



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Flagstone Carpet Dye

**Other means of identification**

**Product Code** 121533-6

**Recommended use** Carpet Dye

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufacturer**

**Company name** Malco Products, Inc.

**Address** 361 Fairview Ave  
Barberton, OH 44203  
United States

**Telephone** Phone 800-253-2526

Fax 330-753-2025

**Website** www.malcopro.com

**E-mail** msdsinfo@malcopro.com

**Contact person** Technical Department

**Emergency phone number** Phone 1-800-424-9300

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable aerosols	Category 1
	Gases under pressure	Liquefied gas
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1A
	Reproductive toxicity	Category 1
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
<b>Environmental hazards</b>	Specific target organ toxicity, repeated exposure	Category 1
	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 3
<b>OSHA defined hazards</b>	Not classified.	

**Label elements**



**Signal word** Danger

**Hazard statement** Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

## Precautionary statement

<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	36.31% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Acetone (propan-2-one; Propanone)		67-64-1	40 - < 50
N-butane		106-97-8	10 - < 20
Propane		74-98-6	10 - < 20
Toluene		108-88-3	10 - < 20
Methyl ethyl ketone		78-93-3	1 - < 3
Titanium Dioxide		13463-67-7	1 - < 3
Xylene		1330-20-7	1 - < 3
1-Methyl-2-pyrrolidone		872-50-4	< 1
Benzyl Butyl Phthalate		85-68-7	< 1
Ethylbenzene		100-41-4	< 1

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Skin contact</b>	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Not likely, due to the form of the product. In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.
<b>Most important symptoms/effects, acute and delayed</b>	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Prolonged exposure may cause chronic effects.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire fighting equipment/instructions</b>	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Refer to attached safety data sheets and/or instructions for use. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Suck back of water into the container must be prevented. Do not allow backfeed into the container. Purge air from system before introducing gas. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Do not re-use empty containers. Do not breathe mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
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**Conditions for safe storage, including any incompatibilities**

Level 3 Aerosol.

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Stored containers should be periodically checked for general condition and leakage. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Acetone (propan-2-one; Propanone) (CAS 67-64-1)	PEL	2400 mg/m3	
Ethylbenzene (CAS 100-41-4)	PEL	1000 ppm 435 mg/m3	
Methyl ethyl ketone (CAS 78-93-3)	PEL	100 ppm 590 mg/m3	
Propane (CAS 74-98-6)	PEL	200 ppm 1800 mg/m3	
Titanium Dioxide (CAS 13463-67-7)	PEL	1000 ppm 15 mg/m3	Total dust.
Xylene (CAS 1330-20-7)	PEL	435 mg/m3 100 ppm	

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

Components	Type	Value
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
Acetone (propan-2-one; Propanone) (CAS 67-64-1)	STEL	500 ppm
	TWA	250 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Methyl ethyl ketone (CAS 78-93-3)	STEL	300 ppm
	TWA	200 ppm
N-butane (CAS 106-97-8)	STEL	1000 ppm
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3
Toluene (CAS 108-88-3)	TWA	20 ppm
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Acetone (propan-2-one; Propanone) (CAS 67-64-1)	TWA	590 mg/m3
		250 ppm
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
		100 ppm
Methyl ethyl ketone (CAS 78-93-3)	STEL	885 mg/m3

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
		300 ppm
	TWA	590 mg/m3
N-butane (CAS 106-97-8)		200 ppm
	TWA	1900 mg/m3
Propane (CAS 74-98-6)		800 ppm
	TWA	1800 mg/m3
Toluene (CAS 108-88-3)		1000 ppm
	STEL	560 mg/m3
		150 ppm
	TWA	375 mg/m3
		100 ppm

**US. Workplace Environmental Exposure Level (WEEL) Guides**

Components	Type	Value
1-Methyl-2-pyrrolidone (CAS 872-50-4)	TWA	40 mg/m3
		10 ppm

**Biological limit values****ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
1-Methyl-2-pyrrolidone (CAS 872-50-4)	100 mg/l	5-Hydroxy-N-methyl-2-pyrrolidone	Urine	*
Acetone (propan-2-one; Propanone) (CAS 67-64-1)	25 mg/l	Acetone	Urine	*
Ethylbenzene (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*
Methyl ethyl ketone (CAS 78-93-3)	2 mg/l	MEK	Urine	*
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines****US - California OELs: Skin designation**

1-Methyl-2-pyrrolidone (CAS 872-50-4)

Can be absorbed through the skin.

