h
Persistence and degradability
no data available
Bioaccumulative potential
no data available
Mobility in soil
no data available
PBT and vPvB assessment
no data available
Other adverse effects
Very toxic to aquatic life.
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

9003-11-6 Sufactant

Ecotoxicity: Not available.
BOD5 and COD: Not available.
Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation: Not available.

Section 13 -- DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Waste from this product may be hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Do not incinerate. Depressurize container. Dispose of in accordance with Federal, State, and Local regulations regarding pollution.

Section 14 -- TRANSPORT INFORMATION

Proper Shipping Name:	Consumer Commodity
NOS Technical Name:	ORM-D
Hazard Class:	N/A
UN Number:	N/A
Packing Group:	N/A

Section 15 -- REGULATORY INFORMATION

Canadian Regulations:
CEPA (Canadian Environmental Protection Act): <

All substances in this product are listed on the Canadian Domestic Substance List (DSL) or are not required to be listed.

US Regulations:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SARA 313:

CAS No.	CHEMICAL/COMPOUND	% by WT
872-50-4	N-Methyl-2-Pyrrolidone (NMP)	3.1
7632-00-0	Sodium Nitrite	0.4

PROP 65

CAS No.	CHEMICAL COMPOUND	% by WT
1333-86-4	Carbon Black	0.8
872-50-4	N-Methyl-2-Pyrrolidone (NMP)	3.1

TSCA CERTIFICATION:

U.S. TSCA: This product and/or all of its components are listed on the U.S. TSCA Inventory or is otherwise exempt from TSCA Inventory reporting requirements.

Section 16 -- OTHER INFORMATION

DISCLAIMER:

Do not handle until the manufacturer's safety precautions have been read and understood. Regulations require that all employees be trained on Material Safety Data Sheets for all products with which they come in contact. While we believe that the data contained herein is accurate and derived from qualified sources, the data are not to be taken as a warranty or representation for which we assume legal responsibility. They are offered solely for your consideration, investigation, and verification. Any use of these data and information must be determined by the user to be in accordance with applicable federal, state, provincial, and local laws and regulations.