



MATERIAL SAFETY DATA SHEET

Version 1.1 *Supercedes all previous versions*
15JAN2009

1. Product and Company Information

Product Name **StressKote Brittle Coating,
SK 20°F/(-7°C) through SK 100°F/(38°C), inclusive**

Company StressKote Brittle Coatings, LLC
Address S14 W33511 Hwy18, Bldg C
Delafield WI 53018 US
Technical Information 262-510-9568 or 414-940-1193
Fax 262-968-3050
Emergency 414-940-1193 or 414-322-3884

Product Use Coating for Mechanical Stress Analysis
OSHA Status Hazardous
CAS# Mixture
Shipping Requirements (USDoT 49CFR, IATA)
Proper Shipping Name Dichloromethane Solution
Hazard Class, Division 6.1
Identification Number UN1593

2. Composition/Information on Ingredients

Definitions:

Liquid StressKote A clear (non-turbid), reddish-orange liquid, comprising a solution of gum rosin derivatives in a mixture of dichloromethane and toluene, with or without dibutylphthalate. A total of seventeen (17) solutions, of diverse composition, are included in the product line. Each is formulated to maximize strain sensitivity at a specific target temperature at 5 F° intervals within the range of 20 -100 °F. As examples, SK 35°F and SK 80°F are formulated to maximize strain sensitivity at the target temperatures of 35°F (2°C) and 80°F (27°C), respectively. Each of the seventeen solutions has a specific composition which falls within the following range of compositions. Hereinafter, "Liquid StressKote" shall refer to each and all of the seventeen solutions.

Wt %	Substance	CAS#
75-78	dichloromethane (methylene chloride)	75-09-2
8-10	toluene (toluol, methylbenzene)	108-88-3
0-3	dibutylphthalate (o-benzenedicarboxylic acid, dibutyl ester)	84-74-2
12-15	gum rosin derivatives [Non-hazardous per OSHA: 29CFR 1910.1200]	

VOC: 83-87 wt %

Dried Brittle Coating In normal use, Liquid StressKote is applied to a test surface by spraying, brushing, rolling and/or pouring in a series of thin coats, allowing a few minutes between the coats to promote solvent evaporation. The multilayered coating is purged of occluded residual solvent by heating in air for a period of 12-24 hrs. at a temperature typically 10-20 °F above the target temperature, or at a minimum of 60°F for the SK 20°F through SK 50°F coatings. This processed coating is optimally 3-6 mil (0.08-0.15 mm) thick, smooth, shiny, copper or bronze colored, and essentially dichloromethane/toluene free. It is hereinafter referred to as “Dried Brittle Coating.”

3. Hazards Identification

The specific hazards associated with a StressKote Brittle Coating depends upon its physical state as either Liquid StressKote, or Dried Brittle Coating. The liquid, which contains the volatile organic compounds, dichloromethane and toluene, has potential health effects primarily attributable to these two solvents, and to a much lesser extent, the gum rosin derivatives and the low concentration of dibutylphthalate, if present. The Dried Brittle Coating, containing only the gum rosin derivatives or gum rosin derivatives and dibutylphthalate, is believed not to pose a health risk to the end user, unless airborne dust, which can be inhaled, is generated during a mechanical removal (e.g., scraping, grinding, or wire brushing) of the coating from a test surface. The hazards identified below apply to Liquid StressKote, unless otherwise noted.

Emergency Overview

OSHA Hazards

Toxic. Target Organ Effect, Harmful by ingestion, Irritant, Possible carcinogen and teratogen. May cause harm to the unborn child.

