



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS
which includes the amended Hazardous Products Act (HPA) and the Hazardous Products
Regulation (HPR)

Revision Date 20-Nov-2025

Version 1

1. Identification

Product identifier

Product Name LIQUID METAL FILLER 3.5 FL.OZ

Other means of identification

Product Code 25909

UN number or ID number UN1133

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Adhesive Filler.

Restrictions on use No information available

Details of the supplier of the safety data sheet

Manufacturer Address

ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

May Also Be Distributed by:

ITW Permatex Canada
101-2360 Bristol Circle
Oakville, ON Canada L6H 6M5
Telephone: (800) 924-6994

E-mail address mail@permatex.com

Emergency telephone number

Company Phone Number 866-732-9502

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

24-hour emergency phone number No information available

2. Hazard(s) identification

Classification

Flammable liquids	Category 2
Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2A

Emergency Response Guide Number 128

Carcinogenicity	Category 1A
-----------------	-------------

Label elements

Contains BARIUM SULFATE; SILICA, QUARTZ; TITANIUM DIOXIDE; CARBON BLACK

**Danger****Hazard statements**

Highly flammable liquid and vapor.
Harmful if swallowed.
Harmful if inhaled.
Causes serious eye irritation.
May cause cancer.

Precautionary Statements - Prevention

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves, protective clothing, eye protection and face protection.
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid breathing dust, fume, gas, mist, vapors and spray.
Use only outdoors or in a well-ventilated area.
Ground and bond container and receiving equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Use explosion-proof electrical, ventilating and lighting equipment.

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention.

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice and attention.

Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor if you feel unwell.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
Rinse mouth.

Fire

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Precautionary Statements - Storage

Store locked up.
Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

Unknown acute toxicity

9.8542 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
56.0242 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
76.0142 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
76.0142 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

16.8442 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Other Information

No information available.

3. Composition/information on ingredients**Substance**

Not applicable.

Mixture

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
BARIUM SULFATE	7727-43-7	30-60%	-	-
KAOLIN	1332-58-7	10-30%	-	-
ACETONE	67-64-1	10-30%	-	-
ISOBUTYL ACETATE	110-19-0	3-7%	-	-
CALCIUM CARBONATE	1317-65-3	0.5-1.5%	-	-
TITANIUM DIOXIDE	13463-67-7	0.1-1%	-	-
SILICA, QUARTZ	14808-60-7	0.1-1%	-	-
CARBON BLACK	1333-86-4	0.1-1%	-	-

4. First-aid measures**Description of first aid measures****General advice**

Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention.

Inhalation

Remove to fresh air. If symptoms persist, call a physician. If breathing has stopped, give artificial respiration. Get medical attention immediately.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Ingestion

Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Get medical attention.

Self-protection of the first aider

Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists.

Most important symptoms and effects, both acute and delayed**Symptoms**

May cause redness and tearing of the eyes. Burning sensation. Coughing and/ or wheezing. Difficulty in breathing.

Effects of Exposure

May cause cancer.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam.
Small Fire	In case of fire, use water spray, foam, dry chemical, or CO ₂ .
Large Fire	In case of fire, use water spray, foam, dry chemical, or CO ₂ .
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Hazardous combustion products	No information available.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	Yes.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid breathing vapors or mists.
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
Methods for cleaning up	Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof
--------------------------------	---

equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children.

