# Safety Data Sheet

Section 1: Identification			
Product name:	Like90 CIC Dry Film™		
Product number:	10012		
Recommended use:	Corrosion protection of weld sea	ms	
Manufacturer:	Bonding Solutions, LLC		
	3703 West Parkway Blvd., West Valley City, UT 84120 USA		
	Phone: +1 801.988.4267	Email: info@like90.net	Web: www.like90.net
Emergency telephone:	800.424.9300 - CHEMTREC		

## Section 2: Hazard Identification

United States	According to OSHA 29 CFR 1910.1200 HCS
Physical Hazards	
Classification:	Flammable Aerosols, Category 1
Label elements:	DANGER
Hazard statements:	Extremely flammable aerosol. – H222
Precautionary statements	
Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. $-$ P210
	Do not spray on an open flame or other ignition source. $-P211$
	Do not pierce or burn, even after use. – P251
Health Hazards	
Classification:	Acute Toxicity – Oral – Level 4
	Acute Toxicity – Dermal – Level 5
	Acute Toxicity – Inhalation – Level 5
	Skin Corrosion/Irritation – Level 2
	Eye Damage/Irritation – Level 2B
	Aspiration Hazard – Level 1

Label elements:	DANGER		
Hazard statements:	Harmful if swallowed – H302		
	May be fatal if swallowed and enters airways. $-$ H304		
	May be harmful in contact with skin. – H313		
	Causes skin irritation. – H315		
	Causes eye irritation. – H320		
	May be harmful if inhaled. – H333		
Precautionary statements			
Prevention:	Avoid breathing dust/fume/gas/mist/vapors/spray. — P261		
	Wear protective gloves/protective clothing/eye protection/face protection. $-$ P280		
Response:	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician. Do NOT induce vomiting. – P301 + P310 + P331		
	IF ON SKIN: Wash with plenty of water. $-P302 + P352$		
	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell. – P304 + P312		
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell – P305 + P351 + P338 + P312		
	If skin irritation or rash occurs: Get medical advice/attention. $-P333 + P313$		
	If eye irritation persists: Get medical advice/attention. $-P337 + P313$		
	Take off contaminated clothing. – P362		
Storage/Disposal:	Store locked up. – P405		
	Protect from sunlight. – P410		
	Do not expose to temperatures exceeding 50 °C/122 °F. $-$ P412		
	Dispose of contents/container in accordance with applicable local/regional/national regulations. $-$ P501		
Canada	According to WHMIS		
WHMIS	This product is regulated as a hazardous material by the Canadian Controlled Product Regulations and is a controlled product under the Workplace Hazardous Materials Information System.		
Classification	B5 – Flammable Aerosols		
Other Information			
HMIS Ratings:	Health: 1 Fire: 2 Physical Hazard: 0		
	(Hazard Scale: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe; * = Chronic hazard)		

## Section 3: Composition / Information on Ingredients

Substances

Material does not meet the criteria of a substance.

#### Mixtures

CAS #	Chemical Name	% by weight
64742-88-7	Mineral Spirits	15 - 20
115-10-6	Dimethyl Ether	40 - 45

The exact percentage of this composition has been withheld as a trade secret.

## Section 4: First Aid Measures

General	See Section 2 for precautionary response statements. This material is an aspiration hazard and defats the skin. Breathing vapors of high concentration may cause CNS depression.
Inhalation:	High vapor/aerosol concentrations (greater than approximately 100 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.
Skin Contact:	Low order of toxicity. Frequent or prolonged contact may irritate and cause dermatitis. Skin contact may aggravate an existing dermatitis condition.
Eye Contact:	Slightly irritating but does not injure eye tissue.
Ingestion:	Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly minimal toxicity.
Special Precautions	Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

#### Description of first aid measures

Inhalation:	Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.
Skin Contact:	Flush with large amounts of water; use soap if available. Remove grossly contaminated clothing, including shoes, and wash before reuse. If signs/symptoms develop, get medical attention.
Eye Contact:	Flush with large amounts of water until irritation subsides. If irritation persists, get medical attention.
Ingestion:	If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

#### Most important symptoms and effects, both acute and delayed

See section 11 - Toxicological Information.

## Indication of any immediate medical attention and special treatment required

Not applicable.

#### Section 5: Fire-fighting Measures

#### Suitable extinguishing media

In case of fire: Dry chemical. CO<sub>2</sub>. Halogenated extinguishing agent. Stop gas flow.

#### Special hazards arising from the substance or mixture

This product releases flammable vapors at well below ambient temperatures and readily forms flammable mixtures with air exposed to an ignition source. It will burn in the open or be explosive in confined spaces. Its vapors are heavier than air and may travel long distances to a point of ignition, and then flash back. Alkaline/chlorine gas mixtures have produced explosions.

