

TECH LINE Coatings

SAFETY DATA SHEET

Section 1 – Identification

Product Identifier: DRS-SC

Other means of identification: Not Available

Product Type: Liquid

Recommended Use: Thermal Barrier - Corrosion resistance

Manufacturer / Supplier:

Tech Line Coatings, Inc

26844 ADAMS AVE.

MURRIETA, CA 92562

USA

Phone/Fax 1-865-773-0597

www.techlinecoatings.com

Part Number: DRS-SC

Restrictions on Use:

Industrial Use Only

Keep out of reach of children.

Emergency Phone: N. America +1-800-535-5053

Intl. +1-352-323-3500

Section 2 – Hazards Identification

OSHA status: This material is considered hazardous by the OSHA Hazard Communication Standard (29CFR 1910.1200)

Classification of the mixture: Corrosive – category 3

Signal Word: Danger

Hazard Statements:

Symbols:



Hazard statements : May cause skin damage

May cause eye damage

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response : IF exposed or concerned: Get medical attention. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth.

Storage : Store above 65F

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations

Hazards not otherwise classified: None known

Section 3 – Composition / Information On Ingredients

Substance/mixture: Mixture

Other means of

identification: Not available.

CAS number/other identifiers: Not available

Product code : DRS-SC

Section 3 – Composition / Information On Ingredients

Component Name	Common Name / Synonyms	CAS#	% of Weight
Water		7732-18-15	70.00%
Phosphoric Acid	H3O4P	7664-38-2	<30%

Components not listed above are non-hazardous.

Any concentration shown as a range is to protect confidentiality or is due to batch variation

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4 – First Aid Measures

General advise:

●Consult a physician. Show this Safety Data Sheet to the doctor in attendance. Move out of dangerous area.

After EYE Contact:

- Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

After SKIN Contact:

- Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

After INHALATION:

- Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention.

After SWALLOWING:

- Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Most important symptoms and effects, both acute and delayed:

Irritation, Nausea, Headache, Shortness of breath. May cause severe burns and ulcerations. May cause severe burn and irreversible eye injury. May cause gastrointestinal tract burns, corrosion and permanent tissue damage of the digestive tract and esophagus;

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled

Specific treatments: No specific treatment

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See section 11 for additional information

Section 5 – Fire Fighting Measures

Extinguishing media

Suitable extinguishing agents:

If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

For safety reasons unsuitable extinguishing agents:

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Avoid contact with eyes, skin, and clothing. Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation. Keep away from ignition sources. Protect from heat. Stop the spill, if possible. Contain spilled material by diking or using inert absorbent. Transfer to a disposal or recovery container.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13

Methods and material for containment and cleaning up:

Absorb spillage to prevent material damage due to corrosiveness to metal. If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor. Collect liquids using inert absorbent material.

Additional Information:

- See Section 7 for safe handling information.
- See Section 8 for PPE information
- See Section 13 for disposal information

Section 7 – Handling And Storage

Precautions for safe handling

Wash hands after handling. Do not mix with bases. Use in a chemical fume hood. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Prevent contact with eyes, skin, and clothing

Conditions for safe storage, including any incompatibilities:

Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly sealed. Do not store under direct sun light. Do not pile up the containers. Do not store at temperatures close to freezing point. Container materials should be made of stainless steel 316-L, high-density polyethylene, or according to 29CFR1910/1200 and GHS Rev. 3

Conditions for safe storage: Store at 55-90°F (13-32°C).

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ingredient name

Exposure limits

Phosphoric acid

ACGIH TLV (United States, 6/2013).

TWA: 1 mg/m³ 8 hours.

STEL: 3 mg/m³ 15 minutes.

OSHA PEL 1989 (United States, 3/1989).

TWA: 1 mg/m³ 8 hours.

STEL: 3 mg/m³ 15 minutes.

NIOSH REL (United States, 10/2013).

TWA: 1 mg/m³ 10 hours.

STEL: 3 mg/m³ 15 minutes.

OSHA PEL (United States, 2/2013).

TWA: 1 mg/m³ 8 hours

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use/handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or dusts (total/respirable) below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above

Respiratory protection:

Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.

Protection of skin:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection:

Safety glasses with side shields or goggles.

General hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals. Keep away from food, beverages and feed sources. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Do not inhale gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and skin.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels

Individual protection measures:

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection:

Hand protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Form :	liquid
Color :	Yellow
Odor :	Slightly musty smell to no odor
Odor Threshold:	Not Established
pH :	1.8 to 2.6
Melting point / Freezing point:	Not Established
Initial boiling point :	Not Established
Flash point :	> 212° F (Water based)
Evaporation Rate:	Not Established
Upper/lower flammability or explosive limits:	Not Established
Vapor pressure	Not Established
Vapor density	Not Established
Relative density	Not Established
Solubility(ies)	Water: somewhat soluble

Partition coefficient: n-octanol/water	Not Established
Auto-ignition temperature	Not Established
Decomposition temperature	Not Established
Viscosity	Not Established
Total VOC	0 lbs/gal

SECTION 10 STABILITY AND REACTIVITY

Reactivity:

Chemical stability:

This hygroscopic substance pulls moisture from air. No decomposition if used and stored according to specifications.

