



KEY Pipe Joint Compounds

WKM valves accessory

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KEY Pipe Joint Compounds

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KEY-TITE

Waterproof sealant for air, gas, water, and steam line joints

KEY-TITE® viscous sealant is ideal for leak-proof sealing of threaded, flanged, and gasket joints. Use KEY-TITE in flowlines for hot and cold water, aqueous solutions, low-pressure steam slurries, natural and manufactured gases, compressed air, dilute acids, and caustics and alcohols.

KEY-TITE seals effectively without cementing because it is a film-forming, non-hardening compound. It also acts as a lubricant and protects pipe threads from rusting and seizing.

KEY-TITE is dark green and consists of vegetable and mineral oils and prime and extender pigments, plus an antioxidant. It contains no lead or other toxic ingredients and will not affect the taste or color of water or any other potable liquid.

You never need to stir KEY-TITE. It remains soft and pliable and will not settle or dry out in its container.

Temperature range

From -50 to 450 degF [-46 to 232 degC]

Sizes

- ½-pint dope kit with applicator brush in cap, 48 per case
- 1-pint can, 24 per case
- 1-quart can, 12 per case
- 1-galUS can, 4 per case
- 5-galUS pail
- 500-lbm drum

See lading guide on pages 6–10.



KEY-TITE is available in a range of sizes.

KEY Compounds

KEY Red-D-Mix Graphite Sealant for Extreme Temperatures, Easy Breakout

KEY Red-D-Mix is a black viscous thread lubricant and sealant that is recommended for use at extreme operating temperatures and where frequent breakout of joints is required.

It is suitable for air, water, steam, dilute acids and alkalis, salt, metal carbonate, phosphate, and sulfate and nitrate solutions.

KEY Red-D-Mix consists of mineral oils, graphites, and a suspending agent.

Temperature range

From -50 to 1,200 degF [-46 to 649 degC]

Sizes

- 10-lbm pail, 4 per case
- 50-lbm pail
- 500-lbm drum

KEY Red-D-Mix Characteristics

Viscosity strokes at 77 degF [25 degC]	650–750
Toxicity	None
Metal adhesion	Good
Stability	Good
Corrosion—copper strip method	None
Free alkali—maximum	None
Moisture	None



KEY Red-D-Mix accommodates extreme temperatures.

KEY Graphite Paste

For petroleum product, acid, and high-pressure steam line joints

Thixotropic compounds

A simple demonstration shows the superior thixotropic qualities that enable KEY-TITE and KEY graphite paste to seal and lubricate joints more effectively compared with other brands of joint compounds.

A thixotropic thread sealant can be defined as one that flows readily when brushed or poured but becomes semisolid and ceases to flow after a short time.

A test compared KEY-TITE, KEY graphite paste, and five well-known competitive brands of compounds. A small quantity of each was applied, one immediately after the other, to the top of a 45° glass incline. The conventional compounds slid or ran quickly down the surface, indicating a lack of coatability and therefore poor long-term sealing ability.

Conversely, KEY-TITE and KEY graphite paste, because of their superior thixotropic properties, moved only a short distance and stopped permanently. They had quickly formed an exterior film without hardening.

This thixotropic nature assures that when KEY compounds are applied to your pipe joint threads, they will seal effectively, will not drip, and yet will permit easy breakout of the joint when necessary.

This viscous compound is ideal for leak-proof sealing of threaded, flanged and gasket joints in flowlines for gasoline and other fuels; solvents including chlorinated (trichloroethylene) and aromatic hydrocarbon gases; liquefied petroleum gas; coal tar products; animal and vegetable oils; ethers; esters; ketones; alcohols; glycerine; glycols; compressed air; high-pressure steam; and strong acids.

KEY graphite paste, like KEY-TITE, seals without cementing the joint because of its film-forming, non-hardening nature. It, too, acts as a lubricant and protects pipe threads from rust and seizing.

When hot, KEY graphite paste expands to provide an even tighter seal. Gaskets sealed with it can be reused. It stays soft and pliable in the can and never needs stirring.

KEY graphite paste is black and consists of a carbohydrate binder, graphite, and a preservative.

