SAFETY DATA SHEET

1. Identification

Product identifier #156 SHALE

Other means of identification

121551-6 **Product Code** Recommended use Not available.

Manufacturer/Importer/Supplier/Distributor information

Supplier

Company name MALCO PRODUCTS Address 361 FAIRVIEW AVE

BARBERTON, OH 44203 United States

Company phone General Assistance 330-753-0361

Hazard(s) identification

Flammable aerosols Category 1 Physical hazards

> Gases under pressure Liquefied gas Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A

Carcinogenicity Category 2 Reproductive toxicity Category 1

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated Category 1

exposure

Environmental hazards Hazardous to the aquatic environment, acute Category 2

hazard

Hazardous to the aquatic environment, Category 3

long-term hazard

OSHA defined hazards Not classified.

Label elements

Health hazards



Signal word Danger

Extremely flammable aerosol, Contains gas under pressure; may explode if heated. Causes skin Hazard statement

irritation. Causes serious eve irritation. May cause drowsiness or dizziness. Suspected of causing 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

Obtain special instructions before use. Do not handle until all safety precautions have been read Prevention

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.

Response 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.

Storage 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.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information 42.91% of the mixture consists of consist

42.91% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 42.91% 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	<u></u> %
ACETONE		67-64-1	40 to <50
N-BUTANE		106-97-8	10 to <20
PROPANE		74-98-6	10 to <20
TOLUENE		108-88-3	10 to <20
METHYL ETHYL KETONE		78-93-3	1 to <5
PROPYLENE GLYCOL METHYL ETHER ACETATE		108-65-6	1 to <5
TITANIUM DIOXIDE		13463-67-7	1 to <5
XYLENE		1330-20-7	1 to <5
1-METHYL-2-PYRROLIDONE		872-50-4	0.1 to <1
BUTYL BENZYL PHTHALATE		85-68-7	0.1 to <1
ETHYLBENZENE		100-41-4	0.1 to <1
Other components below reportable le	vels		5 to <10

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

4. First-aid measures

Inhalation 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.

Skin contact No adverse effects due to skin contact are expected. Remove contaminated clothing. Wash with

plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash

contaminated clothing before reuse.

Eye contact 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.

No specific first aid measures noted.

Ingestion Not likely, due to the form of the product. In the unlikely event of swallowing contact a physician or

poison control center. Rinse mouth.

Most important May caus

symptoms/effects, acute and

delayed

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.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

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

Suitable extinguishing media

Unsuitable extinguishing media

Alcohol resistant foam. Water fog. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Contents under pressure. Pressurized container may explode when exposed to heat or flame. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Firefighters must use standard protective equipment including flame retardant coat, helmet with

Fire fighting

face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

equipment/instructions

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.

Specific methods

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.

General fire hazards

Extremely flammable aerosol. Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Accidental release measures

Personal precautions, protective equipment and emergency procedures

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.

Methods and materials for containment and cleaning up Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. 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. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. 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.

Environmental precautions

Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. Handling and storage

Precautions for safe handling

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. 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.

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. Secure cylinders in an upright position at all times, close all valves when not in use. 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