Toluene (CAS 108-88-3)

Can be absorbed through the skin.

**US - Minnesota Haz Subs: Skin designation applies**

Toluene (CAS 108-88-3)

Skin designation applies.

**US WEEL Guides: Skin designation**

1-Methyl-2-pyrrolidone (CAS 872-50-4)

Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Chemical respirator with organic vapor cartridge and full facepiece.

**Skin protection****Hand protection**

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

**Other**

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

<b>Respiratory protection</b>	Chemical respirator with organic vapor cartridge and full facepiece.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

<b>Appearance</b>	Aerosol.
<b>Physical state</b>	Liquid.
<b>Form</b>	Aerosol. Liquefied gas.
<b>Color</b>	Not available.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-305.68 °F (-187.6 °C) estimated / -67.43 °F (-55.24 °C) estimated
<b>Initial boiling point and boiling range</b>	-43.78 °F (-42.1 °C) estimated
<b>Flash point</b>	-156.0 °F (-104.4 °C) estimated
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	1.3 % estimated
<b>Flammability limit - upper (%)</b>	12.8 % estimated
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	2289.75 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	550 °F (287.78 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Density</b>	6.06 lbs/gal
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Flammable IA estimated
<b>Heat of combustion</b>	30.19 kJ/g estimated
<b>Heat of combustion (NFPA 30B)</b>	31.69 kJ/g estimated
<b>Oxidizing properties</b>	Not oxidizing.
<b>Percent volatile</b>	91.09 % estimated
<b>Specific gravity</b>	0.73
<b>VOC (Weight %)</b>	2.93 lb/gal Material estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.

<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong acids. Acids. Strong oxidizing agents. Nitrates. Halogens. Fluorine. Chlorine.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause damage to organs through prolonged or repeated exposure by inhalation. May cause drowsiness and dizziness. Headache. Nausea, vomiting.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** May cause drowsiness and dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

### Information on toxicological effects

**Acute toxicity** Narcotic effects.

Components	Species	Test Results
1-Methyl-2-pyrrolidone (CAS 872-50-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	8000 mg/kg
<b>Oral</b>		
LD50	Mouse	5130 mg/kg
	Rat	3914 mg/kg
		4.2 ml/kg
Acetone (propan-2-one; Propanone) (CAS 67-64-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	20000 mg/kg
		20 ml/kg
<b>Inhalation</b>		
LC50	Rat	76 mg/l, 4 Hours
		50.1 mg/l, 8 Hours
<b>Oral</b>		
LD50	Mouse	3000 mg/kg
	Rabbit	5340 mg/kg
	Rat	5800 mg/kg
Benzyl Butyl Phthalate (CAS 85-68-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Mouse	6700 mg/kg
	Rat	6700 mg/kg
<b>Oral</b>		
LD50	Rat	13500 mg/kg
Ethylbenzene (CAS 100-41-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	17800 mg/kg

Components	Species	Test Results
<b>Oral</b>		
LD50	Rat	3500 mg/kg
Methyl ethyl ketone (CAS 78-93-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 8000 mg/kg
<b>Inhalation</b>		
LC50	Mouse	11000 ppm, 45 Minutes
	Rat	11700 ppm, 4 Hours
<b>Oral</b>		
LD50	Mouse	670 mg/kg
	Rat	2300 - 3500 mg/kg
N-butane (CAS 106-97-8)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
Propane (CAS 74-98-6)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Rat	> 1442.847 mg/l, 15 Minutes
Toluene (CAS 108-88-3)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	12124 mg/kg 14.1 ml/kg
<b>Inhalation</b>		
LC50	Mouse	5320 ppm, 8 Hours 400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours 12200 ppm, 2 Hours 8000 ppm, 4 Hours
<b>Oral</b>		
LD50	Rat	2.6 g/kg
Xylene (CAS 1330-20-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 43 g/kg
<b>Inhalation</b>		
LC50	Mouse	3907 mg/l, 6 Hours
	Rat	6350 mg/l, 4 Hours
<b>Oral</b>		
LD50	Mouse	1590 mg/kg
	Rat	3523 - 8600 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Causes skin irritation.  
**Serious eye damage/eye irritation** Causes serious eye irritation.



