

SAFETY DATA SHEET

**Florock
R0-177**

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives

1. PRODUCT IDENTIFICATION

1.1 TRADE NAME (AS LABELED):	Florocrete 3.0 Part B
SYNONYMS:	Urethane coating
CAS#:	Mixture
PRODUCT #:	R0-177
1.2 PRODUCT USE:	Floor coating, urethane coating
CHEMICAL SHIPPING NAME/CLASS:	See Section 14
U.N. NUMBER:	See Section 14
1.3 NORTH AMERICA:	
MANUFACTURER'S NAME:	Florock Polymer Flooring
ADDRESS:	1120 W Exchange, Chicago IL, 60609 USA
BUSINESS PHONE:	1-773-376-7132
EMERGENCY PHONE:	800-424-9300 (Chemtrec U.S. – 24 Hrs) 1-703-537-3887 (Chemtrec Europe – 24 Hrs)
DATE OF CURRENT REVISION:	March 8, 2019
DATE OF LAST REVISION:	December 6, 2017

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This product is an amber colored liquid.
Health Hazards: Exposure may cause skin, eye, and respiratory irritation. May cause allergic reaction of the respiratory systems and or skin. May cause dizziness/drowsiness. Prolonged exposure may cause organ damage.
Flammability Hazards: This product is a nonflammable liquid with a flash point of >200°F (>93°C).
Reactivity Hazards: None known
Environmental Hazards: The Environmental effects of this product have not been investigated. Release of this product may have significant adverse effects in the aquatic environment.

2.1 GHS LABELING AND CLASSIFICATION:

CLASSIFICATION OF SUBSTANCE OR MIXTURE IN ACCORDANCE WITH 29 CFR 1200 (OSHA HCS) AND THE EUROPEAN UNION DIRECTIVES:

This product does meet the definition of a hazardous substance or preparation as defined by 29 CFR 1910. 1200 AND the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

Component(s) Contributing to Classification(s)

Modified MDI

2.2 LABEL ELEMENTS:

GHS Hazard Symbols:



Signal Word: Danger!

GHS Hazard Classification(s):

Acute Toxicity Category 4 (Inhalation)

Skin Irritation Category 2

Eye Irritation Category 2A.

Respiratory Sensitizer Category 1

Skin Sensitizer Category 1

Specific Target Organ Toxicity – Single Exposure Category 3 (Respiratory Irritation / Drowsiness, Dizziness)

SAFETY DATA SHEET

Florock
R0-177

Hazard Statement(s):

H332: Harmful if inhaled
H315: Causes skin irritation
H319: Causes serious eye irritation
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317: May cause allergic skin reaction
H335: May cause respiratory irritation
H336: May cause drowsiness or dizziness

Prevention Statement(s):

P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves, protective clothing/eye protection/face protection.
P284: [In case of inadequate ventilation] wear respiratory protection.

Response Statements:

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P302+P352: IF ON SKIN: Wash with plenty of water.
P321: Specific treatment (See Section 4 of this SDS).
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P391: Collect spillage.
P314: Get medical advice if you feel unwell.

Storage Statements:

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.

Disposal Statements:

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 HEALTH HAZARDS OR RISKS FROM EXPOSURE:

SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of overexposure for this product are by contact with skin and eyes. The symptoms of overexposure are described below.

ACUTE:

INHALATION: May cause respiratory irritation, allergy, or asthma symptoms. May cause drowsiness / dizziness.

CONTACT WITH SKIN: May cause skin irritation. May cause skin sensitization.

EYE CONTACT: May cause serious eye irritation.

INGESTION: May cause nausea or vomiting if swallowed.

CHRONIC: No specific data available.

TARGET ORGANS: **Acute:** Skin and Eyes **Chronic:** No data available

SAFETY DATA SHEET

Florock
R0-177

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS #	Hazard Classification
Modified MDI	60-100%	Proprietary	Proprietary	H332: Acute Toxicity Cat 4 (Inhalation), H319: Eye Irritant Cat 2, H315: Skin Irritant Cat 2, H334: Respiratory Sensitizer Cat 1, H317: Skin Sensitizer Cat 1, H335/H336: STOT SE Cat 3
Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).				
* Ingredients concentrations are Company Trade Secret - Business Confidential. Florock is withholding the specific chemical information under provision of the OSHA Hazard Communication Rule Trade Secrets (1910.1200(i)(1)). The specific chemical information will be made available to health professionals in accordance with 29 CFR 1910.1200 (i)(1) (2) (3) (4)..				

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

EYE CONTACT: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention.