CAS 78-93-3) PROPANE (CAS 74-98-6) PEL 1800 mg/m3 1000 ppm ITANIUM DIOXIDE (CAS PEL 15 mg/m3 Total dust. 15 mg/m3 100 ppm PEL 435 mg/m3 100 ppm JS. OSHA Table Z-2 (29 CFR 1910.1000) Components Type Value FOLUENE (CAS 108-98-3) Ceiling 300 ppm JS. ACGIH Threshold Limit Values Components Type Value TWA 200 ppm JS. ACGIH Threshold Limit Values Components Type Value TWA 200 ppm TWA 500 ppm TWA 20 ppm METHYL ETHYL KETONE (CAS TWA 100-41-4) METHYL ETHYL KETONE CAS 78-93-3) TWA 200 ppm TWA 100 ppm	Components	Туре	Value	Form
THYLERNZENE (CAS PEL 435 mg/m3 100 ppm	CETONE (CAS 67-64-1)	PEL		
METHYL ETHYL KETONE		PEL	435 mg/m3	
PROPANE (CAS 74-98-6) PEL 1800 mg/m3 1000 ppm 10000 ppm 10000 ppm 10000 ppm 10000 ppm 10000 ppm 100000 ppm 100000 ppm 10000000 ppm 10000000000	METHYL ETHYL KETONE (CAS 78-93-3)	PEL		
TITANIUM DIOXIDE (CAS PEL 15 mg/m3 Total dust. Isla63-67-7) PEL 435 mg/m3 100 ppm Isla63-67-7) PEL 435 mg/m3 Isla63-67-7) PEL 750 ppm Isla63-67-7) PEL 750 ppm Isla63-67-7) PEL 1000 ppm Isla63-67-7) PEL 1000 ppm Isla63-67-7) PEL 1000 ppm Isla63-67-7) PEL 150 ppm PEL 150 ppm Isla63-67-7) PEL 150 ppm Isla63-67-70 PEL 150 ppm PEL	PROPANE (CAS 74-98-6)	PEL	1800 mg/m3	
CYLENE (CAS 1330-20-7) PEL		PEL		Total dust.
Type Value		PEL	_	
Ceiling 300 ppm TWA 200 ppm TWA 20	JS. OSHA Table Z-2 (29 CFR 1910.100	0)	•	
TWA 200 ppm	The state of the s	•	Value	
S. ACGIH Threshold Limit Values Type Value	OLUENE (CAS 108-88-3)	•		
Components	US. ACGIH Threshold Limit Values			
TWA 500 ppm TWA 20 ppm 100-41-4) WETHYL ETHYL KETONE STEL 300 ppm N-BUTANE (CAS 106-97-8) STEL 1000 ppm N-BUTANE (CAS 108-88-3) TWA 200 ppm N-BUTANE (CAS 108-88-3) TWA 10 mg/m3 13463-67-7) FOLUENE (CAS 108-88-3) TWA 20 ppm TYLENE (CAS 1330-20-7) STEL 150 ppm TWA 100 ppm JS. NIOSH: Pocket Guide to Chemical Hazards Components Type Value ACETONE (CAS 67-64-1) TWA 590 mg/m3 250 ppm ETHYLBENZENE (CAS STEL 545 mg/m3 100-41-4) TWA 358 mg/m3 100 ppm METHYL ETHYL KETONE STEL 885 mg/m3 ACAS 78-93-3) TWA 590 mg/m3 200 ppm PROPANE (CAS 106-97-8) TWA 1800 mg/m3 200 ppm PROPANE (CAS 74-98-6) TWA 1800 mg/m3 100 ppm FOLUENE (CAS 108-88-3) STEL 560 mg/m3 100 ppm FOLUENE (CAS 108-88-3) STEL 560 mg/m3 100 ppm	Components			
### THYLENZENE (CAS TWA 20 ppm	ACETONE (CAS 67-64-1)			
100-41-4 WETHYL ETHYL KETONE				
TWA 200 ppm I-BUTANE (CAS 106-97-8) STEL 1000 ppm I-TANIUM DIOXIDE (CAS TWA 10 mg/m3 3463-67-7) OLUENE (CAS 108-88-3) TWA 20 ppm (YLENE (CAS 1330-20-7) STEL 150 ppm JS. NIOSH: Pocket Guide to Chemical Hazards Components Type Value ICETONE (CAS 67-64-1) TWA 590 mg/m3 250 ppm TWA 435 mg/m3 OU-41-4) IETHYL ETHYL KETONE STEL 885 mg/m3 ABS mg/m3 ABS mg/m3 TWA 590 mg/m3 200 ppm TWA 100 ppm ABS mg/m3 OD ppm ABS mg/m3 A	00-41-4)			
N-BUTANE (CAS 106-97-8) N-BUTANE (CAS 106-97-8) N-BUTANE (CAS 106-97-8) N-BUTANE (CAS 106-97-8) N-BUTANE (CAS 108-88-3) N-BUTANE (CAS 108-88-3) N-BUTANE (CAS 108-88-3) N-BUTANE (CAS 1330-20-7) N-BUTANE (CAS 1330-20-7) N-BUTANE (CAS 1330-20-7) N-BUTANE (CAS 67-64-1) N-BUTANE (CAS 106-97-8) N-BUTANE (CAS 106-97-8) N-BUTANE (CAS 106-97-8) N-BUTANE (CAS 108-88-3) N-BUTANE			• •	
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SAGS-67-7 COLUENE (CAS 108-88-3)				
STEL	3463-67-7)		-	
TWA 100 ppm US. NIOSH: Pocket Guide to Chemical Hazards Components Type Value ACETONE (CAS 67-64-1) TWA 590 mg/m3 250 ppm ETHYLBENZENE (CAS STEL 545 mg/m3 100-41-4) 125 ppm TWA 435 mg/m3 100 ppm METHYL ETHYL KETONE STEL 885 mg/m3 CAS 78-93-3) 300 ppm TWA 590 mg/m3 200 ppm N-BUTANE (CAS 106-97-8) TWA 1900 mg/m3 200 ppm PROPANE (CAS 74-98-6) TWA 1800 mg/m3 1000 ppm FOLUENE (CAS 108-88-3) STEL 560 mg/m3 1000 ppm				
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METHYL ETHYL KETONE CAS 78-93-3) TWA TWA S90 mg/m3 200 ppm N-BUTANE (CAS 106-97-8) PROPANE (CAS 74-98-6) TWA 1800 mg/m3 1000 ppm TOLUENE (CAS 108-88-3) STEL STEL 885 mg/m3 300 ppm 1990 mg/m3 1900 mg/m3 1000 ppm 1500 ppm		1 **/ 1	_	
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PROPANE (CAS 74-98-6) TWA 1800 mg/m3 1000 ppm FOLUENE (CAS 108-88-3) STEL 560 mg/m3 150 ppm	N-BUTANE (CAS 106-97-8)	TWA	200 ppm 1900 mg/m3	
FOLUENE (CAS 108-88-3) STEL 560 mg/m3 150 ppm	PROPANE (CAS 74-98-6)	TWA	1800 mg/m3	
• •	TOLUENE (CAS 108-88-3)	STEL	560 mg/m3	
		TWA		