8. Exposure controls/personal protection

Control Parameters

Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
BARIUM SULFATE 7727-43-7	TWA: 5 mg/m ³ inhalable particulate matter particulate matter containing no Asbestos and <1% Crystalline silica	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ ; total dust TWA: 5 mg/m ³ ; respirable dust
KAOLIN 1332-58-7	TWA: 2 mg/m ³ respirable particulate matter particulate matter containing no Asbestos and <1% Crystalline silica	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ ; total dust TWA: 5 mg/m ³ ; respirable dust
ACETONE 67-64-1	TWA: 250 ppm STEL: 500 ppm	TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors. (vacated) STEL: 1000 ppm	TWA: 250 ppm; TWA: 590 mg/m ³ ; IDLH: 2500 ppm
ISOBUTYL ACETATE 110-19-0	TWA: 50 ppm STEL: 150 ppm	TWA: 150 ppm TWA: 700 mg/m ³ (vacated) TWA: 150 ppm (vacated) TWA: 700 mg/m ³	TWA: 150 ppm; TWA: 700 mg/m ³ ; IDLH: 1300 ppm
CALCIUM CARBONATE 1317-65-3	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ ; total dust TWA: 5 mg/m ³ ; respirable dust
TITANIUM DIOXIDE 13463-67-7	TWA: 0.2 mg/m ³ nanoscale respirable particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	TWA: 2.4 mg/m ³ ; CIB 63 fine TWA: 0.3 mg/m ³ ; CIB 63 ultrafine, including engineered nanoscale IDLH: 5000 mg/m ³
SILICA, QUARTZ 14808-60-7	TWA: 0.025 mg/m ³ respirable particulate matter	TWA: 50 µg/m ³ TWA: 50 µg/m ³ excludes	TWA: 0.05 mg/m ³ ; respirable dust

		construction work, agricultural operations, and exposures that result from the processing of sorptive clays (vacated) TWA: 0.1 mg/m ³ respirable dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction	IDLH: 50 mg/m ³ respirable dust
CARBON BLACK 1333-86-4	TWA: 3 mg/m ³ inhalable particulate matter	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³ ; TWA: 0.1 mg/m ³ ; Carbon black in presence of Polycyclic aromatic hydrocarbons PAH IDLH: 1750 mg/m ³

Chemical name	Alberta	British Columbia	Ontario	Quebec
BARIUM SULFATE 7727-43-7	TWA: 10 mg/m ³ ;	TWA: 5 mg/m ³ ; inhalable	TWA: 5 mg/m ³ ; inhalable particulate matter	TWAEV: 5 mg/m ³ ; inhalable dust
KAOLIN 1332-58-7	TWA: 2 mg/m ³ ; respirable	TWA: 2 mg/m ³ ; respirable particulate	TWA: 2 mg/m ³ ; respirable particulate matter	TWAEV: 2 mg/m ³ ; respirable dust
ACETONE 67-64-1	TWA: 500 ppm; TWA: 1200 mg/m ³ ; STEL: 750 ppm; STEL: 1800 mg/m ³ ;	TWA: 250 ppm; STEL: 500 ppm;	TWA: 250 ppm; STEL: 500 ppm;	TWAEV: 250 ppm; STEV: 500 ppm;
ISOBUTYL ACETATE 110-19-0	TWA: 150 ppm; TWA: 713 mg/m ³ ;	TWA: 50 ppm; STEL: 150 ppm;	TWA: 50 ppm; STEL: 150 ppm;	TWAEV: 50 ppm; STEV: 150 ppm;
CALCIUM CARBONATE 1317-65-3	TWA: 10 mg/m ³ ;	TWA: 10 mg/m ³ ; total dust TWA: 3 mg/m ³ ; respirable fraction STEL: 20 mg/m ³ ;	-	TWAEV: 10 mg/m ³ ; total dust
TITANIUM DIOXIDE 13463-67-7	TWA: 10 mg/m ³ ;	TWA: 10 mg/m ³ ; total dust TWA: 3 mg/m ³ ; respirable fraction	TWA: 10 mg/m ³ ;	TWAEV: 10 mg/m ³ ; total dust
SILICA, QUARTZ 14808-60-7	TWA: 0.025 mg/m ³ ; respirable particulate	TWA: 0.025 mg/m ³ ; respirable	TWA: 0.10 mg/m ³ ; respirable fraction	TWAEV: 0.05 mg/m ³ ; respirable dust
CARBON BLACK 1333-86-4	TWA: 3.5 mg/m ³ ;	TWA: 3 mg/m ³ ; inhalable	TWA: 3 mg/m ³ ; inhalable particulate matter	TWAEV: 3 mg/m ³ ; inhalable dust

