SAFETY DATA SHEET

1. Identification

Product identifier **1990 SATIN BLACK - HIGH TEMP**

Other means of identification

Product code 1A62H290

Recommended use Stove paint.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company Name FORREST Technical Coatings

Address 1011 McKinley Street
P.O. Box 22110

City Eugene

State OR

Zip 97402

Country United States

Telephone 1 (541) 342-1821

Contact person EHS Department

Website www.forrestpaint.com

E-mail info@forrestpaint.com

Emergency phone number 1 (800) 424-9300 (CHEMTREC - Contract # 8730) USA & Canada
+1 703-527-3887 (CHEMTREC - Contract # 8730) Outside USA and Canada

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 1
	Gases under pressure	Compressed gas
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 2
	Reproductive toxicity	Category 1A
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 1 (central nervous system)
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 4

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of causing cancer. May damage fertility or the unborn child. Causes damage to organs (central nervous system) through prolonged or repeated exposure. Toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Precautionary statement

Prevention	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 gas. Do not breathe mist/vapors. 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 swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. 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. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it 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. 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	35.6% of the mixture consists of component(s) of unknown acute oral toxicity. 60.13% of the mixture consists of component(s) of unknown acute dermal toxicity. 36.66% of the mixture consists of component(s) of unknown acute inhalation toxicity. 64.25% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 64.25% 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		67-64-1	20-35
TOLUENE		108-88-3	20-35
BUTANE		106-97-8	10-25
PROPANE		74-98-6	10-25
MANGANESE FERRITE SPINEL		75864-23-2	1-10
XYLENE		1330-20-7	1-10
COPPER CHROMITE BLACK SPINEL		68186-91-4	1 - 2.5
DIMETHYL CARBONATE		616-38-6	1 - 2.5
MINERAL SPIRITS		8052-41-3	1 - 2.5
n-BUTYL ALCOHOL		71-36-3	1 - 2.5
CARBON BLACK		1333-86-4	0- <1
ETHYL BENZENE		100-41-4	0- <1
Other components below reportable levels			1-10

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

Composition comments Occupational Exposure Limits for constituents are listed in Section 8.

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	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions. 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.
Ingestion	Not likely, due to the form of the product. Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. 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. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. 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. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	None known.
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 face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire fighting 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. Cool containers exposed to flames with water until well after the fire is out. 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.

6. 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/vapors. Do not breathe gas. 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. 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. Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. 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. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
Environmental precautions	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

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. Close valve after each use and when empty. Protect containers from physical damage; do not drag, roll, slide, or drop. When moving containers, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport containers. 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/vapors. Do not breathe gas. 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. Store in tightly closed container. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Keep out of the reach of children. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
ACETONE (CAS 67-64-1)	PEL	2400 mg/m3
		1000 ppm
CARBON BLACK (CAS 1333-86-4)	PEL	3.5 mg/m3
ETHYL BENZENE (CAS 100-41-4)	PEL	435 mg/m3
		100 ppm
MANGANESE FERRITE SPINEL (CAS 75864-23-2)	Ceiling	5 mg/m3
MINERAL SPIRITS (CAS 8052-41-3)	PEL	2900 mg/m3
		500 ppm
n-BUTYL ALCOHOL (CAS 71-36-3)	PEL	300 mg/m3
		100 ppm
PROPANE (CAS 74-98-6)	PEL	1800 mg/m3
		1000 ppm
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	Form
ACETONE (CAS 67-64-1)	STEL	500 ppm	
	TWA	250 ppm	
BUTANE (CAS 106-97-8)	STEL	1000 ppm	
CARBON BLACK (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
COPPER CHROMITE BLACK SPINEL (CAS 68186-91-4)	TWA	1 mg/m3	Dust and mist.
		0.2 mg/m3	Fume.
ETHYL BENZENE (CAS 100-41-4)	TWA	20 ppm	
MANGANESE FERRITE SPINEL (CAS 75864-23-2)	TWA	0.1 mg/m3	Inhalable fraction.
		0.02 mg/m3	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
MINERAL SPIRITS (CAS 8052-41-3)	TWA	100 ppm	
n-BUTYL ALCOHOL (CAS 71-36-3)	TWA	20 ppm	
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	Form
ACETONE (CAS 67-64-1)	TWA	590 mg/m3	
		250 ppm	
BUTANE (CAS 106-97-8)	TWA	1900 mg/m3	
		800 ppm	
CARBON BLACK (CAS 1333-86-4)	TWA	0.1 mg/m3	
ETHYL BENZENE (CAS 100-41-4)	STEL	545 mg/m3	
		125 ppm	
	TWA	435 mg/m3	
		100 ppm	
MANGANESE FERRITE SPINEL (CAS 75864-23-2)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.
MINERAL SPIRITS (CAS 8052-41-3)	Ceiling	1800 mg/m3	
	TWA	350 mg/m3	
n-BUTYL ALCOHOL (CAS 71-36-3)	Ceiling	150 mg/m3	
		50 ppm	
PROPANE (CAS 74-98-6)	TWA	1800 mg/m3	
		1000 ppm	
TOLUENE (CAS 108-88-3)	STEL	560 mg/m3	
		150 ppm	
	TWA	375 mg/m3	
		100 ppm	

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1)	25 mg/l	Acetone	Urine	*
ETHYL BENZENE (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in 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

n-BUTYL ALCOHOL (CAS 71-36-3)	Can be absorbed through the skin.
TOLUENE (CAS 108-88-3)	Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies

n-BUTYL ALCOHOL (CAS 71-36-3)	Skin designation applies.
TOLUENE (CAS 108-88-3)	Skin designation applies.

