

SAFETY DATA SHEET

TEC® PERMALASTIC® 424

Version 1.0

Revision Date 11/13/2025

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : TEC® PERMALASTIC® 424
Product code : 100000015619

Manufacturer or supplier's details

Company : TEC Specialty Products
Address : 1105 South Frontenac
Aurora, IL, 60504
Telephone : 800-832-9023

Medical Emergency Phone Number (24 Hours) : 1-800-424-9300

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Cement, Adhesive

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	powder
Color	gray
Odor	odorless

GHS Classification

Skin irritation : Category 2
Serious eye damage : Category 1
Skin sensitization : Category 1

GHS label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements:

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

Precautionary Statements:

Prevention: P261 Avoid breathing dust. P264 Wash skin thoroughly after handling. P271 Use only

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outdoors or in a well-ventilated area. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves/ eye protection/ face protection.

Response: P302 + P352 IF ON SKIN: Wash with plenty of water. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse. **Storage:** P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Carcinogenicity:

IARC

Group 1: Carcinogenic to humans

Quartz (SiO₂)

14808-60-7

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

Known to be human carcinogen

Quartz (SiO₂)

14808-60-7

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Concentration [%]
Quartz (SiO ₂)	14808-60-7	60 - 80
Cement, portland, chemicals	65997-15-1	10 - 30
Ashes (residues)	68131-74-8	3 - 7
Calcium carbonate	471-34-1	1 - 5
Calcium oxide	1305-78-8	1 - 5
aluminium oxide	1344-28-1	1 - 5
calcium sulfate	7778-18-9	1 - 5
diiron trioxide	1309-37-1	1 - 5
magnesium oxide	1309-48-4	0.5 - 1.5
Mica	12001-26-2	0.5 - 1.5
Feldspar-group minerals	68476-25-5	0.5 - 1.5
diphosphorus pentaoxide	1314-56-3	0.1 - 1

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical

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	advice immediately.
If inhaled	: If inhaled Remove person to fresh air. If signs/symptoms continue, get medical attention. Oxygen or artificial respiration if needed.
In case of skin contact	: Wash off with soap and water. Remove contaminated clothing. If irritation develops, get medical attention.
In case of eye contact	: Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
If swallowed	: Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this SDS. If conscious, drink plenty of water. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	: Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. Corrosive to the respiratory tract.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	: None known.
Specific hazards during fire fighting	: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. No hazardous combustion products are known
Hazardous combustion products	: No hazardous combustion products are known
Specific extinguishing methods	:
Further information	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for fire-fighters	: Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

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SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.
- Environmental precautions : Prevent product from entering drains.
Should not be released into the environment.
- Methods and materials for containment and cleaning up : Use approved industrial vacuum cleaner for removal.
Do not use compressed air for cleaning purposes.
Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration.

SECTION 7. HANDLING AND STORAGE

- Local/Total ventilation : Use only with adequate ventilation.
- Advice on safe handling : Avoid creating dust.
Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations.
Take precautionary measures against static discharges.
Provide for appropriate exhaust ventilation and dust collection at machinery.
- Conditions for safe storage : Keep tightly closed in a dry and cool place.
- Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Quartz (SiO ₂)	14808-60-7	TWA (Respirable particulate matter)	0.025 mg/m ³	ACGIH
		TWA (total dust)	30 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA	250 mppcf	OSHA Z-3

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		(respirable)	/ %SiO ₂ +5	
		TWA (Respirable fraction)	0.1 mg/m ³	OSHA P0
		TWA (Respirable dust)	0.05 mg/m ³	OSHA Z-1
		PEL (Respirable dust)	0.05 mg/m ³	CAL PEL
		TWA (respirable dust fraction)	0.1 mg/m ³	OSHA P0
Cement, portland, chemicals	65997-15-1	TWA (Respirable particulate matter)	1 mg/m ³	ACGIH
		TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Dust)	50 Million particles per cubic foot	OSHA Z-3
		TWA (Total)	10 mg/m ³	OSHA P0
		TWA (Respirable fraction)	5 mg/m ³	OSHA P0
		TWA (Total dust)	10 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	5 mg/m ³	OSHA P0
		PEL (Total dust)	10 mg/m ³	CAL PEL
		PEL (respirable dust fraction)	5 mg/m ³	CAL PEL
Calcium carbonate	471-34-1	PEL (Total dust)	10 mg/m ³	CAL PEL
		PEL (respirable dust fraction)	5 mg/m ³	CAL PEL
		TWA (Respirable)	5 mg/m ³	NIOSH REL
		TWA (total)	10 mg/m ³	NIOSH REL
Calcium oxide	1305-78-8	TWA	2 mg/m ³	ACGIH
		TWA	5 mg/m ³	OSHA Z-1
		TWA	5 mg/m ³	OSHA P0

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		PEL	2 mg/m3	CAL PEL
aluminium oxide	1344-28-1	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total)	10 mg/m3	OSHA P0
		TWA (Respirable fraction)	5 mg/m3	OSHA P0
		TWA (Respirable particulate matter)	1 mg/m3	ACGIH
		TWA (Total dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
		PEL (Total dust)	10 mg/m3	CAL PEL
		PEL (respirable dust fraction)	5 mg/m3	CAL PEL
		TWA (Respirable particulate matter)	1 mg/m3	ACGIH
calcium sulfate	7778-18-9	TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total)	15 mg/m3	OSHA P0
		TWA (Respirable fraction)	5 mg/m3	OSHA P0
		TWA (Inhalable particulate matter)	10 mg/m3	ACGIH
		TWA (Total)	15 mg/m3	OSHA P0

