

1. Identification

Product identifier	RED/ORANGE HIGH VIS
Other means of identification	
Product code	1A27N370
Recommended use	Tree and log marking 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
	Germ cell mutagenicity	Category 1B
	Carcinogenicity	Category 1B
	Reproductive toxicity	Category 2
	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 3
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 genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs (central nervous system) through prolonged or repeated exposure. Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

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. 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 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 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

86.31% of the mixture consists of component(s) of unknown acute oral toxicity. 86.31% of the mixture consists of component(s) of unknown acute dermal toxicity. 60.59% of the mixture consists of component(s) of unknown acute inhalation toxicity. 49.56% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 49.56% 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	%
SOLVENT NAPHTHA, LIGHT ALIPHAT		64742-89-8	20-35
BUTANE		106-97-8	10-25
NAPHTHA (PETROLEUM), HYDRODTREATED LIGHT		64742-49-0	10-25
PROPANE		74-98-6	10-25
ACETONE		67-64-1	1-10
MINERAL SPIRITS		64742-88-7	1-10
XYLENE		1330-20-7	1-10
ETHYL BENZENE		100-41-4	1 - 2.5
SILICON DIOXIDE		112945-52-5	1 - 2.5
Other components below reportable levels			10-25

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

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

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.

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. Narcosis. Dizziness. 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. 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	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
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.
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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. 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
ETHYL BENZENE (CAS 100-41-4)	PEL	435 mg/m3 100 ppm
NAPHTHA (PETROLEUM), HYDRODTREATED LIGHT (CAS 64742-49-0)	PEL	400 mg/m3 100 ppm
PROPANE (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm
SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)	PEL	400 mg/m3 100 ppm
XYLENE (CAS 1330-20-7)	PEL	435 mg/m3 100 ppm

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value
SILICON DIOXIDE (CAS 112945-52-5)	TWA	0.8 mg/m3 20 mppcf

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	
ETHYL BENZENE (CAS 100-41-4)	TWA	20 ppm	
MINERAL SPIRITS (CAS 64742-88-7)	TWA	200 mg/m3	Non-aerosol.
XYLENE (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
ACETONE (CAS 67-64-1)	TWA	590 mg/m3 250 ppm
BUTANE (CAS 106-97-8)	TWA	1900 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
ETHYL BENZENE (CAS 100-41-4)	STEL	800 ppm 545 mg/m3
	TWA	125 ppm 435 mg/m3
MINERAL SPIRITS (CAS 64742-88-7)	TWA	100 ppm 100 mg/m3
	TWA	400 mg/m3
PROPANE (CAS 74-98-6)	TWA	100 ppm 1800 mg/m3
	TWA	1000 ppm
SILICON DIOXIDE (CAS 112945-52-5)	TWA	6 mg/m3
SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)	TWA	400 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	*
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 ACGIH Threshold Limit Values: Skin designation

MINERAL SPIRITS (CAS 64742-88-7)

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	Red/Orange
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. Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.7 % estimated
Flammability limit - upper (%)	12.8 % estimated
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	2240.36 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	6.33 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	75 %w/w
Specific gravity	0.76
VOC	519.26 g/l MATERIAL 566.47 g/l COATING

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 oxidizing agents. Chlorine. Fluorine. Nitrates.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	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. Narcosis. Dizziness. 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
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ACETONE (CAS 67-64-1)

Acute

Dermal

LD50	Guinea pig, rabbit, rat	7400 mg/kg
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Inhalation

LD50	Rat	7600 mg/m ³ , 4 hours
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Oral

LD50	Rat	5800 mg/kg
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XYLENE (CAS 1330-20-7)

Acute

Dermal

LD50		12130 mg/kg
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Inhalation

LC50		27120 mg/m ³
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Oral

LD50		3523 mg/kg
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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

ETHYL BENZENE (CAS 100-41-4) 2B Possibly carcinogenic to humans.

SILICON DIOXIDE (CAS 112945-52-5) 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 Suspected of damaging fertility or the unborn child.

Specific target organ toxicity - single exposure Not classified.

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. Harmful to aquatic life with long lasting effects.