#### Hazardous decomposition or by-products

Carbon monoxide	During combustion
Carbon dioxide	During combustion
Hydrocarbons	During combustion

#### Special protective actions for fire-fighters

Use water spray to cool fire, exposed surfaces and to protect personnel. Isolate "fuel" supply from fire. Use foam, dry chemical, or water spray to extinguish fire. Avoid spraying water directly into storage containers due to danger of boiling over. This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

#### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

Ventilate the area with fresh air. For a large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice.

#### **Environmental precautions**

Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

#### Methods and material for containment and cleaning up

Contain spill. Work from around the edges of the spill inward and cover with commercially available inorganic absorbent material. Mix in sufficient absorbent material until it appears dry. Shovel as much of the material as possible into a suitable container. Seal the container and dispose of as soon as possible. Consult Federal, State, and local disposal authorities. Clean up residue with detergent and water.

Section 7: Handling and Storage		
Precautions for safe handling		
Ventilation:	Use adequate-level exhaust ventilation. Note: Where carbon monoxide may be generated, special ventilation may be required. Local exhaust recommended when appropriate to control employee exposure.	
Respiratory:	In situations where vapor concentrations exceed the recommended exposure limits, a NIOSH-approved organic vapor cartridge or air-supplying respirator should be worn.	

Eyes: Face shield and goggles or chemical goggles should be worn.

- Gloves: Impervious gloves should be worn. Gloves contaminated with the product should be discarded. Polyfluorinated polyethylene has been suggested.
- Other Clothing: Standard work clothing. Standard work shoes; discard if shoes cannot be decontaminated. Store contaminated clothing in well-ventilated cabinets or closed containers. Wash contaminated clothing and dry before reuse.

#### Conditions for safe storage, including any incompatibilities

Store locked up. Keep containers closed and in a cool, well-ventilated area. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

#### Disposal

Empty de-pressurized containers cannot be reused. Cans which are pressurized or contain liquid must be disposed of in a permitted waste management facility. Consult Federal, State, and local disposal authorities for approved procedures.

#### Section 8: Exposure Controls / Personal Protection

#### **Control parameters**

Occupational exposure limits

If a component is disclosed in section 3 but does not appear here, an occupational exposure limit is not available for the component.

CAS #	Chemical Name	Agency	Limit Type
64742-88-7	Mineral Spirits	ACGIH	TLV: 100 ppm
64742-88-7	Mineral Spirits	OSHA	PEL: 100 ppm
115-10-6	Dimethyl Ether	ACGIH	Not established
115-10-6	Dimethyl Ether	OSHA	Not established
Key to abbreviations	ACGIH = American Conference of	Governmental Industr	ial Hygienists; OSHA = Occupational Safety and Health

ACGIH = American Conference of Governmental Industrial Hygienists; OSHA = Occupational Safety and Health Administration; PEL = Personal Exposure Limits; STEL = Short-Term Exposure Limit; TLV = Threshold Limit Value; TWA = Time-Weighted Average based on 8hr/day and 40hr/week exposures

#### **Exposure controls**

Personal protective equipment

Ventilation:	Use adequate-level exhaust ventilation. Note: Where carbon monoxide may be generated, special ventilation may be required. Local exhaust recommended when appropriate to control employee exposure.
Respiratory:	In situations where vapor concentrations exceed the recommended exposure limits, a NIOSH-approved organic vapor cartridge or air-supplying respirator should be worn.
Eyes:	Face shield and goggles or chemical goggles should be worn.
Gloves:	Impervious gloves should be worn. Gloves contaminated with the product should be discarded. Polyfluorinated polyethylene has been suggested.
Other Clothing:	Standard work clothing. Standard work shoes; discard if shoes cannot be decontaminated. Store contaminated clothing in well-ventilated cabinets or closed containers. Wash contaminated clothing and dry before reuse.

General industrial hygiene Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

Environmental exposure Follow best practice for site management and disposal of waste. Avoid release to the environment.

## Section 9: Physical and Chemical Properties

#### Basic physical and chemical properties

Physical form:	Liquid	Specific gravity:	Liquid: 0.76 [Water = 1]
Appearance:	Clear	Bulk density:	6.3 lbs./gal
Odor:	Mild	Percent volatile:	75%
Flash point:	-42° F (PMCC)	VOC:	Product-weighted MIR = 0.97
Freezing point:	No data available	Water solubility:	Nil
Boiling point:	375° F	Vapor pressure:	No data available

Section 10: Stability and Reactivity		
Reactivity:	This material may be reactive with certain agents under certain conditions – see remaining information in this section.	
Chemical stability:	Stable	
Possibility of hazardous reactions:	Hazardous polymerization will not occur.	
Conditions to avoid:	Temperatures above 130 degree F.	
Incompatible materials:	Strong oxidizing agents	
Hazardous decomposition products:	None known. Refer to section 5 for hazardous decomposition products during combustion.	