Target Organs

Liver, kidneys, pancreas, eyes, blood

HMIS Classification

Health Hazard	2	
Flammability	1	(Self-extinguishing liquid. See section 5)
Physical Hazards	0	

NFPA Rating

Health Hazard	2	
Fire	1	(Self-extinguishing liquid)
Reactivity	0	

Potential Health Effects

Inhalation	May be harmful if inhaled, causing respiratory tract irritation. Liquid StressKote produces vapors which have a sweet, chlorinated hydrocarbon and pungent, aromatic hydrocarbon odor. These vapors, which are more dense than air, may cause at levels around 1000 ppm, drowsiness, dizziness, headache, nausea and vomiting, and if allowed to accumulate in poorly ventilated areas to concentrations as low as 10,000 ppm, can cause CNS depression, cardiac arrhythmia, unconsciousness and death. Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the blood’s oxygen-carrying capacity.
Skin	May be harmful if absorbed through skin. May cause skin irritation and

discoloration, with prolonged contact causing redness, swelling and burns. Severe response may be experienced on covered skin (under clothing, gloves or jewelry), with attendant drying and flaking of the skin. May cause dermatitis. Dried Brittle Coating may also cause skin irritation and discoloration, with prolonged contact causing redness and dermatitis.

Eyes	May cause eye irritation, conjunctivitis, and reversible corneal injury. Dried Brittle Coating dusts may also cause eye irritation and conjunctivitis.
Ingestion	Low toxicity if small amounts are swallowed. Larger amounts will cause abdominal pain (gastrointestinal discomfort), nausea, diarrhea, and through aspiration may engender pneumonitis. Ingestion of small amounts of Dried Brittle Coating dust has a low toxicity.
Cancer	None of the components of Liquid StressKote or hence, Dried Brittle Coating, is believed to pose a measurable carcinogenic risk to man when handled as recommended.

4. First Aid Measures

General advice

Call the StressKote emergency numbers and consult a physician. Have a copy of this MSDS available for use by emergency response personnel.

If inhaled

If any of the potential health effects attributed to inhalation are observed, move the person into fresh air immediately. If breathing is labored, give oxygen. If not breathing, perform CPR. Consult a physician.

In case of skin contact

If any Liquid StressKote contacts the skin, immediately wipe the area with a clean cloth, then remove all residuals with soap and water. Consult a physician. Contaminated clothing must be removed immediately and washed or dry cleaned before reuse. If the clothing is heavily contaminated, it should be taken to a well-ventilated area to allow for the safe evaporation of the dichloromethane and toluene, then discarded appropriately. Dried Brittle Coating dust should be removed with soap and water.

In case of eye contact

If any Liquid StressKote splashes into the eye(s), or, for example, is transferred to the eye from a contaminated finger, then immediately flush the eye(s) [remove contact lenses] with clean water for 15 minutes, lifting the eye lids as necessary to ensure a complete rinse. Consult a physician, preferably an ophthalmologist. Dried Brittle Coating dust in the eye should be removed by a clean water rinse in the same manner.

If Liquid StressKote is swallowed

Never give anything by mouth to an unconscious person. Do not induce vomiting, as vomiting will significantly increase the risk of aspiration causing pneumonitis. Rinse mouth with clean water. Consult a physician and transport the victim to an emergency care facility immediately.

5. Firefighting Measures

Flammable properties

Flash Point None

Self-extinguishing Liquid

Liquid StressKote does not exhibit a TCT flash point as defined by ASTM D56. A green halo, characteristic of thermal decomposition of

dichloromethane is observed around the test flame even at temperatures approaching 0°F.

Flammable limits	No determination made.
Autoignition temperature	Literature values for the autoignition temperatures of dichloromethane, toluene and dibutylphthalate, are 556°C (1,033°F), 536°C (997°F), and 404°C (759°F), respectively. A propane torch flame applied to the surface of Liquid StressKote will produce red-orange, sooty flames attributable primarily to burning toluene. However, upon removal of the torch flame, the liquid immediately self-extinguishes. Dried Brittle Coating is a combustible solid.
Hazardous combustion products	Carbon dioxide, carbon monoxide, hydrogen chloride, phosgene, smoke, fumes, unburned dichloromethane and hydrocarbons, aldehydes.
Suitable extinguishing media	Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Personal protective equipment	Wear full-face, self-contained breathing apparatus and protective clothing.

6. Accidental Release Measures

Personal precautions	Use personal protective equipment, as detailed in Sections 7 and 8. Avoid breathing vapors, mist, gas, or dust. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapor accumulations in low areas, e.g., workpits and basements.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not allow spillage to enter drains, sewers, and natural waterways.
Methods for cleaning up	Do not touch with unprotected hand or walk through spilled material. Contain spillage, then collect with clean absorbent towelling or sand, earth, diatomaceous earth, or vermiculite, and place the sorbed material in a container which will allow the drying of the Liquid StressKote in a well-ventilated, unoccupied area. It is possible, the sorbed Dried Brittle Coating may be offered as ordinary industrial waste for disposal in accordance with local regulations. However, the end user (waste generator) should ensure that any dibutylphthalate contained in the gum rosin derivatives matrix does not preclude the disposal of the dried material as ordinary industrial waste.

7. Handling and Storage

Definition:

Respirator OSHA's Occupational Safety and Health Standard for methylene chloride (MC, dichloromethane), 29 CFR 1910.1052, section 1910.1052(g)(3) requires employers to (I) select, and provide to employees, the appropriate atmosphere-supplying respirator specified in paragraph (d)(3)(i)(A) of 29 CFR 1910.134; however, employers must not select or use half masks of any type because MC may cause eye irritation or damage, and (ii), for emergency escape, provide employees with one of

the following respirator options: A self-contained breathing apparatus operated in the continuous-flow or pressure-demand mode; or a gas mask with an organic vapor canister. Hereinafter, the term "OSHA required respirator" shall mean a full-face respirator which complies with the requirements set forth in these aforementioned OSHA standards.

Handling

General handling Avoid contact with eyes, skin and clothing. Avoid breathing vapor, mist, gas or dust. Do not swallow. Use only with adequate ventilation. Do not enter confined spaces in which Liquid StressKote is being used or has recently been used, unless the space is adequately ventilated and an OSHA required respirator is worn. As the dichloromethane vapors evolved from Liquid StressKote are more dense (heavier) than air, lethal concentrations can develop in low, confined and unventilated spaces such as tanks, workpits, small rooms, and basements. Do not enter these confined spaces where Liquid StressKote vapors are suspected unless an OSHA required regulator is worn and an observer is present for monitoring and assistance. Wash thoroughly after handling. Keep containers tightly closed when not in use. For the storage of Liquid StressKote, use the metal containers provided in the original packaging or an equivalent container. When using the product, do not eat, drink or smoke. Take normal measures for preventative fire protection, which includes keeping sources of ignition (e.g, open flames and incendive electrostatic discharges) away from the Liquid StressKote and its vapors, and airborne dusts of Dried Brittle Coatings.

Other precautions Liquid StressKote containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near partial or empty containers. Uncapped emptied containers awaiting proper disposal should be placed in well-ventilated areas free of ignition hazards.

Storage Store tightly closed containers of the Liquid StressKote in a clean, dry, cool, well-ventilated place away from direct sunlight. Containers which have been opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure Controls/Personal Protection

Abbreviations (initialisms and acronyms):

CAS	Chemical Abstracts Service, Registry Number
ACGIH	US American Conference of Governmental and Industrial Hygienists
BEI	Biological Exposure Index
STEL	Short-term Exposure Limit
TLV TWA	Threshold Limit Value Time-Weighted Average
NIOSH	US Department of Health and Human Services - National Institute for Occupational Safety and Health
REL	NIOSH Recommended Exposure Limit
RTECS	Registry of Toxic Effects of Chemical Substances
OSHA	US Department of Labor-Occupational Safety and Health Administration
CEIL	Ceiling Limit
PEL	Permissible Exposure Limit (PEL)
MSHA	US Department of Labor, Mine Safety and Health Administration
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program

Definition:

Regulated Area(s) “Regulated area” as defined in OSHA’s Occupational Safety and Health Standard for methylene chloride (MC, dichloromethane), 29CFR 1910.1052, section 1910.1052(b), means an area, demarcated by the employer, where an employee’s exposure to airborne concentrations of MC exceeds or can reasonably be expected to exceed either the 8-hour TWA PEL or the STEL. Currently, the 8-hour TWA PEL and STEL for methylene chloride are 25 and 125 ppm, respectively. Because toluene has a lower volatility and higher action level vapor concentrations than methylene chloride, a regulated area established for methylene chloride will serve as well for the toluene in Liquid StressKote. The Federal Register, Vol. 71, No. 39, p10343 (28FEB2006) provides additional guidance to general industry employers on the establishment of Regulated Areas.

Components with workplace control parameters

Component	CAS No.	Control	Parameter	Effective Date	Basis
dichloromethane (methylene chloride)	75-09-2	TWA	50 ppm 174 mg/m ³	1996-05-18	ACGIH TLV and BEI
		STEL	125 ppm	1997-04-04	OSHA 29CFR1910.1000 Z-1-A
		TWA	25 ppm	1997-04-04	OSHA 29CFR1910.1000 Z-1-A
		Action Level-Skin	12.5 ppm		OSHA
toluene	108-88-3	TWA	50 ppm 188 mg/m ³	1996-05-18	ACGIH TLV and BEI
		TWA	100 ppm 375 mg/m ³	1989-03-01	OSHA 29CFR1910.1000 Z-1-A
		STEL	150 ppm 560 mg/m ³	1993-06-30	OSHA 29CFR1910.1000 Z-1-A
		TWA	200 ppm	1993-06-30	OSHA 29CFR1910.1000 Z-2
		CEIL	300 ppm	1993-06-30	OSHA 29CFR1910.1000 Z-2
dibutyl phthalate	84-74-2	TWA	5 mg/m ³		ACGIH
		TWA	5 mg/m ³		MSHA
		TWA	5 mg/m ³		NIOSH
		PEL	5 mg/m ³ 8 hr TWA		OSHA

Personal protective equipment

Employ good industrial hygiene practices. Unless otherwise indicated, the following recommendations apply to both the Liquid StressKote and the Dried Brittle Coating in the form of airborne dust.

Engineering controls	Establish a regulated area(s) with good ventilation (typically 10 air changes per hour) or other engineering controls to maintain airborne concentrations of vapors or mists below the applicable exposure limits indicated in the table above, and to safely expel any generated airborne dust. Exhaust systems should be designed to move the air away from the source of vapor/mist generation and personnel. All electrical equipment should comply with the National Electric Code. An emergency eye wash station and safety shower should be located near the regulated area where the Liquid StressKote and Dried Brittle Coating are used.
Respiratory protection	Wear an OSHA required respirator when using Liquid StressKote. For protection against airborne dust which may be generated during the mechanical removal of Dried Brittle Coating, a respirator specifically designed for particle entrapment is strongly recommended, and one of which is tested and approved under germane government standards (e.g., NIOSH).
Hand protection	Avoid skin contact. Use heavy duty gloves made of chemical resistant materials such as Viton®, or butyl rubber. Wash hands with plenty of mild soap or dish detergent and water before eating, drinking, smoking, use of toilet facilities, or leaving work. DO NOT use gasoline, kerosene, solvents or harsh abrasives as skin cleaners.
Eye protection	Wear an OSHA required respirator, with its full-face protection, when using Liquid StressKote. Safety glasses equipped with side shields are recommended as minimum protection in industrial settings when handling or processing materials coated with Dried Brittle Coating.
Body protection	Use protective clothing chemically resistant to Liquid StressKote. Selection of specific items such as boots, apron, or a full body suit will depend upon the product's use. If any of the Liquid StressKote contacts the skin, immediately wipe the area with a clean cloth, then remove all residuals with soap and water. Consult a physician. Contaminated clothing must be removed immediately and washed or dry cleaned before reuse. If the clothing is heavily contaminated, it should be taken to a well-ventilated area to allow for the safe evaporation of the dichloromethane and toluene, then discarded appropriately.
Ingestion	Avoid ingestion of even very small amounts of either Liquid StressKote or the Dried Brittle Coating. Do not consume or store food, beverages, or tobacco in the regulated area or any contiguous work areas. Wash hands and face before eating, drinking or smoking.

9. Physical and Chemical Properties

Appearance	Liquid StressKote is a clear (non-turbid), reddish-orange liquid, as supplied. The Dried Brittle Coating, as normally used for mechanical stress analysis, is optimally a 3-6 mil (0.08-0.15 mm) thick, smooth, shiny, copper or bronze colored film or coating.
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Odor	Liquid StressKote produces vapors which have a sweet, chlorinated hydrocarbon and pungent, aromatic hydrocarbon odor. The intact Dried Brittle Coating is nearly odorless, but as a dust, has a pleasant gum rosin odor.		
pH	No measurements made on either Liquid StressKote or Dried Brittle Coating.		
Melting point	The Dried Brittle Coating has a melting range of 145-160 °C. A melting (freezing) point for the Liquid StressKote has not been measured.		
Boiling point	42-44°C (108-111°F) at 760 torr (normal bp). Note: As dichloromethane and toluene apparently do not form an azeotrope, 42-44°C more accurately marks the beginning of the boiling range for the Liquid StressKote, ending with the normal boiling point for pure toluene at 110.6°C (231°F).		
Flash point	None	The Liquid StressKote does not exhibit a TCT flash point as defined by ASTM D56. A green halo, characteristic of thermal decomposition of dichloromethane is observed around the test flame even at temperatures approaching 0°F.	
Ignition temperature	400°C (750°F), estimated for the Dried Brittle Coating.		
Lower explosion limit	No determination made		
Upper explosion limit	No determination made		
Vapor pressure	41-43 kPa (310-320 torr, 0.41-0.42 atm) absolute at 20°C (68°F) and 79-81 kPa (590-610 torr, 0.78-0.80 atm) absolute at 37.8°C (100°F) for Liquid StressKote.		
Vapor density (air = 1)	3	(Liquid StressKote vapor).	
Evaporation rate (acetone =1)	2		
Water solubility	Liquid Stresskote is miscible with water at concentrations less than 2% by weight (calculated), and the Dried Brittle Coating is insoluble.		
Density (20°C)	Liquid StressKote:	1.25 ± 0.03 g/ml	(H ₂ O 1.0 g/ml)
	Dried Brittle Coating	1.07 ± 0.03 g/cm ³	

10. Stability and Reactivity This section applies to both Liquid StressKote and Dried Brittle Coating, unless otherwise noted.

Storage stability	Stable under recommended storage conditions. Keep containers of Liquid StressKote tightly closed in a clean, dry, cool, well-ventilated place away from direct sunlight. Containers which have been opened must be carefully resealed and kept upright to prevent leakage.
Conditions to avoid	Heat, flames and sparks.
Materials to avoid	Liquid Stresskote can react with alkali metals (Na, K), strong oxidizing agents, strong bases, amines, powdered zinc, aluminum and magnesium. Water contamination may cause corrosion of ferrous metals due to the formation of hydrochloric acid. As gum rosin derivatives can serve as pyrotechnic fuels,

contact of the Dried Brittle Coating (especially in a particulate form) with strong oxidizing agents should be avoided.

Hazardous decomposition products	Hazardous decomposition products formed under fire conditions: Carbon dioxide, carbon monoxide, hydrogen chloride, phosgene, smoke, fumes, unburned dichloromethane and hydrocarbons, aldehydes.
Hazardous reactions	Liquid StressKote vapors in large, enclosed spaces may form explosive mixtures with air. Liquid StressKote does not undergo exothermic polymerization.

11. Toxicological Information

Dichloromethane, toluene and dibutylphthalate, the three hazardous components of Liquid StressKote, each have a unique set of oral, inhalation, and dermal toxicities. For each of the toxicity categories, the compound which has the highest value reported in the literature is considered to establish the toxicity of the mixture. Additional toxicity data may be available upon request.

Acute toxicity

Ingestion (Oral)	LD50, rat	1,500 mg/kg	(dichloromethane)
Inhalation	LC50, rat, 4hr	12,500 mg/m ³	(toluene)
Dermal	LD50, guinea pig	2,096 mg/kg	(dibutylphthalate)
	LD50, rabbit	12,196 mg/kg	(toluene)

Irritation and corrosion

Skin	rabbit	skin irritation, 24 hr.	(dichloromethane)
Eyes	rabbit	severe irritation, 24 hr	(toluene)

Sensitization No data available

Chronic exposure

Carcinogenicity, rat	inhalation	(dichloromethane)
Tumorigenic:	Carcinogenic by RTECS criteria. Endocrine: Tumors	
Genotoxicity in vivo, rat	oral (dichloromethane)	
DNA damage	(dichloromethane)	
Developmental toxicity, rat	oral	Effects on embryo or fetus: Fetotoxicity (toluene)
Reproductive toxicity, rat	inhalation	Paternal effects: Spermatogenesis, including genetic material, sperm morphology, motility, and count (toluene)

Liquid StressKote contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, OSHA, or EPA classification.

IARC:	Group 2	The agent is possibly carcinogenic to humans (dichloromethane)
NTP:	Reasonably anticipated to be a human carcinogen (dichloromethane)	

OSHA: 19.101.052 (dichloromethane)

None of the components of StressKote is believed to pose a measurable carcinogenic risk to man when handled as recommended.

Signs and symptoms of exposure

Dichloromethane	Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood. It acts as a simple asphyxiant by displacing air. Anaesthetic effects include difficulty in breathing, headache, and dizziness. Prolonged or repeated contact with skin may cause defatting, dermatitis. Contact with the eyes can cause redness, blurred vision, conjunctivitis, and tearing. Effects due to ingestion may include gastrointestinal discomfort, central nervous system depression, paresthesia, drowsiness, convulsions, pulmonary edema through aspiration. Effects may be delayed.
Toluene	Lung irritation, chest pain, pulmonary edema. Inhalation studies on toluene have demonstrated the development of inflammation and ulcerous lesions of the penis, prepuce, and scrotum in animals.
Dibutyl phthalate	Exposure can cause nausea, dizziness, and headache.

Potential health effects See Section 3

12. Ecological Information

Elimination information (persistence and degradability)

Both Liquid StressKote and Dried Brittle Coating **should not** be considered biodegradable. The bioconcentration factor (BCF) for dichloromethane is 2- 40, and it has a very high potential for soil mobility. No other data are available.

Ecotoxicity effects

Toxicity to fish	(dichloromethane)	96 hr LC50	fathead minnow	193 mg/l
		96 hr NOEC	sheepshead minnow	130 mg/l
		96 hr LC50	bluegill	74-340 mg/l
	(toluene)	96 hr LC50	rainbow trout	7.63 mg/l
		7 d NOEC	fathead minnow	5.44 mg/l
		7 d LOEC	fathead minnow	8.04 mg/l
	(dibutylphthalate)	96 hr LC50	fathead minnow	0.92 mg/l
		96 hr LC50	rainbow trout	1.6 mg/l
		96 hr LC50	sheepshead minnow	≥0.6 mg/l
96 hr LC50		bluegill sunfish	0.48 mg/l	
Toxicity to daphnia	(dichloromethane)	48 hr EC50	water flea	1,682 mg/l
		(toluene)	24 hr EC50	water flea
	(dibutylphthalate)	48 hr EC50	daphnid	3 mg/l

13. Disposal Considerations

Product DO NOT DUMP UNUSED LIQUID STRESSKOTE OR THE DRIED BRITTLE COATING INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. Observe all federal, state, and local environmental regulations. Regulations may vary with location. Waste characterization and compliance with applicable laws are the sole responsibility of the waste generator. If you characterize unused Liquid StressKote as waste, then contact a licensed professional waste disposal service to dispose of the material. Liquid StressKote may be destroyed by admixing with a combustible solvent and burning the mixture in a chemical incinerator equipped with an afterburner and scrubber. It is possible the Dried Brittle Coating may be offered as ordinary industrial waste for disposal in accordance with local regulations. However, you, the end- user (waste generator) should ensure the occluded dibutylphthalate in the gum rosin derivative matrix does not preclude the disposal of the dried material as ordinary industrial waste. StressKote Brittle Coatings, LLC has no control over the management practices or procedures of parties handling or using Liquid StressKote or Dried Brittle Coating.

Contaminated packaging Dispose of as Dried Brittle Coating.

14. Transport Information This section applies only to Liquid StressKote. StressKote Brittle Coatings, LLC should be contacted directly for guidance on the shipping of Dried Brittle Coating.

Shipping descriptions may vary based upon mode of transport, quantities, package size, origin and/or destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

US DoT UN Number: 1593 Class: 6.1 Packing group: III
Proper shipping name: Dichloromethane Solution

IMDG UN Number 1593 Class: 6.1 Packing group: III
Proper shipping name: Dichloromethane Solution EMS-No: F-A, S-A
Marine pollutant: Yes, dibutylphthalate

IATA UN Number: 1593 Class: 6.1 Packing group: III
Proper shipping name: Dichloromethane Solution

15. Regulatory Information This section applies to Liquid StressKote and in some cases to Dried Brittle Coating.

OSHA Hazards Toxic. Target Organ Effect (liver, kidneys, pancreas, eyes, blood), Harmful by ingestion, Irritant, Possible carcinogen and tetraogen. May cause harm to unborn child.

TSCA Status Dichloromethane, toluene, and dibutylphthalate are TSCA Inventory items.

CEPA DSL Status Dichloromethane, toluene, and dibutylphthalate are listed on the Canadian Domestic Substances List (DSL) under the Canadian Environmental Protection Act (CEPA).

SARA 302 Components No chemicals in Liquid StressKote are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act, Title III, Section 302.

SARA 313 Components Dichloromethane, toluene, and dibutylphthalate are subject to SARA Section 313 reporting requirements, with De Minimis Limits of 0.1, 1.0, and 1.0, respectively.

Therefore, both Liquid StressKote and Dried Brittle Coating may be subject to SARA Section 313 reporting requirements.

SARA 311/312 Hazards Liquid StressKote and Dried Brittle Coating contain both Acute and Chronic Health Hazards.

Massachusetts Right To Know Components Dichloromethane, toluene, dibutylphthalate

Pennsylvania Right To Know Components Dichloromethane, toluene, dibutylphthalate

New Jersey Right To Know Components Dichloromethane, toluene, dibutylphthalate

California Proposition 65 Components Dichloromethane, toluene, dibutylphthalate
WARNING! This product contains a chemical known in the State of California to cause cancer.

16. Other Information

Disclaimer Liquid StressKote, as supplied, or the derived Dried Brittle Coating is for industrial testing and/or R&D use only. StressKote Brittle Coatings, LLC does not approve the use of Liquid StressKote or derivatives for direct sales to the general public. KEEP OUT OF REACH OF CHILDREN. StressKote Brittle Coatings, LLC does not recommend the use of Liquid StressKote or derivatives in applications or in a manner WHERE: (1) soil or ground water contamination is likely, such as from spillage or intentional discharge to the ground, sink drains, sewers, or septic tanks, (2) inhalation overexposure is likely, such as in confined spaces where there is inadequate ventilation, (3) skin and/or eye contact is likely, (4) direct contact with food, drink or tobacco products is likely, (5) vapor levels and concentrations may represent an explosion hazard, (6) disposal of waste would present an environmental or health risk, or (7) chemical reactivity would pose a danger, e.g., contact with strong alkali or welding flames or sparks.

Warranty

StressKote Brittle Coatings, LLC strongly advises each customer or recipient of this MSDS to read and examine it carefully (peruse) and consult appropriate experts, if necessary, to fully understand the data contained and appreciate any hazards and risks associated with this product. The above information is provided in good faith and is believed to be correct as of the effective date shown, but does not purport to be all inclusive and shall be used only as a guide. No warranty nor any guarantee, expressed or implied, is given. Regulatory requirements are subject to change and may differ depending upon location. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented herein pertains to both the Liquid StressKote, as shipped, and in part to the Dried Brittle Coating. Because conditions for use of the product are not under control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. StressKote Brittle Coatings, LLC shall not be held liable for any damage resulting from the handling or use of the product. Copyright 2009 StressKote Brittle Coatings, LLC.