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
BARIUM SULFATE	TWA: 5 mg/m ³ ; inhalable particulate matter	TWA: 5 mg/m ³ ; inhalable fraction	TWA: 5 mg/m ³ ; inhalable particulate matter	TWA: 5 mg/m ³ ; inhalable particulate matter
KAOLIN	TWA: 2 mg/m ³ ; particulate matter, respirable particulate matter	TWA: 2 mg/m ³ ;	TWA: 2 mg/m ³ ; particulate matter, respirable particulate matter	TWA: 2 mg/m ³ ; particulate matter, respirable particulate matter
ACETONE	TWA: 250 ppm; STEL: 500 ppm;	TWA: 250 ppm; STEL: 500 ppm;	TWA: 250 ppm; STEL: 500 ppm;	TWA: 250 ppm; STEL: 500 ppm;
ISOBUTYL ACETATE	TWA: 50 ppm; STEL: 150 ppm;	TWA: 50 ppm; STEL: 150 ppm;	TWA: 50 ppm; STEL: 150 ppm;	TWA: 50 ppm; STEL: 150 ppm;
TITANIUM DIOXIDE	TWA: 0.2 mg/m ³ ; nanoscale respirable particulate matter TWA: 2.5 mg/m ³ ; finescale respirable particulate matter	TWA: 10 mg/m ³ ;	TWA: 0.2 mg/m ³ ; nanoscale respirable particulate matter TWA: 2.5 mg/m ³ ; finescale respirable particulate matter	TWA: 0.2 mg/m ³ ; nanoscale respirable particulate matter TWA: 2.5 mg/m ³ ; finescale respirable particulate matter

Chemical name	Manitoba	New Brunswick	Newfoundland and Labrador	Nova Scotia
SILICA, QUARTZ	TWA: 0.025 mg/m ³ ; respirable particulate matter	TWA: 0.025 mg/m ³ ; respirable fraction	TWA: 0.025 mg/m ³ ; respirable particulate matter	TWA: 0.025 mg/m ³ ; respirable particulate matter
CARBON BLACK	TWA: 3 mg/m ³ ; inhalable particulate matter	TWA: 3 mg/m ³ ; inhalable fraction	TWA: 3 mg/m ³ ; inhalable particulate matter	TWA: 3 mg/m ³ ; inhalable particulate matter

Chemical name	Nunavut	Prince Edward Island	Saskatchewan	Yukon
BARIUM SULFATE	TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;	TWA: 5 mg/m ³ ; inhalable particulate matter	TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;	
KAOLIN	TWA: 2 mg/m ³ ; respirable fraction STEL: 4 mg/m ³ ; respirable fraction	TWA: 2 mg/m ³ ; particulate matter, respirable particulate matter	TWA: 2 mg/m ³ ; respirable fraction STEL: 4 mg/m ³ ; respirable fraction	TWA: 30 mppcf; TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;
ACETONE	TWA: 500 ppm; STEL: 750 ppm;	TWA: 250 ppm; STEL: 500 ppm;	TWA: 500 ppm; STEL: 750 ppm;	TWA: 1000 ppm; TWA: 2400 mg/m ³ ; STEL: 1250 ppm; STEL: 3000 mg/m ³ ;
ISOBUTYL ACETATE	TWA: 150 ppm; STEL: 188 ppm;	TWA: 50 ppm; STEL: 150 ppm;	TWA: 150 ppm; STEL: 188 ppm;	TWA: 150 ppm; TWA: 700 mg/m ³ ; STEL: 187 ppm; STEL: 875 mg/m ³ ;
CALCIUM CARBONATE	TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;		TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;	TWA: 30 mppcf; TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;
TITANIUM DIOXIDE	TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;	TWA: 0.2 mg/m ³ ; nanoscale respirable particulate matter TWA: 2.5 mg/m ³ ; finescale respirable particulate matter	TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;	TWA: 30 mppcf; TWA: 10 mg/m ³ ; STEL: 20 mg/m ³ ;
SILICA, QUARTZ	TWA: 0.05 mg/m ³ ; respirable fraction	TWA: 0.025 mg/m ³ ; respirable particulate matter	TWA: 0.05 mg/m ³ ; respirable fraction	TWA: 300 particle/mL;
CARBON BLACK	TWA: 3.5 mg/m ³ ; STEL: 7 mg/m ³ ;	TWA: 3 mg/m ³ ; inhalable particulate matter	TWA: 3.5 mg/m ³ ; STEL: 7 mg/m ³ ;	TWA: 3.5 mg/m ³ ; STEL: 7 mg/m ³ ;

Chemical name	ACGIH
ACETONE 67-64-1	25 mg/L - urine (Acetone) - end of shift

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Hand protection

Wear suitable gloves.