## Respiratory or skin sensitization

**Respiratory sensitization** Not a respiratory sensitizer.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Germ cell mutagenicity** May cause genetic defects.

**Carcinogenicity** May cause cancer.

### IARC Monographs. Overall Evaluation of Carcinogenicity

Benzyl Butyl Phthalate (CAS 85-68-7)	3 Not classifiable as to carcinogenicity to humans.
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Titanium Dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

### US. National Toxicology Program (NTP) Report on Carcinogens

Not available.

**Reproductive toxicity** Components in this product have been shown to cause birth defects and reproductive disorders in laboratory animals. May damage fertility or the unborn child.

**Specific target organ toxicity - single exposure** May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure** Causes damage to organs through prolonged or repeated exposure.

**Aspiration hazard** Not an aspiration hazard.

**Chronic effects** Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
Acetone (propan-2-one; Propanone) (CAS 67-64-1)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
Benzyl Butyl Phthalate (CAS 85-68-7)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	> 0.96 mg/l, 48 hours
Fish	LC50	Shiner perch (Cymatogaster aggregata)	0.47 - 0.56 mg/l, 96 hours
Ethylbenzene (CAS 100-41-4)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	7.5 - 11 mg/l, 96 hours
Methyl ethyl ketone (CAS 78-93-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	4025 - 6440 mg/l, 48 hours
Fish	LC50	Sheepshead minnow (Cyprinodon variegatus)	> 400 mg/l, 96 hours
Titanium Dioxide (CAS 13463-67-7)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours
Toluene (CAS 108-88-3)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours

Components	Species	Test Results
Fish	LC50	Coho salmon, silver salmon (Oncorhynchus kisutch)
Xylene (CAS 1330-20-7)		
<b>Aquatic</b>		
Fish	LC50	Bluegill (Lepomis macrochirus)
		7.711 - 9.591 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

#### Bioaccumulative potential

##### Partition coefficient n-octanol / water (log Kow)

1-Methyl-2-pyrrolidone	-0.54
Acetone (propan-2-one; Propanone)	-0.24
Benzyl Butyl Phthalate	4.91
Ethylbenzene	3.15
Methyl ethyl ketone	0.29
N-butane	2.89
Propane	2.36
Toluene	2.73
Xylene	3.12 - 3.2

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

### 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

### 14. Transport information

#### DOT

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	63,190,277,327

#### IATA

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Other information**

**Passenger and cargo aircraft** Forbidden.  
**Cargo aircraft only** Forbidden.

**IMDG**

**UN number** UN1950  
**UN proper shipping name** AEROSOLS  
**Transport hazard class(es)**  
**Class** 2.1  
**Subsidiary risk** -  
**Packing group** Not applicable.

**Environmental hazards**  
**Marine pollutant** No.  
**EmS** Not available.

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

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

**DOT****IATA; IMDG****General information**

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers: Ensure that containers are firmly secured. Ensure cylinder valve is closed and not leaking. Ensure valve outlet cap nut or plug (where provided) is correctly fitted. Ensure valve protection device (where provided) is correctly fitted. Ensure adequate ventilation. Ensure compliance with applicable regulations.

**15. Regulatory information****US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**TSCA Chemical Action Plans, Chemicals of Concern**

Benzyl Butyl Phthalate (CAS 85-68-7)

Phthalates Action Plan

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Acetone (propan-2-one; Propanone) (CAS 67-64-1)

Listed.

Benzyl Butyl Phthalate (CAS 85-68-7)

Listed.

Ethylbenzene (CAS 100-41-4)

Listed.

Methyl ethyl ketone (CAS 78-93-3)

Listed.

Toluene (CAS 108-88-3)

Listed.