SKIN CONTACT: Wash skin thoroughly with soap and water after handling. Seek medical attention if irritation develops and persists.

INHALATION: If breathing becomes difficult, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention.

INGESTION: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing skin and respiratory conditions may be aggravated by this product.

4.2 SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Skin and eye irritation. May cause an allergic skin reaction. May cause respiratory sensitization and/or drowsiness / dizziness.

4.3 RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

5. FIRE-FIGHTING MEASURES

5.1 FIRE EXTINGUISHING MATERIALS:

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods below:

Water Spray: Yes Carbon Dioxide: Yes
Foam: Yes Dry Chemical: Yes
Halon: Yes Other: Any "C" Class

5.2 UNUSUAL FIRE AND EXPLOSION HAZARDS:

Explosion Sensitivity to Mechanical Impact: No
Explosion Sensitivity to Static Discharge: No

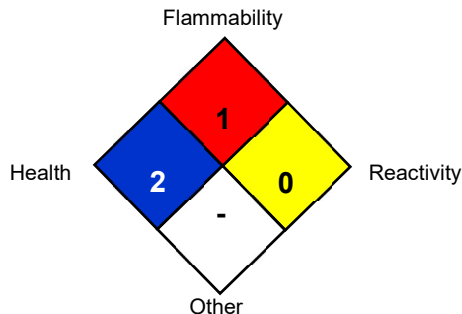
5.3 SPECIAL FIRE-FIGHTING PROCEDURES:

Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

SAFETY DATA SHEET

Florock
R0-177

NFPA RATING SYSTEM



HMIS RATING SYSTEM

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM	
HEALTH HAZARD (BLUE)	2
FLAMMABILITY HAZARD (RED)	1
PHYSICAL HAZARD (YELLOW)	0
PROTECTIVE EQUIPMENT	
EYES	RESPIRATORY
RESPIRATORY	HANDS
HANDS	BODY
	See Sect 8
	See Sect 8

For Routine Industrial Use and Handling Applications

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

See section 8.2 for Exposure Controls.

6.2 ENVIRONMENTAL PRECAUTIONS:

Precautions should be taken to prevent exposure to the environment.

6.3 SPILL AND LEAK RESPONSE: Stop the flow of material, if this can be done safely. Floor may be slippery; use care to avoid falling. Dike and contain the spill with inert material (sand, earth, fuller's earth, etc.) and if appropriate, transfer the liquid and solid diking material to containers for disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Wash clothing before reuse. Keep spill out of all sewers and open bodies of water. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

7. HANDLING and STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Use good hygiene practices. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Use good hygiene practices.

7.2 STORAGE AND HANDLING PRACTICES:

Store in original container. Keep container closed. Store in a cool, dry location. Avoid exposure to incompatible materials. Do not reuse empty containers.

7.3 SPECIFIC USES:

See section 1.2 for details.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

8.1 EXPOSURE PARAMETERS:

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Modified MDI	Proprietary	0.3 mg/m ³	Not established

8.2 EXPOSURE CONTROLS:

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

SAFETY DATA SHEET

Florock
R0-177

EYE PROTECTION: Safety glasses or chemical splash goggles are required to avoid contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

HAND PROTECTION: Chemical resistant gloves are required to prevent contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

BODY PROTECTION: Use as appropriate to prevent skin contact. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

9. PHYSICAL and CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE (Physical State) and COLOR: This product is an amber colored liquid.

ODOR: None

ODOR THRESHOLD: Not Available

pH: Not Applicable

MELTING/FREEZING POINT: Not Available

BOILING POINT: 572°F (300°C)

FLASH POINT: 213°C (415.4°F)

AUTOIGNITION TEMPERATURE: Not Available

EVAPORATION RATE (n-BuAc=1): n-Butyl Acetate

FLAMMABILITY (SOLID, GAS): Not Applicable

UPPER/LOWER FLAMMABILITY OR EXPLOSION LIMITS: Not Available

VAPOR PRESSURE (mm Hg @ 20°C (68°F): Not Available

VAPOR DENSITY: Heavier than air

RELATIVE DENSITY: 1.15

DENSITY: Not Available

SPECIFIC GRAVITY: Not Available

SOLUBILITY IN WATER: Insoluble

WEIGHT PER GALLON: Not Available

PARTITION COEFFICIENT (n-octanol/water): Not Available

AUTO-IGNITION TEMPERATURE: >600°C

DECOMPOSITION TEMPERATURE: Not Available

VISCOSITY: Not Available

VOC g/l / Lb/gal: Not Available

9.2 OTHER INFORMATION:

No additional information available

10. STABILITY and REACTIVITY

10.1 REACTIVITY: No specific data available.

10.2 STABILITY: Stable under conditions of normal storage and use.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Reaction with water (moisture) produces CO₂-gas. Exothermic reaction with materials containing active hydrogen groups. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of the reaction partners is good or is supported by stirring or by the presence of solvents. MDI is insoluble with, and heavier than water and sinks to the bottom but reacts slowly at the interface. A solid water-insoluble layer of polyurea is formed at the interface by liberating carbon dioxide gas.