## Section 11: Toxicological Information

#### Information on toxicological effects

Signs and symptoms:	Based on component information, this material may produce the following health effects:
Ingestion:	May cause nausea or vomiting. Aspiration into lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.
Inhalation:	Nausea or dizziness may occur from breathing high concentrations. Breathing extremely high concentrations of the vapors may lead to anesthetic effects such as dizziness, headache, or nausea. Prolonged exposure to extremely high concentrations of vapor may lead to narcosis, cardiac irregularities, unconsciousness or death.
Skin contact:	Causes mild skin irritation. Prolonged or repeated contact may cause dermatitis, exercise due care.
Serious eye:	May cause irritation.
Respiratory:	Not expected to be a respiratory irritant.

## Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### **Acute Toxicity**

Chemical Name	Route	Species	Value
Mineral Spirits	Ingestion	Rat	LD50 > 2,000 mg/kg
Mineral Spirits	Dermal	Rat	LD50 > 2,000 mg/kg
Dimethyl Ether	Inhalation	Rat	LC50: 308.5 mg/l (4 hours)

Skin Corrosion / Irritation Either no data are currently available or the data are not sufficient for classification.

**Serious Eye Damage / Irritation** Either no data are currently available or the data are not sufficient for classification.

**Skin Sensitization** Either no data are currently available or the data are not sufficient for classification.

**Photosensitization** Either no data are currently available or the data are not sufficient for classification.

**Respiratory sensitization** Either no data are currently available or the data are not sufficient for classification.

**Germ cell mutagenicity** Either no data are currently available or the data are not sufficient for classification.

**Carcinogenicity** Either no data are currently available or the data are not sufficient for classification.

**Reproductive Toxicity** 

**Reproductive and/or developmental effects** Either no data are currently available or the data are not sufficient for classification.

Target Organ(s)

Specific Target Organ Toxicity - single exposure Either no data are currently available or the data are not sufficient for classification. Specific Target Organ Toxicity - repeated exposure Either no data are currently available or the data are not sufficient for classification.

Aspiration nazard	Either no data are currently available or the data are not sufficient for classification.

Section 12: Ecological Information	
Toxicity – Aquatic toxicity of components No data available	

Persistance and degradability No data available

**Bioaccumulative potential** Has the potential to bioaccumulate.

Mobility Adsorbs to soil and has low mobility, floats on water.

Other adverse effects No data available

## Section 13: Disposal Considerations

#### Disposal methods

Avoid disposal. Completely utilize product, if possible.

WASTE DISPOSAL METHOD: Consult local authorities for proper waste disposal procedures. Empty de-pressurized containers can not be reused. Cans which are pressurized or contain liquid must be disposed of in a permitted waste management facility. Consult Federal, State, and local disposal authorities for approved procedures.

Section 14: Transport Information			
US DOT:	DOT Proper Shipping Name:		
	UN1950 Aerosols, flammable (each not exceeding 1L capacity) 2.1 "Ltd Qty"		
IMDG (Ocean):	UN1950 Aerosols, flammable (each not exceeding 1L capacity) 2.1 "Ltd Qty"		
IATA (Air)	UN1950 Aerosols, flammable (each not exceeding 1L capacity) 2.1 "Ltd Qty"		

#### Section 15: Regulatory Information

CAS #	Chemical Name	CA	MA	MN	NJ	PA	RI
Component analysis:	The following components appea	ar on one or more o	f the following	g state hazar	rdous subst	ances lists:	
General information:	n: Other state regulations may apply. Check individual state requirements.						
State Regulations							
Component analysis:	None of the product's components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), or CERCLA (40 CFR 302.4).						
General information: No additional information available.							
Chemical inventory:	All components of this product are included on the TSCA Chemical Inventory or are not required to be listed on the TSCA Chemical Inventory.						
U.S. Federal Regulation	ns						

CAS #	Chemical Name	CA	MA	MIN	NJ	PA	KI
64742-88-7	Mineral Spirits	No	Yes	No	No	Yes	No
115-10-6	Dimethyl Ether	No	Yes	No	No	Yes	No

California Proposition 65: This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other harm.

## Canadian WHMIS information

Chemical inventory:	All components of this product are included on the Domestic Substances List (DSL) or are not required to be listed on the DSL.
General information:	This product is a controlled product under the Canadian Workplace Hazardous Materials Information System.
Component analysis:	This product does not contain substances required to be disclosed according to the Canada WHMIS Ingredient Disclosure List.

#### Section 16: Other Information

#### Other information

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