

PRODUCT NAME: ABRO Engine Enamel w/ Ceramic-Blue  
PRODUCT NUMBER/SIZE: EE-555-BLU

Revision Date: 05/01/2015

## SECTION 1 Identification of the Substance and of the Company/Undertaking

MANUFACTURER'S NAME: ABRO INDUSTRIES, INC.  
ADDRESS: 3580 Blackthorn Court  
South Bend, IN 46628  
USA  
PRODUCT DESCRIPTION: Engine Enamel  
COMPANY PHONE: 574-232-8289  
EMERGENCY 24-HR TELEPHONE: Chemtrec: US/Canada 1-800-424-9300  
International +1-703-527-3887

## SECTION 2 Hazards Identification

Health	2
Flammability	3
Physical Hazard	0

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

### Classification:

FLAMMABLE AEROSOLS - Category 1  
GASES UNDER PRESSURE - Compressed gas  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
SKIN SENSITIZATION - Category 1  
CARCINOGENICITY - Category 2  
TOXIC TO REPRODUCTION (Unborn child) - Category 2  
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation and Narcotic effects) - Category 3  
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
ASPIRATION HAZARD - Category 1  
Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 16.7%

### Label Pictogram(s):



**Signal Word:** DANGER

**Hazard Phrases:** Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. Causes skin irritation. May cause an allergic skin reaction. Suspected of damaging the unborn child. Suspected of causing cancer. May be fatal if swallowed and enters airways. May cause respiratory irritation. May cause drowsiness and dizziness. May cause damage to organs through prolonged or repeated exposure.

**Precautionary Phrases:** Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Pressurized container: Do not pierce or burn, even after use. Do not spray on an open flame or other ignition source. Use only outdoors or in a well-ventilated area. Do not breathe dust or mist. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

**Response:** Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash 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 / Disposal:** Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122 °F. Store in a well-ventilated place. Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Other:** DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. FOR INDUSTRIAL USE ONLY.

Please refer to the SDS for additional information. Keep upright in a cool, dry place. Do not discard empty can in trash compactor.

### SECTION 3 Composition/Information on Ingredients

**Substance/mixture:** Mixture  
**Other means of identification:** Not available.

COMPONENTS	CAS Number	Percent by weight
Acetone	67-64-1	25.8 %
Toluene	108-88-3	23.2 %

Propane	74-98-6	14.8 %
Butane	106-97-8	14.2 %
Titanium Dioxide	13463-67-7	1.9 %
Methyl Ethyl Ketoxime	96-29-7	0.2 %

\*\*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

### First Aid Measures

<b>Eye Contact</b>	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.
<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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.
<b>Skin Contact</b>	Wash with plenty of soap and 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. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	Get medical attention immediately. Call a poison center or physician. 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, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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 Signs & Symptoms/Effects, acute and delayed Potential Acute Health Effects

Eye Contact: Causes serious eye irritation.

Inhalation:	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.
Skin Contact:	Causes skin irritation. May cause an allergic skin reaction.
Ingestion:	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

**Over-exposure signs/symptoms**

Eye Contact:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation coughing nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness 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: nausea or vomiting reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments:	No specific treatment.
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.

## SECTION 5 Fire Fighting Measures

<b>Suitable Extinguishing Media:</b>	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable Extinguishing Media:</b>	None known.
<b>Specific Hazards Arising From The Chemical:</b>	Extremely flammable aerosol. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. Runoff to sewer may create fire or explosion hazard.
<b>Hazardous Thermal Decomposition Products:</b>	Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
<b>Special Protective Actions For Fire-Fighters:</b>	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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
<b>Special Protective Equipment For Fire-Fighters:</b>	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

<b>For Non-Emergency Personnel:</b>	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>For Emergency Responders:</b>	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".
<b>Environmental Precautions:</b>	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. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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.

**SECTION 7**  
**Handling and Storage**

**Precautions for Safe Handling**

**Protective Measures:**

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. 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 breathe vapor or mist. Do not swallow. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

**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, Including Any  
Incompatibilities:**

Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Protect from sunlight. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination.