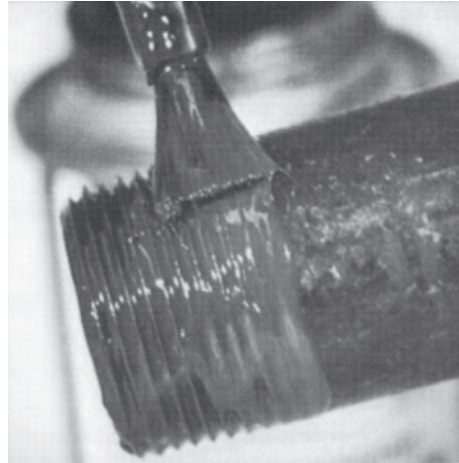
Temperature range:

From -30 to 750 degF [-34 to 399 degC]

Sizes:

- ¼-lbm can, 36 per case
- ⅝-lbm dope kit with applicator brush in cap, 48 per case
- 1-lbm can, 24 per case
- 2¾-lbm can, 12 per case
- 10-lbm pail, 4 per case
- 30-lbm and 50-lbm pails
- 500-lbm drum

See lading guide on pages 6–10.



Because their contents are in equal suspension, KEY-TITE and KEY graphite paste flow smoothly from the brush and spread quickly and evenly.



KEY graphite paste is available in a range of sizes.

KEY Graphite Paste Characteristics

Viscosity strokes at 77 degF [25 degC]	650–750
Toxicity	None
Metal adhesion	Good
Stability	Good
Corrosion — copper strip method	None
Moisture — maximum	16%

Lading Guide

KEY compounds are formulated and manufactured under strict quality-control guides. They comprise a complete family of high-grade pipe joint sealants and are formulated to handle practically all of the industry's most used ladings, from acetaldehyde to zinc sulfate.

Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Absorption oil		●
Acetaldehyde		●
Acetate solvents		●
Acetic acid		●
Acetic anhydride	●	●
Acetone	●	●
Acetylene gas	●	●
Acetylene generator waste		●
Acid sludge	●	
Acrylonitrile		●
Agitator drawoff refinery		●
Air	●	●
Alcohols, methyl or ethyl	●	●
Alcohols, higher		●
Alkalies	●	
Alums	●	
Aluminum acetate	●	
Aluminum chloride, anhydrous		●
Aluminum resinate		●
Aluminum sulfate	●	
Aluminum salt solutions	●	
Ammonia, gas or liquid	●	
Ammonia liquor	●	
Ammonia recovery lines	●	
Ammonia saturators	●	
Ammonium chloride	●	
Ammonium hydroxide	●	
Ammonium nitrate	●	
Ammonium phosphate	●	
Ammonium salt solutions	●	
Ammonium sulfate	●	
Ammonium sulfate liquor	●	
Amyl acetate		●
Amyl chloride		●
Aniline		●
Aniline oils		●
Animal oils		●
Aqueous solutions	●	
Aromatic solvents		●
Arsenic acid	●	
Arsenic trichloride	●	
Asphalt		●

● Compound is most suitable for the lading within the temperature limits shown for the compound.

Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Asphalt emulsions		●
Barium carbonate	●	
Barium chloride	●	
Barium hydroxide	●	
Barium salt solutions	●	
Barium sulfate	●	
Barites	●	
Benzaldehyde		●
Benzine (petroleum ether)		●
Benzene (benzol)		●
Benzoate of soda	●	
Benzoic acid	●	
Bicarbonate of soda	●	
Bituminous paints		●
Black liquor, paper industry	●	
Blast furnace gas	●	●
Bleach liquor (calcium hypochlorite)	●	
Blue gas	●	●
Boiler blowoff (steam)	●	●
Boiler feeder water	●	
Borax	●	
Boric acid	●	
Brake fluid		●
Bright stock, petroleum		●
Brines	●	
Bulk stations		●
Bunker oils (fuel oils)		●
Butadiene		●
Butane, gas or liquid		●
Butyric acid	●	
Calcium chloride	●	
Calcium hydroxide	●	
Calcium hypochlorite	●	
Calcium salt solutions	●	
Calcium sulfate	●	
Carbolic acid (phenol solution)		●
Carbon dioxide, gas or liquid	●	●
Carbon disulfide		●
Carbon monoxide gas	●	●
Carbon tetrachloride		●
Carbonic acid (CO ₂ solution)	●	
Casein paints	●	

● Compound is most suitable for the lading within the temperature limits shown for the compound.

Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Casing head gas		●
Caster oil		●
Caustic cell liquors	●	
Caustic potash (potassium hydroxide)	●	
Caustic soda (sodium hydroxide)	●	
Cellulose acetate		●
Cement slurries	●	
Chestnut extract	●	
Chlorinated paraffin		●
Chlorinated solvents		●
Chlorobenzene		●
Chrome tanning solutions	●	
Chromic acid	●	
Citric acid	●	
Clay slips	●	
Coal gas	●	●
Coal tar oils		●
Coal tar solvents		●
Coal washers	●	
Coconut oil		●
Coke oven gas		●
Condensate	●	
Continuous treaters, refinery		●
Copper solution	●	
Copper sulfate	●	
Core oil		●
Corn oil		●
Cottonseed oil		●
Creosote oil		●
Cresylic acid (cresol)		●
Crude oil		●
Crude oil and brine		●
Cumene		●
Cutting oils		●
Cyanide solutions	●	
Denatured alcohol	●	●
Dextrin	●	
Dichlorethylene		●
Diesel fuel		●
Diethanolamine		●
Distillate, petroleum		●
Doctor solution (sodium plumbite)		●
Doctor solution and gasoline		●
Downtherm		●
Drilling mud	●	
Drip cocks, gas		●
Drip oil		●
Dry cleaning fluid		●
Dyes, oil soluble		●

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Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Elaine red oil (oleic acid)		●
Electrolytic cell liquor	●	
Emulsions	●	●
Epsom salts	●	
Ethane gas	●	●
Ethers		●
Ether, petroleum		●
Ethyl acetate		●
Ethyl alcohol (ethanol)	●	●
Ethyl benzene		●
Ethyl chloride, gas or liquid		●
Ethylene dibromide		●
Ethylene dichloride		●
Ethylene gas	●	●
Ethylene glycol		●
Fatty acids		●
Fatty acids and water		●
Ferric chloride	●	
Ferric nitrate	●	
Ferric sulfate	●	
Ferrous chloride	●	
Ferrous sulfate	●	
Fertilizer solutions		
Nitrate	●	
Phosphate	●	
Sulfate	●	
Filter house lines		●
Fish oil		●
Flavoring extracts	●	
Flue gas	●	●
Fluosilic acid	●	
Foamite lines	●	
Formaldehyde	●	
Formic acid	●	
Freon®, gas or liquid		●
Fruit juices	●	
Fuel oil		●
Fuming sulfuric acid		●
Furfural		●
Fusel oil (crude amyl alcohol)		●
Gallic acid	●	
Gas drips		●
Gas fuel lines		●
Gas liquor (ammonia liquor)	●	
Gas, manufactured	●	●
Gas, natural	●	●
Gas odorizers		●
Gas oil		●
Gasoline, low aromatic		●

● Compound is most suitable for the lading within the temperature limits shown for the compound.

Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Gasoline, high aromatic		●
Gasoline and water		●
Gelatin	●	
Gin		●
Glacial acetic acid	●	
Glauber's salt	●	
Glaze liquid, ceramic	●	
Glucose	●	
Glue	●	
Glycerine (glycerol)	●	●
Glycols	●	●
Grain alcohol (ethyl alcohol)	●	●
Grease		●
Green liquor, paper industry	●	
Gypsum (calcium sulfate)	●	
Helium	●	●
Hemlock extract	●	
Heptane		●
Heavy oil, coke plant		●
Hexane		●
High-test gasoline		●
Hydraulic oil		●
Hydrochloric acid		●
Hydrocyanic acid		●
Hydrofluoric acid		●
Hydrogen gas	●	●
Hydrogen chloride		●
Hydrogen peroxide, dilute	●	
Hydrogen sulfide	●	●
Inhibited acid	●	
Ink, washable	●	
Jet fuel		●
Kerosene		●
Ketones, except acetone		●
Lactic acid	●	
Lard		●
Latex	●	
Lead arsenate	●	
Licorice extract	●	
Light oil, coke plant		●
Lignin liquor	●	
Lime solutions	●	
Linseed oil		●
Liquefied petroleum gas (LPG)	●	
Lithium chloride	●	
Loading racks, petroleum		●
Logwood extracts	●	
Low temperatures	Refer to specific service	
Lubricating oil, petroleum		●