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
NAPHTHA (PETROLEUM), HYDRODTREATED LIGHT (CAS 64742-49-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
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
PROPANE	2.36
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 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

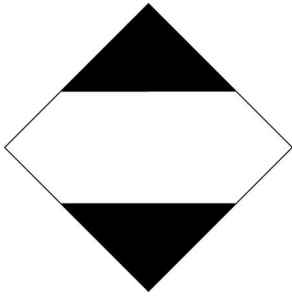
UN number	ID8000
UN proper shipping name	Consumer commodity, Limited Quantity
Transport hazard class(es)	
Class	9
Subsidiary risk	ORM-D
Packing group	Not available.
Environmental hazards	No.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
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.
ETHYL BENZENE (CAS 100-41-4)	Listed.
PROPANE (CAS 74-98-6)	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	1 - 2.5
XYLENE	1330-20-7	1-10

Other federal regulations

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

ETHYL BENZENE (CAS 100-41-4)
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

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

ACETONE (CAS 67-64-1) 35 %WV

DEA Exempt Chemical Mixtures Code Number

ACETONE (CAS 67-64-1) 6532

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

ACETONE (CAS 67-64-1) 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

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)

ETHYL BENZENE (CAS 100-41-4)

MINERAL SPIRITS (CAS 64742-88-7)

NAPHTHA (PETROLEUM), HYDRODTREATED LIGHT (CAS 64742-49-0)

SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)

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)	No
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	No

*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 06-15-2020
Version # 01
HMIS® ratings Health: 3*
Flammability: 4
Physical hazard: 3
NFPA ratings Health: 2
Flammability: 4
Instability: 3

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.

SAFETY DATA SHEET

1. Identification

Product identifier	GREEN HIGH VIS	
Other means of identification		
Product code	1A27N700	
Recommended use	Tree and log marking paint	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	FORREST Paint Co. DBA FORREST Technical Coatings	
Address	1011 McKinley Street P.O. Box 22110 Eugene, OR 97402 United States	
Telephone	1 (541) 342-1821	
Website	www.forrestpaint.com	
E-mail	info@forrestpaint.com	
Contact person	EHS Department	
Emergency phone number	1 (800) 424-9300	(CHEMTREC - Contract # 8730)
	+1 703-527-3887	(CHEMTREC - Contract # 8730)

2. Hazard(s) identification

Physical hazards	Flammable aerosols	Category 2
	Gases under pressure	Compressed gas
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Germ cell mutagenicity	Category 1
	Carcinogenicity	Category 1A
	Reproductive toxicity	Category 2
	Specific target organ toxicity, repeated exposure	Category 1
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 3
OSHA defined hazards	Not classified.	

Label elements



Signal word Danger

Hazard statement Flammable aerosol. Contains gas under pressure; may explode if heated. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause genetic defects. May cause cancer. Suspected of damaging 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

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. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

Response

If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. 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 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

86.63% of the mixture consists of component(s) of unknown acute oral toxicity. 86.63% of the mixture consists of component(s) of unknown acute dermal toxicity. 49.89% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 49.89% 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	%
SOLVENT NAPHTHA, LIGHT ALIPHAT		64742-89-8	24.36
PROPANE		74-98-6	14.4
NAPHTHA (PETROLEUM), HYDRODTRE		64742-49-0	12.92
BUTANE		106-97-8	10.6
ACETONE		67-64-1	7.1
XYLENE		1330-20-7	5.57
MINERAL SPIRITS		64742-88-7	5.5
SILICON DIOXIDE		112945-52-5	1.25
ETHYL BENZENE		100-41-4	1.06
COBALT CARBOXYLATE		136-52-7	0.03
Other components below reportable levels			17.2029

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

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.

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. Dizziness. 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 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.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. 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	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. The product is insoluble in water.

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. Do not taste or swallow. 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 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 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
ACETONE (CAS 67-64-1)	PEL	2400 mg/m3 1000 ppm
ETHYL BENZENE (CAS 100-41-4)	PEL	435 mg/m3 100 ppm
MINERAL SPIRITS (CAS 64742-88-7)	PEL	400 mg/m3 100 ppm
NAPHTHA (PETROLEUM), HYDRODTRE (CAS 64742-49-0)	PEL	400 mg/m3 100 ppm
PROPANE (CAS 74-98-6)	PEL	1800 mg/m3 1000 ppm
SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)	PEL	400 mg/m3 100 ppm
XYLENE (CAS 1330-20-7)	PEL	435 mg/m3 100 ppm