**SECTION 8**  
**Exposure Controls/Personal Protection**

**Control Parameters**

**Occupational Exposure Limits:**

<b>Ingredient name</b>	<b>Exposure limits</b>
Acetone	<p><b>ACGIH TLV</b> (United States, 6/2013). TWA: 500 ppm 8 hours. TWA: 1188 mg/m<sup>3</sup> 8 hours. STEL: 750 ppm 15 minutes. STEL: 1782 mg/m<sup>3</sup> 15 minutes. <b>NIOSH REL</b> (United States, 10/2013). TWA: 250 ppm 10 hours. TWA: 590 mg/m<sup>3</sup> 10 hours. <b>OSHA PEL</b> (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 2400 mg/m<sup>3</sup> 8 hours.</p>
Toluene	<p><b>OSHA PEL Z2</b> (United States, 2/2013). TWA: 200 ppm 8 hours. CELL: 300 ppm AMP: 500 ppm 10 minutes. <b>NIOSH REL</b> (United States, 10/2013). TWA: 100 ppm 10 hours. TWA: 375 mg/m<sup>3</sup> 10 hours. STEL: 150 ppm 15 minutes. STEL: 560 mg/m<sup>3</sup> 15 minutes. <b>ACGIH TLV</b> (United States, 6/2013). TWA: 20 ppm 8 hours.</p>
Propane	<p><b>NIOSH REL</b> (United States, 10/2013). TWA: 1000 ppm 10 hours. TWA: 1800 mg/m<sup>3</sup> 10 hours. <b>OSHA PEL</b> (United States, 2/2013). TWA: 1000 ppm 8 hours. TWA: 1800 mg/m<sup>3</sup> 8 hours.</p>
Butane	<p><b>NIOSH REL</b> (United States, 10/2013). TWA: 800 ppm 10 hours. TWA: 1900 mg/m<sup>3</sup> 10 hours. <b>ACGIH TLV</b> (United States, 6/2013). STEL: 1000 ppm 15 minutes.</p>
Titanium Dioxide	<p><b>ACGIH TLV</b> (United States, 4/2014). TWA: 10 mg/m<sup>3</sup> 8 hours. <b>OSHA PEL</b> (United States, 2/2013). TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust</p>
Methyl Ethyl Ketoxime	<p><b>AIHA WEEL</b> (United States, 10/2011). Skin sensitizer. TWA: 10 ppm 8 hours.</p>

**Appropriate Engineering Controls:**

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**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. Contaminated work clothing should not be allowed out of the workplace. 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

**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.

**Respiratory Protection:** Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**SECTION 9**  
**Physical and Chemical Properties**

**Appearance:**

<b>Physical State:</b>	Liquid.
<b>Color:</b>	Blue.
<b>Odor:</b>	Not Available.

<b>Odor Threshold:</b>	Not Available.
<b>pH:</b>	Not Available.
<b>Melting Point:</b>	Not Available.
<b>Boiling Point:</b>	Not Available.
<b>Flash Point:</b>	Closed cup: -29°C (-20.2°F) [Pensky-Martens Closed Cup]
<b>Evaporation Rate:</b>	5.6 (butyl acetate = 1)
<b>Flammability (Solid, Gas):</b>	Not Available.
<b>Lower And Upper Explosive (Flammable) Limits:</b>	Lower: 1% Upper: 12.8%
<b>Vapor Pressure:</b>	13.5 kPa (101.325 mm Hg) [at 20°C]
<b>Vapor Density:</b>	1.55 [Air = 1]
<b>Relative Density:</b>	0.75
<b>Solubility:</b>	Not Available.
<b>Partition Coefficient: N-Octanol/Water:</b>	Not Available.
<b>Auto-Ignition Temperature:</b>	Not Available.
<b>Decomposition Temperature:</b>	Not Available.
<b>Viscosity:</b>	Kinematic (room temperature): <0.07 cm <sup>2</sup> /s (<7 cSt) Kinematic (40°C (104°F)): <0.07 cm <sup>2</sup> /s (<7 cSt)
<b>Aerosol Product</b>	
<b>Type Of Aerosol:</b>	Spray
<b>Heat Of Combustion:</b>	0.00002795 kJ/g

## SECTION 10 Stability and Reactivity

<b>Reactivity</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical Stability:</b>	The product is stable.
<b>Possibility Of Hazardous Reactions:</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions To Avoid:</b>	Avoid all possible sources of ignition (spark or flame).
<b>Incompatible Materials:</b>	No specific data.
<b>Hazardous Decomposition Products:</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11 Toxicological Information

### Information on toxicological effects

#### Acute Toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Acetone	LD50 Oral	Rat	5800 mg/kg	-
Toluene	LC50 Inhalation Vapor	Rat	49 g/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	636 mg/kg	-
Butane	LC50 Inhalation Vapor	Rat	658000 mg/m <sup>3</sup>	4 hours
Methyl Ethyl Ketoxime	LD50 Oral	Rat	930 mg/kg	-

**Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
Acetone	Eyes- Mild irritant	Human	-	186300 parts per million	-
	Eyes- Mild irritant	Rabbit	-	10 microliters	-
	Eyes- Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes- Severe irritant	Rabbit	-	20 milligrams	-
Toluene	Skin- Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes- Mild irritant	Rabbit	-	395 milligrams	-
	Eyes- Mild irritant	Rabbit	-	0.5 minutes 100 milligrams	-
	Eyes- Mild irritant	Rabbit	-	870 micograms	-
	Eyes- Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin- Mild irritant	Pig	-	24 hours 250 microliters	-
	Skin- Mild irritant	Rabbit	-	435 milligrams	-
	Skin- Moderate Irritant	Rabbit	-	24 hours 20 milligrams	-
Titanium Dioxide	Skin- Moderate irritant	Rabbit	-	500 milligrams	-
	Skin- Mild irritant	Human	-	72 hours 300 micrograms intermittent	-
Methyl Ethyl Ketoxime	Eyes- Severe irritant	Rabbit	-	100 microliters	-

**Sensitization**

Not available.