US - Tennessee OELs: Skin designation

n-BUTYL ALCOHOL (CAS 71-36-3)	Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

n-BUTYL ALCOHOL (CAS 71-36-3)	Can be absorbed through the skin.

Appropriate engineering controls Good general ventilation 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. Provide eyewash station and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection Applicable for industrial settings only. Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection Applicable for industrial settings only. Wear appropriate chemical resistant gloves.

Other Applicable for industrial settings only. Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection Applicable for industrial settings only. Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations Observe any medical surveillance requirements. 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

Appearance	Aerosol.
Physical state	Liquid, Gas.
Form	Aerosol. Compressed gas.
Color	Black.
Odor	Solvent.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	-133.6 °F (-92.0 °C)
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	1570.46 hPa estimated
Vapor density	Not available.
Relative density	Not available.

Solubility(ies)

Solubility (water)	0 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

Other information

Density	6.42 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	89.53 %w/w
Specific gravity	0.77
VOC	641.77 g/l COATING 455.02 g/l 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 reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong acids. Strong oxidizing agents. Chlorine. Fluorine. Halogens. Nitrates.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

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	Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Symptoms related to the physical, chemical and toxicological characteristics	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. 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 May be fatal if swallowed and enters airways.

Components	Species	Test Results
ACETONE (CAS 67-64-1)		
Acute		
Dermal		
LD50	Guinea pig, rabbit, rat	7400 mg/kg
Inhalation		
LD50	Rat	7600 mg/m3, 4 hours
Oral		
LD50	Rat	5800 mg/kg
n-BUTYL ALCOHOL (CAS 71-36-3)		
Acute		
Dermal		
LD50	Rabbit	3430 mg/kg

Components	Species	Test Results
Inhalation		
LC50	Rat	17.76 mg/l
Oral		
LD50	Rat	2292 mg/kg
TOLUENE (CAS 108-88-3)		
Acute		
Dermal		
LD50		5000 mg/kg
Inhalation		
LC50	Rat	20 mg/l
Oral		
LD50		5000 mg/kg
XYLENE (CAS 1330-20-7)		
Acute		
Dermal		
LD50		12130 mg/kg
Inhalation		
LC50		27120 mg/m3
Oral		
LD50		3523 mg/kg

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 No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

CARBON BLACK (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
CHROMIUM COMPOUNDS (CAS N/A)	3 Not classifiable as to carcinogenicity to humans.
ETHYL BENZENE (CAS 100-41-4)	2B Possibly carcinogenic to humans.
MINERAL SPIRITS (CAS 8052-41-3)	3 Not classifiable as to carcinogenicity 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 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

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 (central nervous system) through prolonged or repeated exposure.

Aspiration hazard May be fatal if swallowed and enters airways.

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

12. Ecological information

Ecotoxicity Toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Components		Species	Test Results
ACETONE (CAS 67-64-1)			
Aquatic			
Crustacea	NOEC	Freshwater invertebrate	> 79 mg/l
Fish	LC50	Freshwater fish	5540 mg/l
BUTANE (CAS 106-97-8)			
Aquatic			
Algae	EC50	Freshwater algae	> 7 mg/l
Crustacea	LC50	Freshwater invertebrate	> 14 mg/l
Fish	LC50	Freshwater fish	> 24 mg/l
ETHYL BENZENE (CAS 100-41-4)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1.37 - 4.4 mg/l, 48 hours
Fish	LC50	Bluegill (Lepomis macrochirus)	7.711 - 9.591 mg/l, 96 hours
		Fathead minnow (Pimephales promelas)	11.5 - 12.7 mg/l, 96 hours
n-BUTYL ALCOHOL (CAS 71-36-3)			
Aquatic			
Algae	EC50	Freshwater algae	225 mg/l
	NOEC	Freshwater algae	129 mg/l
Crustacea	LC50	Water flea (Daphnia magna)	1328 mg/l
	NOEC	Water flea (Daphnia magna)	4.1 mg/l
Fish	LC50	Freshwater fish	1376 mg/l
TOLUENE (CAS 108-88-3)			
Aquatic			
Algae	LC50	Freshwater algae	134 mg/l
	NOEC	Freshwater algae	10 mg/l
Crustacea	LC50	Water flea (Ceriodaphnia dubia)	3.78 mg/l, 48 hours
	NOEC	Water flea (Ceriodaphnia dubia)	0.74 mg/l
Fish	LC50	Freshwater fish	5.5 mg/l
	NOEC	Freshwater fish	1.4 mg/l
XYLENE (CAS 1330-20-7)			
Aquatic			
Algae	EC50	Freshwater algae	1.3 mg/l
	NOEC	Freshwater algae	0.44 mg/l
Crustacea	EC50	Freshwater invertebrate	1 mg/l
	NOEC	Freshwater invertebrate	0.96 mg/l
Fish	LC50	Bluegill (Lepomis macrochirus)	10.464 - 13.762 mg/l, 96 hours
		Freshwater fish	2.6 mg/l
	NOEC	Freshwater fish	> 1.3 mg/l