Skin and body protection

Wear suitable protective clothing. Antistatic boots. Chemical resistant apron. Wear fire/flame resistant/retardant clothing.

Respiratory protection	Use appropriate respiratory protection. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material.
General hygiene considerations	Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.
Thermal hazards	No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	No information available
Color	Black
Odor	No information available
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	54 - 118 °C / 129.2 - 244.4 °F	
Flash point	-18 °C / -0.4 °F	Tag Closed Cup
Evaporation rate	<1	Butyl acetate = 1
Flammability (solid, gas)	No data available	
Flammability Limit in Air		
Upper flammability limit:	12.8%	
Lower flammability limit:	2.4%	
Vapor pressure	181 mm Hg @ 68°F	
Vapor density	>1	Air = 1
Relative density	1.8	
Water solubility	Partially soluble	
Solubility(ies)	No data available	
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Particle characteristics		
Particle Size	No data available	
Particle Size Distribution	No data available	

Other information

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Density	No information available
Bulk density	No information available

10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	No information available.

Conditions to avoid	Heat, flames and sparks. Excessive heat.
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	Carbon oxides. Hydrogen chloride.

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation. (based on components).
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes. Coughing and/ or wheezing.

Acute toxicity Harmful if swallowed. Harmful by inhalation.

Numerical measures of toxicity

The following ATE values have been calculated for the mixture

ATEmix (oral)	1,052.20 mg/kg
ATEmix (dermal)	35,760.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapor)	99,999.00 mg/L
ATEmix (inhalation-dust/mist)	2.69 mg/L

Unknown acute toxicity

9.8542 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 56.0242 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
 76.0142 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
 76.0142 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
 16.8442 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
BARIUM SULFATE 7727-43-7	= 307000 mg/kg (Rat)	-	-
KAOLIN 1332-58-7	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
ACETONE 67-64-1	= 5800 mg/kg (Rat)	> 15700 mg/kg (Rabbit)	= 50100 mg/m ³ (Rat) 8 h
ISOBUTYL ACETATE 110-19-0	= 15400 mg/kg (Rat)	> 17400 mg/kg (Rabbit)	-
TITANIUM DIOXIDE 13463-67-7	> 2000 mg/kg (Rat)	-	> 5.09 mg/L (Rat) 4 h
CARBON BLACK 1333-86-4	> 10000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 4.6 mg/m ³ (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer.

Chemical name	ACGIH	IARC	NTP	OSHA
KAOLIN 1332-58-7	A4 - Not Classifiable as a Human Carcinogen	-	-	-
ACETONE 67-64-1	A4 - Not Classifiable as a Human Carcinogen	-	-	-
TITANIUM DIOXIDE 13463-67-7	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans	Group 2B - Possibly carcinogenic to humans	-	Present
SILICA, QUARTZ 14808-60-7	A2 - Suspected Human Carcinogen	Group 1 - Carcinogenic to humans	Known Human Carcinogen	Present
CARBON BLACK 1333-86-4	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans	Group 2B - Possibly carcinogenic to humans	-	Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. Ecological information

Ecotoxicity The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
ACETONE 67-64-1	-	LC50: 4.74 - 6.33mL/L (96h, Oncorhynchus mykiss) LC50: 6210 - 8120mg/L (96h, Pimephales promelas) LC50: =8300mg/L (96h, Lepomis macrochirus)	-	EC50: 10294 - 17704mg/L (48h, Daphnia magna) EC50: 12600 - 12700mg/L (48h, Daphnia magna)
ISOBUTYL ACETATE 110-19-0	-	LC50: =17mg/L (96h, Oryzias latipes)	-	-

Persistence and degradability No information available.