**Mutagenicity**

Not available.

**Carcinogenicity**

Not available.

**Classification**

Product/ingredient name	OSHA	IARC	NTP
Toluene	-	3	-
Titanium Dioxide	-	2B	-

**Reproductive Toxicity**

Not available.

**Teratogenicity**

Not available.

**Specific Target Organ Toxicity (Single Exposure)**

Name	Category	Route of Exposure	Target Organs
Acetone	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Toluene	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Propane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Butane	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

**Specific Target Organ Toxicity (Repeated Exposure)**

<b>Name</b>	<b>Category</b>	<b>Route of Exposure</b>	<b>Target Organs</b>
Acetone	Category 2	Not determined.	Not determined.
Toluene	Category 2	Not determined.	Not determined.
Propane	Category 2	Not determined.	Not determined.
Butane	Category 2	Not determined.	Not determined.

**Aspiration Hazard**

<b>Name</b>	<b>Result</b>
Toluene	ASPIRATION HAZARD - Category 1
Propane	ASPIRATION HAZARD - Category 1
Butane	ASPIRATION HAZARD - Category 1

**Information on the likely routes of exposure:** Not available.

**Potential Acute Health Effects**

Eye Contact:	Causes serious eye irritation.
Inhalation:	Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness. May cause respiratory irritation.
Skin Contact:	Causes skin irritation. May cause an allergic skin reaction.
Ingestion:	Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

**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:  
 respiratory tract irritation  
 coughing  
 nausea or vomiting  
 headache  
 drowsiness/fatigue  
 dizziness/vertigo  
 unconsciousness  
 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:  
nausea or vomiting  
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**

Not available.

General: May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity: Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: Suspected of damaging the unborn child.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

**Numerical Measures Of Toxicity**

**Acute toxicity estimates**

Route	ATE Value
Oral	2200.9 mg/kg

**SECTION 12**  
**Ecological Information**

**Toxicity**

<b>Product/ingredient name</b>	<b>Result</b>	<b>Species</b>	<b>Exposure</b>
Acetone	Acute EC50 20.565 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 6000000 µg/l Fresh water	Crustaceans -Gammarus pulex	48 hours
	Acute LC50 10000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 5600 ppm Fresh water	Fish - Poecilia reticulata	96 hours
	Chronic NOEC 4.95 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Chronic NOEC 0.016 ml/L Fresh water	Crustaceans – Daphniidae	21 days
	Chronic NOEC 0.1 ml/L Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 5 µg/l Marine water	Fish - Gasterosteus aculeatus – Larvae	42 days
Toluene	Acute EC50 12500 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 µg/l Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult	48 hours
	Acute EC50 6000 µg/l Fresh water	Daphnia - Daphnia magna -	48 hours

	Acute LC50 5500 µg/l Fresh water	Juvenile (Fledgling, Hatchling, Weanling) Fish - Oncorhynchus kisutch - Fry	96 hours
	Chronic NOEC 1000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
Titanium Dioxide	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
Methyl Ethyl Ketoxime	Acute LC50 843000 µg/l Fresh water	Fish – Pimephales promelas	96 hours

**Persistence and degradability**

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Acetone	-	-	Readily
Toluene	-	-	Readily

**Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Toluene	-	90	Low
Titanium Dioxide	-	352	Low
Methyl Ethyl Ketoxime	-	2.5 to 5.8	Low

**Mobility in soil**

Soil/water partition coefficient (K <sub>oc</sub> ):	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. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

**SECTION 14  
Transport Information**

	DOT Classification	TDG Classification	Mexico Classification	IATA	IMDG
UN Number	UN1950	UN1950	UN1950	UN1950	UN1950
UN proper shipping name	AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS, flammable	AEROSOLS

Transport hazard class(es)	2.1 	2.1 	2.1 	2.1 	2.1 
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.
Additional information	<u>Special provisions</u> LIMITED QUANTITY	<u>Special provisions</u> LIMITED QUANTITY	<u>Special provisions</u> (ERG#126)	<u>Special provisions</u> LIMITED QUANTITY	<u>Special provisions</u> LIMITED QUANTITY, F-D, S-U

Special precautions for user: Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

**SECTION 15  
Regulatory Information**

U.S. Federal regulations:

State regulations:

**SECTION 16  
Other Information**

We believe all information given is accurate. It is offered in good faith but without guarantee. Since conditions of use are beyond our control, user assumes all responsibility and risk.

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

**ABBREVIATIONS:**

NG="NOT GIVEN"

<="LESS THAN"

ND = Not Determined

BT="BETWEEN"

>="GREATER THAN"

NA = Not Applicable