

# SAFETY DATA SHEET



## 1. Identification

**Product identifier** Flex Coat Rod Wrap - Hardener

**Other means of identification**

**SDS number**

**Product code** F1K, F2K, F2S, F2P, F4Y, F8, F32, F128

**Recommended use** Rod Wrap Coating

**Recommended restrictions** None known.

### Manufacturer/Importer/Supplier/Distributor information

**Company name** Flex Coat Company, Inc.

**Address** 15901 FM West  
Driftwood, TX  
78619

**Telephone** Telephone number (512) 858-7742

**E-mail**

**Contact person** Technical Director

**Emergency phone number** CHEMTREC 800-424-9300

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards**

Acute toxicity, oral	Category 4
Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Sensitization, skin	Category 1
Reproductive toxicity (fertility, the unborn child)	Category 2

**OSHA defined hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility. Suspected of damaging the unborn child.

**Precautionary statement**

**Prevention** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** If swallowed: Rinse mouth. Do not induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center/doctor/. Specific treatment (see this label).

**Storage** Store locked up.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Hazard(s) not otherwise classified (HNOC)** None known.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	CAS number	%
Nonyl Phenol Compound	Proprietary	>30
Polyoxypropylene Amine Compound	Proprietary	<40
Amino Piperazine Compound	Proprietary	<25
Butanol Compound	Proprietary	<10

**Composition comments** The identities of the materials in this product are withheld as a trade secret (29CFR1910.1210(i)) and are available to a physician or paramedical personnel in a emergency situation.

### 4. First-aid measures

<b>Inhalation</b>	If inhaled, remove to fresh air. For breathing difficulties, oxygen may be necessary. Get medical attention immediately.
<b>Skin contact</b>	Wash contaminated clothing before reuse. Rinse skin thoroughly with lukewarm water for at least 15 minutes. Call a physician or poison control center immediately.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Call a physician or Poison Control Center immediately.
<b>Most important symptoms/effects, acute and delayed</b>	Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly the digestive tract. May cause an allergic skin reaction. Dermatitis. Rash. Contact can cause corrosive burns, corneal damage, and blindness. Itching, redness, swelling, burning or blistering of skin.
<b>Indication of immediate medical attention and special treatment needed</b>	Exposure may aggravate pre-existing skin disorders. Treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Water. Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire-fighting equipment/instructions</b>	Move container from fire area if it can be done without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Ensure adequate ventilation. Do not breathe mist or vapor. Avoid contact with skin and eyes. Keep unnecessary personnel away. Keep out of low areas. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Keep unnecessary personnel away. This product is miscible in water. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Collect and dispose of spillage as indicated in section 13 of the SDS. Prevent entry into waterways, sewer, basements or confined areas.
<b>Environmental precautions</b>	Never return spills to original containers for re-use. Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment.

## 7. Handling and storage

### Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Do not get this material in your eyes, on your skin, or on your clothing. Avoid contact during pregnancy/while nursing. Provide adequate ventilation. Use personal protective equipment as required. Wash contaminated clothing before reuse. When using, do not eat, drink or smoke. Wash hands thoroughly after handling. Avoid release to the environment. Avoid prolonged exposure. Keep out of reach of children.

### Conditions for safe storage, including any incompatibilities

Keep out of the reach of children. Store locked up. Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials, see Section 10 of the SDS.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Butanol Compound (CAS Proprietary)	PEL	450 mg/m <sup>3</sup>
		150 ppm

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Butanol Compound (CAS Proprietary)	TWA	100 ppm

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Butanol Compound (CAS Proprietary)	STEL	455 mg/m <sup>3</sup>
		150 ppm
		TWA

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

No exposure standards allocated. Use personal protective equipment as required. Keep working clothes separately.

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

#### Skin protection

##### Hand protection

Chemical resistant gloves.

##### Other

Wear appropriate chemical resistant clothing. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.

#### Respiratory protection

If ventilation is insufficient, suitable respiratory protection must be provided.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace. Wash at the end of each work shift and before eating, smoking and using the toilet.

## 9. Physical and chemical properties

### Appearance

#### Physical state

Liquid.

#### Form

Liquid. Viscous liquid.

#### Color

Clear.

<b>Odor</b>	Minimal. Not distinct.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	400 °F (204.44 °C)
<b>Flash point</b>	200.0 °F (93.3 °C) Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	> 1
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Slightly Soluble (0.1-1%)
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>VOC (Weight %)</b>	0 %

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport. Read and follow manufacturer's recommendations.
<b>Chemical stability</b>	Stable under normal temperature conditions and recommended use.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Reacts violently with strong acids. This product may react with oxidizing agents. Do not mix with other chemicals. Contact with incompatible materials. Avoid incompatible materials and intense heat.
<b>Incompatible materials</b>	Acids. Strong oxidizing agents. Oxidizing agents.
<b>Hazardous decomposition products</b>	None expected under normal conditions of use.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Ingestion</b>	Causes digestive tract burns. Harmful if swallowed.
<b>Inhalation</b>	Prolonged inhalation may be harmful. May cause irritation to the respiratory system.
<b>Skin contact</b>	Causes severe skin burns. May be harmful in contact with skin. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.