US. OSHA Table Z-3 Permissible Exposure Limits (PEL) for Mineral Dusts (29 CFR 1910.1000)

Components	Type	Value	Form
SILICON DIOXIDE (CAS 112945-52-5)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		0.8 mg/m3	

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value	Form
ACETONE (CAS 67-64-1)	STEL	500 ppm	
	TWA	250 ppm	
BUTANE (CAS 106-97-8)	STEL	1000 ppm	
COBALT CARBOXYLATE (CAS 136-52-7)	TWA	0.02 mg/m3	Inhalable fraction.
ETHYL BENZENE (CAS 100-41-4)	TWA	20 ppm	
XYLENE (CAS 1330-20-7)	TWA	20 ppm	

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
ACETONE (CAS 67-64-1)	IDLH	2.5 % 2500 ppm
BUTANE (CAS 106-97-8)	IDLH	1.6 % 2000 ppm 1600 ppm
ETHYL BENZENE (CAS 100-41-4)	IDLH	0.8 % 800 ppm

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
MINERAL SPIRITS (CAS 64742-88-7)	IDLH	1 %
		1000 ppm
NAPHTHA (PETROLEUM), HYDRODTRE (CAS 64742-49-0)	IDLH	1 %
		1000 ppm
PROPANE (CAS 74-98-6)	IDLH	2.1 %
		2100 ppm
SILICON DIOXIDE (CAS 112945-52-5)	IDLH	3000 mg/m3
SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)	IDLH	1 %
		1000 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value
ACETONE (CAS 67-64-1)	TWA	590 mg/m3
		250 ppm
BUTANE (CAS 106-97-8)	TWA	1900 mg/m3
		800 ppm
ETHYL BENZENE (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
		TWA
NAPHTHA (PETROLEUM), HYDRODTRE (CAS 64742-49-0)	TWA	100 ppm
		400 mg/m3
		100 ppm
PROPANE (CAS 74-98-6)	TWA	1800 mg/m3
		1000 ppm
SILICON DIOXIDE (CAS 112945-52-5)	TWA	6 mg/m3
		TWA
SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)	TWA	100 ppm
		100 ppm
		400 mg/m3
XYLENE (CAS 1330-20-7)	STEL	655 mg/m3
		150 ppm
		TWA
		100 ppm

Biological limit values**ACGIH Biological Exposure Indices (BEI)**

Components	Value	Determinant	Specimen	Sampling Time
ACETONE (CAS 67-64-1)	25 mg/l	Acetone	Urine	*
COBALT CARBOXYLATE (CAS 136-52-7)	15 µg/l	Cobalt	Urine	*
ETHYL BENZENE (CAS 100-41-4)	0.15 g/g	Sum of mandelic acid and phenylglyoxylic acid	Creatinine in urine	*

ACGIH Biological Exposure Indices (BEI)

Components	Value	Determinant	Specimen	Sampling Time
XYLENE (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

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

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. Keep away from food and drink. 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**

Physical state Liquid, Gas.

Form Aerosol. Compressed gas.

Color Green.

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) estimated

Evaporation rate Not available.

Flammability (solid, gas) Not applicable. Not available.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) 0.7 % estimated

Explosive limit - upper (%) 12.8 % estimated

Vapor pressure 2265.32 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 7.22 lbs/gal estimated

	6.29 lb/gal
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	75 %w/w 25.34 % estimated
Specific gravity	0.87 estimated 0.75
VOC	552.9 g/l COATING 515.4 g/l MATERIAL 266.07 % estimated

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	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Heat. 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	Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Harmful if swallowed. 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. Dizziness. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
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Information on toxicological effects

Acute toxicity	May be fatal if swallowed and enters airways.
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Components	Species	Test Results
ACETONE (CAS 67-64-1)		
Acute		
Dermal		
LD50	Guinea pig, rabbit, rat	7400 mg/kg
Inhalation		
LD50	Rat	7600 mg/m ³ , 4 hours
Oral		
LD50	Rat	5800 mg/kg
XYLENE (CAS 1330-20-7)		
Acute		
Dermal		
LD50		12130 mg/kg
Inhalation		
LC50		27120 mg/m ³
Oral		
LD50		3523 mg/kg

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

Respiratory or skin sensitization

ACGIH sensitization

Cobalt and inorganic compounds, inhalable fraction, as Co (CAS 136-52-7) Dermal sensitization

Respiratory sensitization

Respiratory sensitization Due to partial or complete lack of data the classification is not possible.

Skin sensitization Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity May cause genetic defects.

Carcinogenicity May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

ETHYL BENZENE (CAS 100-41-4) 2B Possibly carcinogenic to humans.
SILICON DIOXIDE (CAS 112945-52-5) 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 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

COBALT CARBOXYLATE (CAS 136-52-7) Reasonably Anticipated to be a Human Carcinogen.

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

Specific target organ toxicity - single exposure Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity - repeated exposure Causes damage to organs 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. Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
ACETONE (CAS 67-64-1)			
Aquatic			
Crustacea	NOEC	Freshwater invertebrate	> 79 mg/l
Fish	LC50	Freshwater fish	5540 mg/l
<i>Acute</i>			
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
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			
Fish	LC50	Bluegill (Lepomis macrochirus)	>= 7.711 - <= 9.591 mg/l, 96 hours
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	1.37 - 4.4 mg/l, 48 hours >= 1.37 - <= 4.4 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	7.5 - 11 mg/l, 96 hours
MINERAL SPIRITS (CAS 64742-88-7)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours

Components		Species	Test Results
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
NAPHTHA (PETROLEUM), HYDRODTRE (CAS 64742-49-0)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	>= 2.7 - <= 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia pulex)	>= 2.7 - <= 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia pulex)	2.7 - 5.1 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
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	Freshwater fish	2.6 mg/l
	NOEC	Freshwater fish	> 1.3 mg/l
<i>Acute</i>			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	6.702 - 10.032 mg/l, 96 hours

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
PROPANE	2.36

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 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 hazard	-
Label(s)	2.1
Packing group	-
Environmental hazards	
Marine pollutant	No.
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

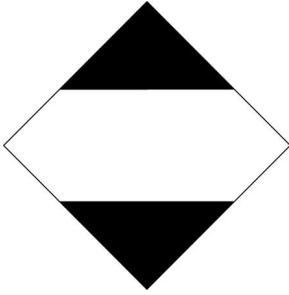
IATA

UN number	ID8000
UN proper shipping name	Consumer commodity, Limited Quantity
Transport hazard class(es)	
Class	9
Subsidiary hazard	ORM-D
Packing group	-
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.

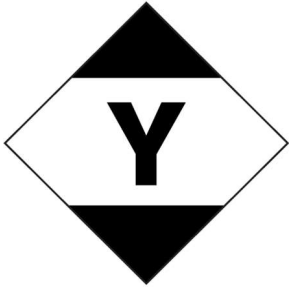
IMDG

UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary hazard	-
Packing group	-
Environmental hazards	
Marine pollutant	No.
EmS	Not assigned.
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.
COBALT CARBOXYLATE (CAS 136-52-7)	Listed.
ETHYL BENZENE (CAS 100-41-4)	Listed.
MINERAL SPIRITS (CAS 64742-88-7)	Listed.
NAPHTHA (PETROLEUM), HYDRODTRE (CAS 64742-49-0)	Listed.
PROPANE (CAS 74-98-6)	Listed.
SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)	Listed.
XYLENE (CAS 1330-20-7)	Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

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	1.06
XYLENE	1330-20-7	5.57

Other federal regulations

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

COBALT CARBOXYLATE (CAS 136-52-7)
ETHYL BENZENE (CAS 100-41-4)
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

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

ACETONE (CAS 67-64-1) 35 %WV

DEA Exempt Chemical Mixtures Code Number

ACETONE (CAS 67-64-1) 6532

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

ACETONE (CAS 67-64-1) Low priority

US state regulations

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)
COBALT CARBOXYLATE (CAS 136-52-7)
ETHYL BENZENE (CAS 100-41-4)
NAPHTHA (PETROLEUM), HYDRODTRE (CAS 64742-49-0)
SOLVENT NAPHTHA, LIGHT ALIPHAT (CAS 64742-89-8)
XYLENE (CAS 1330-20-7)

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
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

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
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

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*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	06-16-2020
Revision date	03-19-2024
Version #	02
HMIS® ratings	Health: 3* Flammability: 4 Physical hazard: 1

NFPA ratings	Health: 2 Flammability: 3 Instability: 1
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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.
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Revision information	This document has undergone significant changes and should be reviewed in its entirety.
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