Bioaccumulative potential There is no data for this product.

Chemical name	Partition coefficient
ACETONE 67-64-1	-0.24
ISOBUTYL ACETATE 110-19-0	2.3

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

US EPA Waste Number Waste designations and classifications should be determined by the end user based on the application for which the product was used.

14. Transport information

DOT

UN number or ID number UN1133
 Proper shipping name Adhesives
 Transport hazard class(es) 3
 Packing group III
 DOT Marine Pollutant NP
 Description UN1133, Adhesives, 3, III, Limited Quantity
 Special Provisions B1, B52, IB3, T2, TP1
 Emergency Response Guide Number 128

TDG

UN number or ID number UN1133
 UN proper shipping name Adhesives
 Transport hazard class(es) 3
 Packing group III
 Description UN1133, Adhesives, 3, III, Limited Quantity

MEX

UN number or ID number UN1133
 UN proper shipping name Adhesives
 Transport hazard class(es) 3
 Packing group III
 Description UN1133, Adhesives, 3, III, Limited Quantity
 Special Provisions 223

ICAO (air)

UN number or ID number UN1133
 UN proper shipping name Adhesives
 Transport hazard class(es) 3
 Packing group III
 Description UN1133, Adhesives, 3, III, Limited Quantity

Special Provisions A3

IATA

UN number or ID number UN1133
 UN proper shipping name Adhesives
 Transport hazard class(es) 3
 Packing group III
 ERG Code 3L
 Special Provisions A3
 Description UN1133, Adhesives, 3, III, Limited Quantity

IMDG

UN number or ID number UN1133
 UN proper shipping name Adhesives
 Transport hazard class(es) 3
 Packing group III
 EmS-No. F-E, S-D
 Special Provisions 223, 955
 Description UN1133, Adhesives, 3, III, (-18°C c.c.), Limited Quantity

15. Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****International Regulations**

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Not determined
IECSC	Complies
KECI	Complies
PICCS	Complies
AICS	Complies
NZIoC	Not Determined

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name

SARA 313 - Threshold Values %

BARIUM SULFATE - 7727-43-7	1.0
----------------------------	-----

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
ISOBUTYL ACETATE 110-19-0	-	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
ACETONE 67-64-1	5000 lb / kg (final RQ)	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
ISOBUTYL ACETATE 110-19-0	5000 lb / kg (final RQ)	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
AMORPHOUS SILICA - 7631-86-9	*Carcinogen
TITANIUM DIOXIDE - 13463-67-7	*Carcinogen (airborne, unbound particles of respirable size)
SILICA, QUARTZ - 14808-60-7	*Carcinogen (airborne particles of respirable size only)
CARBON BLACK - 1333-86-4	*Carcinogen (airborne, unbound particles of respirable size)

*The asterisked chemical(s) listed are not subject to Proposition 65 because they are not airborne in the finished product

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
BARIUM SULFATE 7727-43-7	X	X	X
KAOLIN 1332-58-7	X	X	X
ACETONE 67-64-1	X	X	X
ISOBUTYL ACETATE 110-19-0	X	X	X
CALCIUM CARBONATE 1317-65-3	X	X	X
AMORPHOUS SILICA 7631-86-9	-	X	X
TITANIUM DIOXIDE 13463-67-7	X	X	X
SILICA, QUARTZ 14808-60-7	X	X	X
CARBON BLACK 1333-86-4	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 2	Flammability 3	Instability 0	Special hazards -
HMIS	Health hazards 2 *	Flammability 3	Physical hazards 0	Personal protection X
Chronic Hazard Star Legend	* = Chronic Health Hazard			

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend**

SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Key literature references and sources for data used to compile the SDS

U.S. Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
U.S. Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan National Institute of Technology and Evaluation (NITE)
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
U.S. National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
International Organization for Economic Co-operation and Development (OECD) Environment, Health, and Safety Publications
International Organization for Economic Co-operation and Development (OECD) High Production Volume Chemicals Program
International Organization for Economic Co-operation and Development (OECD) Screening Information Data Set
United Nations World Health Organization (WHO)

Revision Date 20-Nov-2025

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.