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Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Lye solutions	●	
Magnesium chloride	●	
Magnesium hydroxide	●	
Magnesium salt solutions	●	
Magnesium sulfate	●	
Maleic anhydride	●	
Malt syrup (maltose)	●	
Manganous sulfate	●	
Manufactured gas	●	●
Mash, distillery	●	
Menhaden oil (fish)		●
Mercaptans		●
Mercurizing solutions	●	
Mercuric chloride	●	
Mercury	●	●
Methane gas	●	●
Methyl alcohol (methanol)	●	●
Methyl chloride, gas or liquid	●	
Methyl ethyl ketone		●
Methylene chloride		●
Milk of lime	●	
Mine water	●	
Mineral oil		●
Mineral spirits		●
Miscella		●
Molasses	●	
Monochlorobenzene		●
Monethanolamine		●
Mud pump lines	●	
Muriatic acid		●
Naphtha, petroleum		●
Naphtha condensers		●
Naphtha filter house, refinery		●
Naphthalene		●
Natural gas	●	●
Nickel plating solutions	●	
Nitre (potassium nitrate)	●	
Nitric acid		●
Nitrobenzene		●
Nitrogen gas	●	●
Nitrogen solutions (ammonium nitrate)	●	
Nitromethane		●
Oakite		●
Octane		●
Oil, crude		●
Oil, petroleum		●
Oil and water mixtures		●
Oil tar		●
Oil of vitriol (sulfuric acid)		●

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Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Oleic acid		●
Oleomargarine		●
Oleo oil		●
Oleum (fuming sulfuric acid)		●
Olive oil	●	
Oxalic acid	●	
Oxidizer (nitrogen, tetroxide solvent, air force)		●
Paint, latex base	●	
Paint, oil base		●
Paint thinner (mineral spirits)		●
Palm oil		●
Palm oil and water		●
Palmitic acid		●
Paper stock	●	
Paraffin		●
Paraffin oils		●
Peanut oil		●
Pentane		●
Perchlorethylene		●
Petrolatum		●
Petroleum ether		●
Petroleum oil		●
Phenol		●
Phosphoric acid	●	
Phosphorous	●	
Phthalic anhydride	●	
Pickling acids		●
Pine resin		●
Pitch		●
Polybutene		●
Polyisobutylene		●
Potash (potassium carbonate)	●	
Potassium chloride	●	
Potassium hydroxide	●	
Potassium salt solutions	●	
Potassium sulfate	●	
Printing ink		●
Producer gas		●
Propane, gas or liquid		●
Propylene		●
Prussic acid (hydrocyanic acid)	●	
Pulp lines, paper industry	●	
Pyridine	●	
Pyrogallic acid	●	
Pyroligneous liquors	●	
Quebracho extract	●	
Quenching oil		●
Rapeseed oil		●
Raw gas lines		●

● Compound is most suitable for the lading within the temperature limits shown for the compound.

Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Red oil (oleic acid)		●
Residuum, refinery		●
Road oil		●
Roofing tar		●
Rosin (pine resin)		●
Rubber solvent		●
Sal ammoniac (ammonium chloride)	●	
Salicyclic acid	●	
Salt (sodium chloride)	●	
Salt cake (sodium sulfate)	●	
Scouring liquor, woolen mills	●	
Seawater	●	
Sewage	●	
Sewage gas	●	●
Shellac		●
Shock absorber fluid		●
Silicone fluids		●
Slop, brewery	●	
Sludge, acid	●	
Slurries	●	
Snow foam, fire-fighting equipment		●
Soap solutions	●	
Soda ash (sodium carbonate)	●	
Soda liquor, paper industry	●	
Soda liquor, paper industry	●	
Sodium, molten	●	
Sodium, bicarbonate	●	
Sodium bisulfate	●	
Sodium borate	●	
Sodium carbonate	●	
Sodium chloride	●	
Sodium hydroxide	●	
Sodium hypochlorite	●	
Sodium phenolate	●	
Sodium phosphate	●	
Sodium salt solutions	●	
Sodium silicate	●	
Sodium sulfate	●	
Soluble oils		●
Solvent naphtha, coal tar		●
Sour gasoline		●
Sour wash, textile industry	●	
Soybean oil	●	
Spent acid	●	
Spent soap lye	●	
Stannic chloride	●	
Starch solutions	●	
Steam	●	●
Stearic acid		●

● Compound is most suitable for the lading within the temperature limits shown for the compound.

Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Stoddard solvent		●
Strontium nitrate	●	
Styrene monomer		●
Sugar solutions	●	
Sulfonated oils		●
Sulfate liquors		●
Sulfite liquors	●	
Sulfur chloride	●	
Sulfur dioxide	●	●
Sulfur, molten		●
Sulfur monochloride		●
Sulfur slurries	●	
Sulfur trioxide	●	
Sulfuric acid		●
Sulfurous acid		●
Sweet water	●	
Synthesis gas		●
Synthetic tannis	●	
Syrup	●	
Tall oil		●
Tall oil (fatty acids)		●
Tallow		●
Tankage, rendering plants	●	
Tannic acid	●	
Tanning liquors	●	
Tar		●
Tar acid (phenol)		●
Tar oil (creosote)		●
Tartaric acid	●	
Tempering oil		●
Tetraethyl lead		●
Toluene (toluol)		●
Transformer oil		●
Triaryl phosphate		●
Triethanolamine		●
Trisodium phosphate	●	
Tung oil		●
Turpentine		●
UCON® fluids		●
Vacuum service	●	●
Varnish		●
Vat dyes	●	
Vegetable dyes	●	
Vegetable oils		●
Vegetable oils and water		●
Vegetable tannis	●	
Vinegar	●	
Vinyl chloride		●
Vinylidene chloride		●

● Compound is most suitable for the lading within the temperature limits shown for the compound.

Lading	Temperature Range, degF [degC]	
	KEY-TITE	KEY
	-50 to 450 [-46 to 232]	-30 to 750 [-34 to 399]
Viscose		●
Wash oil, coke plant		●
Waste pickle liquor	●	
Water, solutions or suspensions	●	
Water gas	●	●
Water glass (sodium silicate)	●	
Water softener	●	
Wax emulsions		●
Waxes		●
Wet gas lines		●
Whiskey	●	
Whiskey mash	●	
White liquor and water, paper industry	●	
Wine	●	
Wood alcohol (methyl alcohol)	●	●
Wood pulp	●	
Wool scouring liquors	●	
Wort, beer	●	
Xylene (xylol)		●
Zinc chloride	●	
Zinc sulfate	●	

● Compound is most suitable for the lading within the temperature limits shown for the compound.

Cameron Services

We build it. We back it.

Cameron is well positioned to quickly and efficiently deliver total aftermarket support with unmatched OEM expertise. Our highly skilled engineers and technicians are available around the clock to respond to customer queries, troubleshoot problems, and offer reliable solutions.

Easily accessible parts and spare valves

- OEM spare valves, actuators, and parts (including non-Cameron brands)
- Handling, storage, packaging, and delivery
- Dedicated stocking program

Comprehensive aftermarket services portfolio

- Parts and spare valves
- Repair
- Field services
- Preventative maintenance
- Equipment testing and diagnostics
- Remanufacturing
- Asset preservation
- Customer property management
- Training and recertification services
- Warranty

Customized total valve care programs

- Engineering consultancy
- Site management
- Flange management
- Startup and commissioning
- Spare parts and asset management
- Operational support



KEY Pipe Joint Compounds



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