US. NIOSH: Pocket	Guide to Chemical Hazards
Components	Type

Components	Туре	Value	
		100 ppm	
US. Workplace Environmental Exp	osure Level (WEEL) Guides		
Components	Туре	Value	
1-METHYL-2-PYRROLIDO NE (CAS 872-50-4)	TWA	40 mg/m3	
		10 ppm	
PROPYLENE GLYCOL METHYL ETHER ACETATE (CAS 108-65-6)	TWA	50 ppm	

Biological limit values

ACGIH Biological Exposure Indices Components Value Determinant Specimen Sampling Time 1-METHYL-2-PYRROLIDO 100 mg/l 5-Hydroxy-N-m Urine ethyl-2-pyrrolid NE (CAS 872-50-4) one ACETONE (CAS 67-64-1) 50 mg/l Urine Acetone ETHYLBENZENE (CAS $0.15 \, g/g$ Sum of Creatinine in 100-41-4) mandelic acid urine and phenylglyoxylic acid METHYL ETHYL KETONE 2 mg/l Urine MEK (CAS 78-93-3) TOLUENE (CAS 108-88-3) 0.3 mg/g o-Cresol, with Creatinine in hydrolysis urine 0.03 mg/l Toluene Urine 0.02 mg/l Toluene Blood XYLENE (CAS 1330-20-7) 1.5 g/g Methylhippuric Creatinine in

urine

Skin designation applies.

Can be absorbed through the skin.

Can be absorbed through the skin.

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

Exposure guidelines

US - California OELs: Skin designation

PROPYLENE GLYCOL METHYL ETHER ACETATE

(CAS 108-65-6)

TOLUENE (CAS 108-88-3)

US - Minnesota Haz Subs: Skin designation applies

TOLUENE (CAS 108-88-3)

US WEEL Guides: Skin designation

1-METHYL-2-PYRROLIDONE (CAS 872-50-4)

Can be absorbed through the skin. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates

Appropriate engineering controls

wash facilities and emergency shower must be available when handling this product.

acids

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

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

supplier.

Other Wear appropriate chemical resistant clothing.

Respiratory protection If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an

air-supplied respirator.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene considerations

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.

^{* -} For sampling details, please see the source document.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Aerosol. Liquefied gas.

Color Not available.
Odor Not available.
Odor threshold Not available.
pH Not available.

Melting point/freezing point $\,$ -305.68 °F (-187.6 °C) estimated Initial boiling point and boiling $\,$ -43.78 °F (-42.1 °C) estimated

range

Flash point -156.0 °F (-104.4 °C) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

1.3 % estimated

(%)

Flammability limit - upper

12.8 % estimated

(%)

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available.

Vapor pressure 2285.29 hPa estimated

Vapor density Not available. Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperature 550 °F (287.78 °C) estimated

Decomposition temperature Not available. Viscosity Not available.

Other information

Density 6.08 lbs/gal

Flammability class Flammable IA estimated
Heat of combustion (NFPA 30.06 kJ/g estimated

30B)

Percent volatile 90.66 Specific gravity 0.73

VOC 577.608457 g/l Regulatory

4.8203762 lbs/gal Regulatory 349.568557 g/l Material 2.917291 lbs/gal Material

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous Hazardous polymerization does not occur.

reactions

Conditions to avoid Heat. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Incompatible materials Strong acids. Acids. Strong oxidizing agents. Nitrates. Halogens. Fluorine.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation. May cause

drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the

Headache. May cause drowsiness and dizziness. Nausea, vomiting. Severe eye irritation.

physical, chemical and Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May

toxicological characteristics

cause redness and pain.

Information on toxicological effects

Acute toxicity Narcotic effects.

Components Species Test Results

1-METHYL-2-PYRROLIDONE (CAS 872-50-4)

Acute

Dermal

LD50 Rabbit 8000 mg/kg

Oral

LD50 Mouse 5130 mg/kg

Rat 3914 mg/kg

4.2 ml/kg

ACETONE (CAS 67-64-1)

Acute

Dermal

LD50 Rabbit > 15800 mg/kg

Inhalation

LC50 Rat 76 mg/l, 4 Hours

Oral

LD50 Mouse 3000 mg/kg

Rat 5800 mg/kg

BUTYL BENZYL PHTHALATE (CAS 85-68-7)

<u>Acute</u>

Dermal

LD50 Mouse 6700 mg/kg

Rat 6700 mg/kg

Oral

LD50 Rat 13500 mg/kg

ETHYLBENZENE (CAS 100-41-4)

Acute

Dermal

LD50 Rabbit 17800 mg/kg

Oral

LD50 Rat 3500 mg/kg

METHYL ETHYL KETONE (CAS 78-93-3)

Acute

Dermal

LD50 Rabbit > 8000 mg/kg

Inhalation

LC50 Mouse 11000 ppm, 45 Minutes

Rat 11700 ppm, 4 Hours

Components	Species	Test Results
Oral		
LD50	Mouse	670 mg/kg
	Rat	2300 - 3500 mg/kg
N-BUTANE (CAS 106-97-8)		
<u>Acute</u>		
Inhalation		
LC50	Mouse	680 mg/l, 2 Hours
	Rat	658 mg/l, 4 Hours
PROPANE (CAS 74-98-6)		
<u>Acute</u>		
Inhalation		
LC50	Rat	> 1442.847 mg/l, 15 Minutes
TOLUENE (CAS 108-88-3)		
<u>Acute</u>		
Dermal	B.11%	10101 #
LD50	Rabbit	12124 mg/kg
		14.1 ml/kg
Inhalation		
LC50	Mouse	5320 ppm, 8 Hours
		400 ppm, 24 Hours
	Rat	26700 ppm, 1 Hours
		12200 ppm, 2 Hours
		8000 ppm, 4 Hours
Oral		
LD50	Rat	2.6 g/kg
XYLENE (CAS 1330-20-7)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 43 g/kg
Inhalation		
LC50	Mouse	3907 mg/l, 6 Hours
	Rat	6350 mg/l, 4 Hours
Oral		
LD50	Mouse	1590 mg/kg
	Rat	3523 - 8600 mg/kg

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye Causes serious eye irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

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

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Suspected of causing cancer. Carcinogenicity IARC Monographs. Overall Evaluation of Carcinogenicity

BUTYL BENZYL PHTHALATE (CAS 85-68-7)

3 Not classifiable as to carcinogenicity to humans. 2B Possibly carcinogenic to humans. ETHYLBENZENE (CAS 100-41-4) 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.