Xylene (CAS 1330-20-7)

Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - Yes  
Pressure Hazard - Yes  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Toluene	108-88-3	10 - < 20
Xylene	1330-20-7	1 - < 3
1-Methyl-2-pyrrolidone	872-50-4	< 1
Ethylbenzene	100-41-4	< 1

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Ethylbenzene (CAS 100-41-4)

Toluene (CAS 108-88-3)

Xylene (CAS 1330-20-7)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

N-butane (CAS 106-97-8)

Propane (CAS 74-98-6)

**Safe Drinking Water Act (SDWA)** Not regulated.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Acetone (propan-2-one; Propanone) (CAS 67-64-1) 6532

Methyl ethyl ketone (CAS 78-93-3) 6714

Toluene (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Acetone (propan-2-one; Propanone) (CAS 67-64-1) 35 %WV

Methyl ethyl ketone (CAS 78-93-3) 35 %WV

Toluene (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

Acetone (propan-2-one; Propanone) (CAS 67-64-1) 6532

Methyl ethyl ketone (CAS 78-93-3) 6714

Toluene (CAS 108-88-3) 594

**US state regulations**

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

1-Methyl-2-pyrrolidone (CAS 872-50-4)

Acetone (propan-2-one; Propanone) (CAS 67-64-1)

Benzyl Butyl Phthalate (CAS 85-68-7)

Ethylbenzene (CAS 100-41-4)

Methyl ethyl ketone (CAS 78-93-3)

N-butane (CAS 106-97-8)

Titanium Dioxide (CAS 13463-67-7)

Toluene (CAS 108-88-3)

Xylene (CAS 1330-20-7)

**US. Massachusetts RTK - Substance List**

1-Methyl-2-pyrrolidone (CAS 872-50-4)  
 Acetone (propan-2-one; Propanone) (CAS 67-64-1)  
 Benzyl Butyl Phthalate (CAS 85-68-7)  
 Ethylbenzene (CAS 100-41-4)  
 Methyl ethyl ketone (CAS 78-93-3)  
 N-butane (CAS 106-97-8)  
 Propane (CAS 74-98-6)  
 Titanium Dioxide (CAS 13463-67-7)  
 Toluene (CAS 108-88-3)  
 Xylene (CAS 1330-20-7)

**US. New Jersey Worker and Community Right-to-Know Act**

1-Methyl-2-pyrrolidone (CAS 872-50-4)  
 Acetone (propan-2-one; Propanone) (CAS 67-64-1)  
 Benzyl Butyl Phthalate (CAS 85-68-7)  
 Ethylbenzene (CAS 100-41-4)  
 Methyl ethyl ketone (CAS 78-93-3)  
 N-butane (CAS 106-97-8)  
 Propane (CAS 74-98-6)  
 Titanium Dioxide (CAS 13463-67-7)  
 Toluene (CAS 108-88-3)  
 Xylene (CAS 1330-20-7)

**US. Pennsylvania Worker and Community Right-to-Know Law**

1-Methyl-2-pyrrolidone (CAS 872-50-4)  
 Acetone (propan-2-one; Propanone) (CAS 67-64-1)  
 Benzyl Butyl Phthalate (CAS 85-68-7)  
 Ethylbenzene (CAS 100-41-4)  
 Methyl ethyl ketone (CAS 78-93-3)  
 N-butane (CAS 106-97-8)  
 Propane (CAS 74-98-6)  
 Titanium Dioxide (CAS 13463-67-7)  
 Toluene (CAS 108-88-3)  
 Xylene (CAS 1330-20-7)

**US. Rhode Island RTK**

1-Methyl-2-pyrrolidone (CAS 872-50-4)  
 Acetone (propan-2-one; Propanone) (CAS 67-64-1)  
 Benzyl Butyl Phthalate (CAS 85-68-7)  
 Ethylbenzene (CAS 100-41-4)  
 Methyl ethyl ketone (CAS 78-93-3)  
 N-butane (CAS 106-97-8)  
 Propane (CAS 74-98-6)  
 Toluene (CAS 108-88-3)  
 Xylene (CAS 1330-20-7)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - CRT: Listed date/Carcinogenic substance**

Ethylbenzene (CAS 100-41-4) Listed: June 11, 2004  
 Titanium Dioxide (CAS 13463-67-7) Listed: September 2, 2011

**US - California Proposition 65 - CRT: Listed date/Developmental toxin**

1-Methyl-2-pyrrolidone (CAS 872-50-4) Listed: June 15, 2001  
 Benzyl Butyl Phthalate (CAS 85-68-7) Listed: December 2, 2005  
 Toluene (CAS 108-88-3) Listed: January 1, 1991

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 01-20-2016

**Version #** 01

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