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		dust)		
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0
		PEL (Total dust)	10 mg/m3	CAL PEL
		PEL (respirable dust fraction)	5 mg/m3	CAL PEL
		TWA (Inhalable particulate matter)	10 mg/m3	ACGIH
diiron trioxide	1309-37-1	TWA (Respirable particulate matter)	5 mg/m3	ACGIH
		TWA (Fumes)	10 mg/m3	OSHA Z-1
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA	10 mg/m3	OSHA Z-1
		TWA	10 mg/m3	OSHA P0
		TWA (dust and fume)	5 mg/m3	NIOSH REL
		PEL (Total dust)	10 mg/m3	CAL PEL
		PEL (respirable dust fraction)	5 mg/m3	CAL PEL
		PEL (Fumes)	5 mg/m3	CAL PEL
		TWA (Fumes)	10 mg/m3	OSHA P0
magnesium oxide	1309-48-4	TWA (Inhalable particulate matter)	10 mg/m3	ACGIH
		TWA (fume, total particulate)	15 mg/m3	OSHA Z-1
		TWA (total dust)	15 mg/m3	OSHA Z-1

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		TWA (Total particulate)	10 mg/m3	OSHA P0
		PEL (Fumes)	10 mg/m3	CAL PEL
		TWA (Fume - total particulate)	10 mg/m3	OSHA P0
Mica	12001-26-2	TWA (Respirable particulate matter)	0.1 mg/m3	ACGIH
		TWA	20 Million particles per cubic foot	OSHA Z-3
		TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3
		TWA (Respirable fraction)	3 mg/m3	OSHA P0
		TWA (Respirable)	3 mg/m3	NIOSH REL

Engineering measures : Use local exhaust ventilation or other engineering controls to minimize exposures.

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate risk management measures (exhaust/ ventilation) are provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

Filter type : Particulates type

Hand protection
Material : butyl-rubber

Eye protection : Safety glasses with side-shields

Skin and body protection : Long sleeved clothing
Remove and wash contaminated clothing before re-use.
Skin should be washed after contact.

Protective measures : Avoid contact with skin.

Hygiene measures : Avoid contact with skin, eyes and clothing.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: powder
Color	: gray
Odor	: odorless
Odor Threshold	: no data available
	: is not determined
	: is not determined
Flash point	: is not determined
Evaporation rate	: Not applicable
Upper explosion limit	: Upper flammability limit is not determined
Lower explosion limit	: Lower flammability limit is not determined
Density	: 11.2 lb/gal
Solubility(ies)	
Water solubility	: is not determined
Partition coefficient: n- octanol/water	: Not applicable
Autoignition temperature	: is not determined
Viscosity	
Viscosity, kinematic	: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Chemical stability	: The product is chemically stable.
Possibility of hazardous reactions	: Hazardous polymerization does not occur.
Hazardous decomposition products	: No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity	: Acute toxicity estimate : > 5,000 mg/kg Method: Calculation method
Acute inhalation toxicity	: Acute toxicity estimate : > 200 mg/l

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Exposure time: 4 Hours
Test atmosphere: dust/mist
Method: Calculation method

Components:**Ashes (residues):**

Acute oral toxicity : LD50 Rat: > 2,000 mg/kg

diphosphorus pentaoxide:

Acute inhalation toxicity : LC50 Rat: 1.217 mg/l
Exposure time: 1 Hours
Test atmosphere: dust/mist

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration toxicity

No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Components:**

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Calcium oxide :

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): 1,070 mg/l
Exposure time: 96 Hours
Method: static test

calcium sulfate :

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 1,970 mg/l
Exposure time: 96 Hours
Method: static test

Persistence and degradability

No data available

Bioaccumulative potential**Mobility in soil**

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Disposal via incineration at an approved facility is recommended, as industry best practice. Consult state, local or provincial authorities for more restrictive requirements.
The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

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Domestic regulation**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Respiratory or skin sensitization
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

Manganese dioxide

1313-13-9

US State Regulations**California Prop 65**

Please contact Supplier for more information.

The ingredients of this product are reported in the following inventories:**TSCA** All substances listed as active on the TSCA inventory**DSL** All components of this product are on the Canadian DSL

Please reach out to TEC Specialty Products LLC for further information regarding chemical inventories not listed above. **Inventories Legend** TSCA (USA), DSL (Canada), REACH (Europe), AIIC (Australia), NZIoC (New Zealand), ENCS (Japan), KECI (Korea), PICCS (Philippines), IECSC (China), TWINV (Taiwan)

SECTION 16. OTHER INFORMATION

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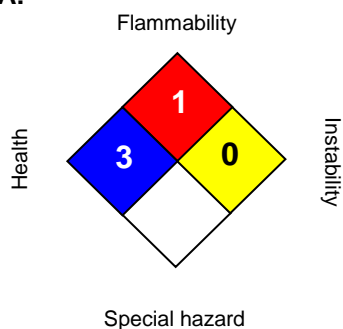
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Further information

NFPA:



HMIS III:

HEALTH	3/
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic