Covalence
CORROSION PROTECTION GROUP

MATERIAL SAFETY DATA SHEET
Polyken Liquid Adhesive

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Polyken Liquid Adhesive
Use/Size	Pipe Corrosion Protection
Product Numbers	1019, 1019R, 1019 SPR, 1019SY
Manufacturer/Supplier	Covalence Corrosion Protection Group
Address	2320 Bowling Green Road
	Franklin, Kentucky
Phone Number	(270) 586-3261 (Monday – Friday 8:00 am to 5:00 pm)
Chemtrec Number	(800) 424-9300
Revision Date:	
MSDS Date:	August 9, 2007

This MSDS has been compiled in accordance with - EC Directive 91/155/EC - OSHA's Hazcom Standard (29 CFR 1910.1200)

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Component Name	CAS#/Codes	Concentration	R Phrases	Classification
Toluene	108-88-3 203-625-9	3-5%	R11, R38, R48/20, R63, R65, R67	F, Xn
Heptane	142-85-5 205-563-8	65-80%	R11, R38, R50/53, R65, R67	F, Xn, N
Carbon Black	1333-86-4 215-609-9	<5%	None	None
Methanol	67-56-1 200-659-6	3-5%	R20/21/22, R68/20/21/22	F, Xn
Polymers and Resins	N.A.	<25%	None	None

3. HAZARD IDENTIFICATION

EU Main Hazards
R11 Highly flammable.
R36/38 Irritating to eyes and skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 Possible risk of harm to the unborn child.
R65 Harmful: may cause lung damage if swallowed.
R67 Vapours may cause drowsiness and dizziness.
R68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

Routes of Entry
- Absorption - Eye contact - Ingestion - Inhalation - Skin contact

Carcinogenic Status
Not considered carcinogenic by NTP, IARC, and OSHA.

3. HAZARD IDENTIFICATION

Target Organs
- Central Nervous System - Skin - Eye - Liver - Kidney - Respiratory System - Reproductive

Health Effects - Eyes
Liquid, mist or vapor may cause pain, transient irritation and superficial corneal effects.

Health Effects - Skin
Material may cause irritation and allergic sensitization. Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis. Material can be absorbed through the skin and cause effects similar to those resulting from inhalation.

Health Effects - Ingestion
Swallowing may have the following effects:
- abdominal pain - vomiting - central nervous system depression - kidney damage - liver damage – testis damage – aspiration into the lungs may occur during ingestion or vomiting causing lung damage
A large dose may have the following effects:
- systemic effects similar to those resulting from inhalation

Health Effects - Inhalation
Exposure to vapor may have the following effects:
- irritation of nose, throat and respiratory tract - central nervous system depression - dizziness - drowsiness - headache - mental confusion - allergic sensitization
Exposure to vapor at high concentrations may have the following effects:
- nerve damage leading to numbness and muscle weakness - lung damage - liver damage - kidney damage - testis damage – adverse reproductive effects

4. FIRST AID MEASURES

Eyes
Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin
Immediately flood the skin with large quantities of water for at least 15 minutes, preferably under a shower. Remove contaminated clothing and continue washing. Contaminated clothing should be washed or dry-cleaned before re-use. Obtain medical attention if blistering occurs or redness persists.

Ingestion
Do not induce vomiting, unless directed to do so by a physician. Have victim drink 1-3 glasses of water to dilute stomach contents. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately.

Inhalation
Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately.

Advice to Physicians
Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media
Use foam, dry chemical or carbon dioxide. Be aware of the possibility of re-ignition. Keep containers and surroundings cool with water spray.

5. FIRE FIGHTING MEASURES

Unusual Fire and Explosion Hazards
Vapors can travel a considerable distance to a source of ignition and flashback. Flashback can occur if air temperature exceeds flash point. Be aware of possibility of re-ignition.

Protective Equipment for Fire-Fighting
Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Wear appropriate protective clothing. Eliminate all sources of ignition. Use non-sparking scoops for flammable materials. Vapors can accumulate in low areas. Consider need for evacuation. Prevent the material from entering drains or watercourses. Notify authorities if spill has entered watercourse or sewer or has contaminated soil or vegetation.

7. HANDLING AND STORAGE

Keep from reach of children. Use in well ventilated area. Use local exhaust ventilation. Avoid inhaling vapor. Avoid contact with eyes, skin and clothing. Keep container tightly closed when not in use.

Store away from sources of heat or ignition. Storage area should be: - cool - dry - well ventilated - out of direct sunlight – away form sources of ignition(heat, sparks, flames, pilot lights) - away from incompatible materials (see Section 10)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards
Exposure limits are listed below, if they exist.
Toluene
ACGIH: TLV 50 ppm (75 mg/m3) 8h TWA. Can be absorbed through skin.

OSHA: PEL 200 ppm 8h TWA. 300 ppm CEILING, 500 ppm 10-min peak per shift.

Heptane
ACGIH: TLV 400 ppm (1640 mg/m3) 8h TWA. 500 ppm STEL.
OSHA: PEL 500 ppm (2000 mg/m3) 8h TWA.
Methanol
ACGIH: TLV 200 ppm (262 mg/m3) 8h TWA. 250 ppm (328 mg/m3) STEL Can be absorbed through skin.
OSHA: PEL 200 ppm (260 mg/m3) 8h TWA
Polymers and Resins
None assigned.
Engineering Control Measures
Use engineering methods to prevent or control exposure. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust), and control of process conditions.

Respiratory Protection
Use respiratory protection if there is a risk of exposure to high vapor concentrations. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Hand Protection
Butyl gloves are recommended.

Eye Protection
Chemical goggles or safety glasses with side shields

Body Protection
If there is danger of splashing, wear: - overall or apron

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Color	Black
Odor	Hydrocarbon solvent
pH	Neutral
Density (lbs/gal)	**1019:** 6.5 **1019R:** 6.5 **1019SPR:** 5.89 **1019SY:** 5.89
Boiling Range/Point (°C/F)	~93/199
Melting Point (°C/F)	Not determined
Flash Point (PMCC) (°C/F)	-12/10
Vapor Pressure	64 mm Hg (75F) (heptane)
Evaporation Rate (BuAc=1)	>2 (heptane)
Solubility in Water	Negligble
Vapor Density (Air = 1)	3.5 (heptane)
VOC (g/l)	**1019:** 620 **1019R:** 581 **1019SPR:** 610 **1019SY:** 615

10. STABILITY AND REACTIVITY

Stability
Stable under normal conditions.

Conditions to Avoid
- Heat, sparks, flames - High temperatures –sources of ignition – welding arcs – pilot lights – static electricity – contact with incompatible materials

Materials to Avoid
- Strong oxidizing agents - acids – bases - reducing agents

Hazardous Polymerization
Will not occur.

Hazardous Decomposition Products
- oxides of carbon - hydrocarbons – phenolic vapors – aldehydes – sodium oxide – phosphorous oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Toluene: Oral LD50 rat >2,000 mg/kg. Dermal LD50 rabbit >3,000 mg/kg
Heptane: Oral LD50 rat 5,000 mg/kg. Dermal LD50 rabbit 3,160 mg/kg
Methanol: Oral LD50 rat 5,628 mg/kg

Chronic Toxicity/Carcinogenicity
Not expected to cause long term adverse health effects.

This product contains carbon black which is classified by IARC as a Group 2B possible human carcinogen. When encapsulated in the liquid matrix the risk of exposure is reduced

Genotoxicity
This product is not expected to cause any mutagenic effects.

Reproductive/Developmental Toxicity
Toluene: In laboratory studies, birth defects, increased fetal lethality and delayed fetal development have been observed in offspring of female animals exposed during pregnancy. Toluene has been demonstrated to be embryofetotoxic and teratogenic in laboratory animals.

12. ECOLOGICAL INFORMATION

Mobility
No relevant studies identified.

Persistence/Degradability
No relevant studies identified.

Bio-accumulation
No relevant studies identified.

Ecotoxicity
Toluene: LC50 Fathead minnow (Pimephales promelas) 96 h 26 ppm. EC50 Daphnia magna 48 h 11.5 ppm

Heptane: EC50 Daphnia magna (Water flea; immobilization) 82.5 mg/L/96 hr

13. DISPOSAL

Dispose of in accordance with all applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near to the container. Use non-sparking tools. Do not incinerate closed containers. Empty containers may contain hazardous residues. Dispose of containers with care.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data	Coating Solution (3) UN1139, II
UN Proper Shipping Name	Coating Solution
UN Class	(3)
UN Number	UN1139
UN Packaging Group	II
Classification for AIR Transportation (IATA)	Consult current IATA Regulations prior to shipping by air.