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 ac	Toxic to aquatic life. Harmful to aquatic life with long lasting effects.			
Components		Species	Test Results		
ACETONE (CAS 67-64-1)					
Aquatic					
Crustacea	EC50	Water flea (Daphnia magna)	21.6 - 23.9 mg/l, 48 hours		
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours		
BUTYL BENZYL PHTHAL	ATE (CAS 85-6	8-7)			
Aquatic					
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 1	00-41-4)				
Aquatic					
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 KETONI	E (CAS 78-93-3)				
Aquatic					
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	3 13463-67-7)				
Aquatic					
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	3)				
Aquatic					
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours		
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	8.11 mg/l, 96 hours		
XYLENE (CAS 1330-20-7)				
Aquatic					
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 -0.24 Partition coefficient n-octanol / water (log Kow)

BUTYL BENZYL PHTHALATE 4.91 3.15 **ETHYLBENZENE** METHYL ETHYL KETONE 0.29 2.89 **N-BUTANE PROPANE** 2.36 **TOLUENE** 2.73 XYLENE 3.12 - 3.2

No data available. Mobility in soil

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents Disposal instructions

> 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.

Dispose in accordance with all applicable regulations. Local disposal regulations

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

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).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

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

UN1950 **UN** number

UN proper shipping name Aerosols, flammable, 2.1

Transport hazard class(es)

Class Not available.

Subsidiary risk

Packing group Not applicable.

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

IATA

UN1950 **UN** number

UN proper shipping name

Transport hazard class(es)

Aerosols, flammable, 2.1

Class Not available.

Subsidiary risk Not applicable.

Packing group Environmental hazards

Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

Forbidden.

aircraft

Forbidden. Cargo aircraft only

IMDG

UN1950 **UN** number

Aerosols, flammable, 2.1 UN proper shipping name

Transport hazard class(es)

Class Not available.

Subsidiary risk

Not applicable. Packing group

Environmental hazards

Marine pollutant Nο

Not available. **EmS**

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

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

the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

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

Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern

BUTYL BENZYL PHTHALATE (CAS 85-68-7) Phthalates Action Plan

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed. **ACETONE (CAS 67-64-1)** BUTYL BENZYL PHTHALATE (CAS 85-68-7) Listed. ETHYLBENZENE (CAS 100-41-4) Listed. METHYL ETHYL KETONE (CAS 78-93-3) Listed. N-BUTANE (CAS 106-97-8) Listed. PROPANE (CAS 74-98-6) 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 - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No

chemical

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
TOLUENE	108-88-3	10 to <20
XYLENE	1330-20-7	1 to <5
1-METHYL-2-PYRROLIDONE	872-50-4	0.1 to <1
ETHYLBENZENE	100-41-4	0.1 to <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 Not regulated.

(SDWA)

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

ACETONE (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 (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 (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 (CAS 67-64-1)

BUTYL BENZYL 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 (CAS 67-64-1)

BUTYL BENZYL 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 (CAS 67-64-1)

BUTYL BENZYL 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 (CAS 67-64-1)

BUTYL BENZYL 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 (CAS 67-64-1)

BUTYL BENZYL 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

CARBON BLACK (CAS 1333-86-4) Listed: February 21, 2003 ETHYL ALCOHOL (CAS 64-17-5) Listed: April 29, 2011

Listed: July 1, 1988 Listed: June 11, 2004

ETHYLBENZENE (CAS 100-41-4) 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 BUTYL BENZYL PHTHALATE (CAS 85-68-7) Listed: December 2, 2005 ETHYL ALCOHOL (CAS 64-17-5) Listed: October 1, 1987 **TOLUENE (CAS 108-88-3)** Listed: January 1, 1991

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin **TOLUENE (CAS 108-88-3)** Listed: August 7, 2009

International Inventories

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

Substances (EINECS)

Europe European List of Notified Chemical Substances (ELINCS) No Inventory of Existing and New Chemical Substances (ENCS) No Japan Korea Existing Chemicals List (ECL) No New Zealand New Zealand Inventory No Philippines No

Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*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 Draft version. Version # Draft version. Health: 2* HMIS® ratings Flammability: 4 Physical hazard: 0

NFPA ratings Health: 2

Flammability: 4 Instability: 0

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Material name: #156 SHALE 121551-6

Yes