10.4 CONDITIONS TO AVOID: Avoid spraying this material. Avoid extreme temperatures.

10.5 MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Water, alcohols, amines, bases, and acids.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Combustion products may include: carbon oxides (CO, CO₂) nitrogen oxides (NO,NO₂ etc.) hydrocarbons and HCN

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

TOXICITY DATA:

Modified MDI

Oral LD50, Rat, >15800 mg/kg

SAFETY DATA SHEET

Florock
R0-177

Dermal LD50, Rabbit, >7940 mg/kg

Inhalation LC50, 480 mg/m³

SUSPECTED CANCER AGENT: Ingredients within this product are found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are considered to be, or suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to skin, eyes or respiratory system

SENSITIZATION TO THE PRODUCT: This product is considered to be a respiratory and skin sensitizer

REPRODUCTIVE TOXICITY INFORMATION: This product does not contain a component that is suspected to be a reproductive hazard.

MUTAGENICITY INFORMATION: This product does not contain a component that is suspected to be a mutagenicity hazard.

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: May cause respiratory irritation and/or drowsiness/dizziness.

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: Prolonged exposure may damage organs.

12. ECOLOGICAL INFORMATION

12.1 TOXICITY: No specific data available on this product.

12.2 PERSISTENCE AND DEGRADABILITY: No specific data available on this product.

12.3 BIOACCUMULATIVE POTENTIAL: No specific data available on this product.

12.4 MOBILITY IN SOIL: No specific data available on this product.

12.5 RESULTS OF PBT AND vPvB ASSESSMENT: No specific data available on this product.

12.6 OTHER ADVERSE EFFECTS: This product may cause harm to plants, animals or aquatic life.

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

12.7 WATER ENDANGERMENT CLASS: May be water endangering in accordance with EU Guideline 91/155-EWG.

12.8 SPECIFIC AVAILABLE COMPONENT INFORMATION: No additional data available

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

13.2 EU Waste Code: Not determined

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

BULK SHIPMENTS WITHIN U.S.:

Note: Single containers less than 5,000 lbs. are not regulated. NA3082 is applicable if $\geq 5,000$ lbs.

14.1 PROPER SHIPPING NAME: Not Regulated

14.2 HAZARD CLASS NUMBER and DESCRIPTION: N/A

14.3 UN IDENTIFICATION NUMBER: N/A

14.4 PACKING GROUP: N/A

14.5 DOT LABEL(S) REQUIRED: N/A

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER: N/A

RQ QUANTITY: NA

14.6 MARINE POLLUTANT: None of the components of this product are designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

14.7 SPECIAL PRECAUTIONS FOR USER: None

14.8 INTERNATIONAL TRANSPORTATION:

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

14.9 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND IBC CODE:

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

SAFETY DATA SHEET

Florock
R0-177

15. REGULATORY INFORMATION

15.1 UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for the components of this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None

U.S. TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory or are exempted from listing.

OTHER U.S. FEDERAL REGULATIONS: None

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Ingredients within this product are not on the Proposition 65 Lists.

15.2 CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Complies with WHMIS 2015.

15.3 EUROPEAN ECONOMIC COMMUNITY INFORMATION:

This product does meet the definition of a hazardous substance or preparation as defined by the European Union Council Directives 67/548/EEC, 1999/45/EC, 1272/2008/EC and subsequent Directives.

See Section 2 for full Details

15.4 AUSTRALIAN INFORMATION FOR PRODUCT: The components of this product are listed on the International Chemical Inventory list.

15.5 JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

JAPANESE ENCS INVENTORY: The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW: No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

15.6 INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftlist List of Toxic Substances: Listed

U.S. TSCA: Listed

16. OTHER INFORMATION

PREPARED BY: Chris Eigbrett – (**MSDS to GHS Compliance**)

DATE OF PRINTING: March 8, 2019

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. Florock Polymer Flooring assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Florock Polymer Flooring assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

END OF SDS SHEET