15. REGULATORY INFORMATION

EU Label Information

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments.

EU Hazard Symbol and Indication of Danger

Xn - Harmful
N- Dangerous for the environment
F- Flammable

R phrases

R11 Highly flammable.
R36/38 Irritating to eyes and skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R63 Possible risk of harm to the unborn child.
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R67 Vapours may cause drowsiness and dizziness.
R68/20/21/22 Harmful: possible risk of irreversible effects through inhalation, in contact with skin and if swallowed.

S phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37 Wear suitable protective clothing and gloves.
S57 Use appropriate containment to avoid environmental contamination.
S60 This material and its container must be disposed of as hazardous waste.
S62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS

TSCA Listing

All ingredients have been verified for inclusion on the EPA Toxic Substance Control Act Chemical Substance Inventory.

EINECS Listing

All ingredients in this product have not been verified for inclusion on the European Inventory of Existing Commercial Chemical Substances (EINECS) or specifically exempted.

DSL (Canadian) Listing

All ingredients in this product have not been verified for inclusion on the Domestic Substance List (DSL).

MA Right To Know Law

All components have been checked for inclusion on the Massachusetts Substance List (MSL). Those components present at or above the de minimis concentration include: Toluene (108-88-3) –Heptane (142-82-5) – Methanol (67-56-1) – Kaolin Clay (1332-58-7) <1% - Mica (12001-26-2) < 0.3% - Xylene (1330-20-7) <0.5% - For 1019, 1019SPR, and 1019R only: sodium tripolyphosphate (7758-29-4) <1.5%

PA Right To Know Law

This product contains the following chemicals found on the Pennsylvania Hazardous Substance List: Carbon black (1333-86-4) - Toluene (108-88-3) –Heptane (142-82-5) – Methanol (67-56-1) - Xylene (1330-20-7) <0.5% - Ethylbenzene (100-41-4) <0.1% - For 1019, 1019SPR, and 1019R only: sodium tripolyphosphate (7758-29-4) <1.5%

15. REGULATORY INFORMATION

NJ Right To Know Law
This product contains the following chemicals found on the NJ Right To Know Hazardous Substance List Toluene (108-88-3) – Heptane (142-82-5) – Methanol (67-56-1) – Mica (12001-26-2) < 0.3% - Xylene (1330-20-7) <0.5% - For 1019, 1019SPR, and 1019R only: sodium tripolyphosphate (7758-29-4) <1.5%

California Proposition 65
This product contains the following materials which the State of California has found to cause cancer, birth defects or other reproductive harm: - Toluene (108-88-3) – Quartz (14808-60-7) <0.01% - Ethylbenzene (100-41-4) <0.1% - Formaldehyde (50-00-0) trace – Benzene (71-43-2) <0.01%

SARA Title III Sect. 302 (EHS)
This product does not contain any chemicals subject to SARA Title III Section 302.

SARA Title III Sect. 304
The following chemicals have reportable quantities: - Toluene 1000# - Methanol 5000#

SARA Title III Sect. 311/312 Categorization
Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard, Fire Hazard

SARA Title III Sect. 313
This product contains a chemical that is listed in Section 313 at or above de minimis concentrations. The following listed chemicals are present: Toluene (108-88-3) - Methanol (67-56-1)

16. OTHER INFORMATION

NFPA Ratings
NFPA Code for Flammability - 4
NFPA Code for Health - 2
NFPA Code for Reactivity - 0
NFPA Code for Special Hazards – None

HMIS Ratings
HMIS Code for Flammability - 4
HMIS Code for Health - 2
HMIS Code for Reactivity - 0
HMIS Code for Personal Protection - See Section 8

Abbreviations
N/A: Denotes no applicable information found or available
CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
R: Risk
S: Safety

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16. OTHER INFORMATION

The information and recommendations presented in this MSDS are based on sources believed to be accurate. Covalence Adhesives assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the **material** for their particular purposes. In particular, we make NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use **or disposal** of the material is in accordance with applicable Federal, State, and local laws and regulations.