**Symptoms related to the physical, chemical and toxicological characteristics** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause an allergic skin reaction. Dermatitis. Rash.

### Information on toxicological effects

**Acute toxicity** Harmful if swallowed. May cause an allergic skin reaction. May cause irritation to the respiratory system.

Components	Species	Test Results
Amino Piperazine Compound (CAS Proprietary)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	880 mg/kg
Butanol Compound (CAS Proprietary)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	2193 mg/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Skin sensitization</b>	May cause an allergic skin reaction.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Not listed.		
<b>Reproductive toxicity</b>	Possible reproductive hazard. Suspected of damaging the unborn child. Suspected of damaging fertility.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not available.	
<b>Chronic effects</b>	Prolonged inhalation may be harmful.	

## 12. Ecological information

**Ecotoxicity** Expected to be very toxic to aquatic organisms. May cause long-term adverse effects in the environment.

Components	Species	Test Results
Amino Piperazine Compound (CAS Proprietary)		
<b>Aquatic</b>		
Fish	LC50	Fathead minnow ( <i>Pimephales promelas</i> ) 1950 - 2460 mg/l, 96 hours
Nonyl Phenol Compound (CAS Proprietary)		
<b>Aquatic</b>		
Crustacea	EC50	Clam ( <i>Mulinia lateralis</i> ) 0.0379 mg/l, 48 hours
Fish	LC50	Winter flounder ( <i>Pleuronectes americanus</i> ) 0.017 mg/l, 96 hours
Polyoxypropylene Amine Compound (CAS Proprietary)		
<b>Aquatic</b>		
<i>Chronic</i>		
Algae	NOEC	Algae 0.32 mg/l, 72 hours
<b>Persistence and degradability</b>	No data is available on the degradability of this product.	
<b>Bioaccumulative potential</b>	No data available on bioaccumulation.	
<b>Partition coefficient n-octanol / water (log Kow)</b>		
Butanol Compound (CAS Proprietary)	0.61	

**Mobility in soil** No data available.

**Other adverse effects** None known.

### 13. Disposal considerations

**Disposal instructions** Dispose in accordance with applicable federal, state, and local regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Do not allow this material to drain into sewers/water supplies.

**Contaminated packaging** Dispose in accordance with applicable federal, state, and local regulations.

### 14. Transport information

#### DOT

**UN number** UN1760

**UN proper shipping name** Corrosive liquids, n.o.s.

**Transport hazard class(es)**

**Class** 8

**Subsidiary risk** -

**Label(s)** 8

**Packing group** III

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Special provisions** IB3, T7, TP1, TP28

**Packaging exceptions** 154

**Packaging non bulk** 203

**Packaging bulk** 241

#### IATA

**UN number** UN1760

**UN proper shipping name** Corrosive liquids, n.o.s.

**Transport hazard class(es)**

**Class** 8

**Subsidiary risk** -

**Label(s)** 8

**Packing group** III

**Packaging exceptions: 2.7.2.1**

**Environmental hazards** Yes

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

#### IMDG

**UN number** UN1760

**UN proper shipping name** Corrosive liquids, n.o.s.

**Transport hazard class(es)**

**Class** 8

**Subsidiary risk** -

**Label(s)** 8

**Packing group** III

**Special provisions: 223, 274**

**Packing exceptions: 3.4.1**

**Environmental hazards**

**Marine pollutant** Yes

**EmS** F-A, S-B

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This substance/mixture is not intended to be transported in bulk.

### 15. Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Butanol Compound (CAS Proprietary) LISTED

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
 Immediate Hazard - Yes  
 Delayed Hazard - Yes  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Butanol Compound	Proprietary	<10

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

Amino Piperazine Compound (CAS Proprietary)  
 Butanol Compound (CAS Proprietary)

**US. New Jersey Worker and Community Right-to-Know Act**

Amino Piperazine Compound (CAS Proprietary)  
 Butanol Compound (CAS Proprietary)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Amino Piperazine Compound (CAS Proprietary)  
 Butanol Compound (CAS Proprietary)

**US. Rhode Island RTK**

Butanol Compound (CAS Proprietary)

**US. California Proposition 65****US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 1-August-2014

**Revision date** -

**Version #** 01

**HMIS® ratings** Health: 3\*  
Flammability: 0  
Physical hazard: 0

**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently available.