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ACETONE	-0.24
BUTANE	2.89
ETHYL BENZENE	3.15
MINERAL SPIRITS	3.16 - 7.15
n-BUTYL ALCOHOL	1
PROPANE	2.36
TOLUENE	2.73
XYLENE	3.12 - 3.2

Mobility in soil No data available.

Other adverse effects	The product contains volatile organic compounds which have a photochemical ozone creation potential.

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. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. 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	D001: Waste Flammable material with a flash point <140 F D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel] D007: Waste Chromium D018: Waste Benzene 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

UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not available.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

IATA

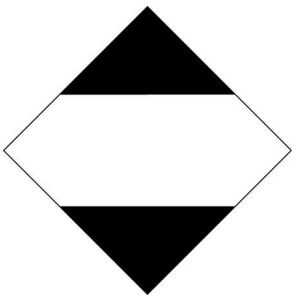
UN number	ID8000
UN proper shipping name	Consumer commodity, Limited Quantity
Transport hazard class(es)	
Class	9
Subsidiary risk	ORM-D
Packing group	Not available.
Environmental hazards	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

IMDG

UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not available.
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; IMDG



IATA

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.

Toxic Substances Control Act (TSCA)

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

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

ACETONE (CAS 67-64-1)	Listed.
BUTANE (CAS 106-97-8)	Listed.
CHROMIUM COMPOUNDS (CAS N/A)	Listed.
COPPER COMPOUNDS (CAS N/A)	Listed.
DIMETHYL CARBONATE (CAS 616-38-6)	Listed.
ETHYL BENZENE (CAS 100-41-4)	Listed.
MANGANESE FERRITE SPINEL (CAS 75864-23-2)	Listed.
n-BUTYL ALCOHOL (CAS 71-36-3)	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 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No (Exempt)

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
ETHYL BENZENE	100-41-4	0- <1
MANGANESE FERRITE SPINEL	75864-23-2	1-10
n-BUTYL ALCOHOL	71-36-3	1 - 2.5
TOLUENE	108-88-3	20-35
XYLENE	1330-20-7	1-10
CHROMIUM COMPOUNDS	N/A	1.0226
COPPER COMPOUNDS	N/A	1.0226

Other federal regulations

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

CHROMIUM COMPOUNDS (CAS N/A)
ETHYL BENZENE (CAS 100-41-4)
MANGANESE FERRITE SPINEL (CAS 75864-23-2)
TOLUENE (CAS 108-88-3)
XYLENE (CAS 1330-20-7)

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

BUTANE (CAS 106-97-8)
PROPANE (CAS 74-98-6)

Safe Drinking Water Act (SDWA) Contains component(s) regulated under the Safe Drinking Water Act.

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

DEA Exempt Chemical Mixtures Code Number

ACETONE (CAS 67-64-1)	6532
TOLUENE (CAS 108-88-3)	594

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

ACETONE (CAS 67-64-1)	Low priority
n-BUTYL ALCOHOL (CAS 71-36-3)	Low priority

US state regulations

California Proposition 65

WARNING: This product can expose you to chemicals including BENZENE, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California Proposition 65 - CRT: Listed date/Carcinogenic substance

BENZENE (CAS 71-43-2)	Listed: February 27, 1987
CARBON BLACK (CAS 1333-86-4)	Listed: February 21, 2003
CRYSTALLINE QUARTZ SILICA (CAS 14808-60-7)	Listed: October 1, 1988
CUMENE (CAS 98-82-8)	Listed: April 6, 2010
ETHYL BENZENE (CAS 100-41-4)	Listed: June 11, 2004

California Proposition 65 - CRT: Listed date/Developmental toxin

BENZENE (CAS 71-43-2)	Listed: December 26, 1997
TOLUENE (CAS 108-88-3)	Listed: January 1, 1991

California Proposition 65 - CRT: Listed date/Male reproductive toxin

BENZENE (CAS 71-43-2)	Listed: December 26, 1997

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

ACETONE (CAS 67-64-1)
BUTANE (CAS 106-97-8)
CARBON BLACK (CAS 1333-86-4)
ETHYL BENZENE (CAS 100-41-4)
MINERAL SPIRITS (CAS 8052-41-3)
TOLUENE (CAS 108-88-3)
XYLENE (CAS 1330-20-7)

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)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	No
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 10-01-2015

Revision date 01-23-2020

Version # 11

HMIS® ratings
Health: 3*
Flammability: 4
Physical hazard: 0

NFPA ratings
Health: 2
Flammability: 4
Instability: 0

NFPA ratings

Disclaimer The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create any warranty, expressed or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.

Revision information This document has undergone significant changes and should be reviewed in its entirety.