Possible hazardous reactions:

Conditions to avoid:

Metals. Exposure to moist air or water. Incompatible materials. Excess heat. Store away from oxidizing agents, strong acids or bases.

Incompatible materials:

Metals. Bases . Alcohols. Amines. Halogenated agents. Organic peroxides. Amides. Azo. Diazo. Hydrazines. Chlorates. Carbamates. Esters. Fluorides. Phenols. Cresols . Organophosphates. Phosphothioates. Epoxides. Combustible and flammable materials. Explosives. Alkalines. Nitromethane. Sodium tetrahydroborate. Mercaptans. Aldehydes. Ketones. Glycols. Cyanides. Sulfides. Caustics. Strong acids. Carbides. Strong bases. Fulminates. Reducing agents. Nitrates. Acetic acid. Oxidizing agents

Hazardous decomposition products:

Phosphine. Oxides of phosphorus. Hydrogen gas is released in contact with most metals.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity

Phosphoric acid	LD50 Oral	Rat	LD50 for a 10% solution of 75.4% thermal phosphoric acid (rat
	LD50 Oral	Rat	LD50 oral-rat: (7764-38-2)
	LC50 Inhalation	Rat	LC50 inhalation-rat (1h) (7664-38-2)

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

This product contains a component that has been reported to be carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

SECTION 11 TOXICOLOGICAL INFORMATION

Classification

Reproductive toxicity

Not available

Teratogenicity

Not available

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Carcinogenicity

IARC: Not listed

NTP: Not listed

Symptoms related to the physical, chemical and toxicological characteristics

Skin contact: Contact with eyes may cause irritation.

Ingestion: No specific data.

Inhalation: can cause irritation to the nose and throat. Symptoms may include runny nose, sneezing, coughing, itching and a burning sensation

Eye contact : No specific data

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects: Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity

Do not release to water: May release phosphates which will result in algae growth, increased turbidity, and depleted oxygen in the marine environment; at extremely high concentrations and/or quantities, this may be hazardous to fish or other marine organisms.

LpH50 (median lethal pH) (96h) phosphoric acid (bluegill sunfish): 3-3.25

Adult brook trout survived 5 months exposure to pH levels of 5.0 and above. Total egg production was not affected, but viability was significantly less at pH 5.0. Hatchability was significantly less at levels below pH 6.5. Growth and survival of alevins was reduced at the lower pH levels.: The data indicate that continuous exposure to pH levels below 6.5 result in significant reductions in egg hatchability and growth.

Algae: NOEC (EC50 >100 mg/l, the upper limit of toxic range) D. subspicatus : 100 mg/l

Persistence and degradability: Readily degradable in the environment.

Bioaccumulative potential: The phosphorus element is an essential nutrient for flora and fauna

Mobility in soil:

Other adverse effects:

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Disposal should be made in accordance with federal, state and local regulations. Recovered non-usable material is a RCRA hazardous waste. Treatment, storage, transportation and disposal must be in accordance with EPA and State regulation under the authority of the Resource Conservation and Recovery Act (RCRA) 40 CFR parts 260-271. A competent and properly permitted contractor should do appropriate disposal.

SECTION 14 TRANSPORTATION INFORMATION

Hazardous for Shipping:

DOT classification: UN 3264, Corrosive liquid, acidic, inorganic, n.o.s., class 8, packing group III, (Limited quantity exemption 173.154 applies)

IATA classification: UN 3264, Corrosive liquid, acidic, inorganic, n.o.s., class 8, packing group III,

IMDG: UN 3264, Corrosive liquid, acidic, inorganic, n.o.s., class 8, packing group III, Marine pollutant

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage

SECTION 15 REGULATIONS

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings): Acute

SARA Section 313 (Specific toxic chemical listings): None of the ingredients is listed

RCRA (hazardous waste code): None of the ingredients is listed

TSCA (Toxic Substances Control Act): All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act): 7664-38-2 Phosphoric acid 5000

Proposition 65 (California):

Chemicals known to cause cancer: None of the ingredients is listed

Chemicals known to cause reproductive toxicity for females: None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males: None of the ingredients is listed

Chemicals known to cause developmental toxicity: None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL): All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%): None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%): 7664-38-2 Phosphoric acid

SECTION 16 OTHER INFORMATION

Date Prepared: 1/24/2017

Update:

The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.

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