



SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification


MANUFACTURER'S NAME	EMERGENCY TELEPHONE
Advantage Coatings Technology Chemtrec U.S.-Canada: 800-424-9300	
1533 Arthur Avenue Chemtrec International: 703-527-3887	
Unit B Information: 303-499-1310	Fax: 720-
Louisville, Colorado 80027-3054	536-8365
Safety Data Sheet Competent Person:	info@actfinish.com
Kevin Durling	

DATE PREPARED: February 5, 2014 **REVISION DATE: February 7, 2014**

PRODUCT NAME: **TOP KNOT HARDENER PART B**
 FORMULA: Preparation/Mixture
 PRODUCT USE: Hardwood Floor finish

Section 2: Hazards Identification

Regulation (EC) No 1272/2008

GHS Hazard Class	Eye Irritation Category 2. 
	Flammable Liquid -- Category 4
	Skin Irritation -- Category 2
	Specific Target Organ Toxicity – Single Exposure
Signal word:	Warning
Hazard Statement:	Causes serious eye irritation
	Combustible liquid
	May cause respiratory irritation
	May cause drowsiness or dizziness
Precautionary Statements:	Prevention Wear eye/face protection
	Wash hands thoroughly after handling
	Keep away from heat, sparks, and open flames – NO smoking.
	Wear protective gloves/eye protection/face protection.
	Wear protective gloves
	Wash hands thoroughly after handling.
	Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	If eye irritation persists: Get medical advice/attention.
	In case of fire, use Foam, dry chemical, or carbon dioxide.
	IF ON SKIN: wash with plenty of soap and water.
	If skin irritation occurs, get medical advice/attention.
	Take off contaminated clothing and wash before reuse.
	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	Call a POISON Center or doctor if you feel unwell.
	Storage Store upright in a well-ventilated place. Keep cool.
	Store upright in a well ventilated place.
	Keep container tightly closed.
	Disposal Waste from residues and unused products: Follow the waste disposal requirements of your country, state, or local authorities.

HAZARD CLASSIFICATION: Not classified as hazardous based on IATA, IMDG, and DOT.

FIRE AND EXPLOSION: Not considered flammable or combustible, but this product will burn if involved in a fire.

POISONING INFORMATION: Not considered toxic or highly toxic.

HAZARD CLASSIFICATION: Not classified as hazardous based on IATA, IMDG, and DOT.
 FIRE AND EXPLOSION: Not considered flammable or combustible, but this product will burn if involved in a fire.
 POTENTIAL HEALTH EFFECTS: <15 % of mixture consists of ingredients of unknown acute toxicity
 INGESTION: May be harmful if swallowed.
 INHALATION: May be harmful if inhaled. Causes respiratory tract irritation.
 SKIN CONTACT: May cause skin irritation. May be harmful if absorbed through skin.
 EYE CONTACT: Eye irritation may result.
 OTHER: None

CHRONIC EFFECTS OF OVEREXPOSURE: None
 APPEARANCE: Clear liquid

NFPA Rating:

Component	Health (Blue)	Flammability (Red)	Reactivity (Yellow)	Special (White)
Top Knot Part B	2	2	0	--

Section 3: Composition, Information on Ingredients

PRODUCT COMPOSITION	APPRX %	ACGIH TLV	OSHA PEL	NIOSH REL	CAS NO.	EINECS/ELINCS	DANGER SYMBOL	RISK PHRASE	DSL CANADA
P-series glycol ether	30 - 40	----	----	----	111109-77-4	N/N	----	----	Y
Aliphatic Polyisocyanate	60 - 70	----	----	----	----	N/N	----	----	N

Trade Secret (TS) Some items on this MSDS may be designated as trade secrets. Bonafide requests for disclosure of trade secret information to medical personnel must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13. The full text for all R-Phrases is shown in Section 16.

Manufacturer of Aliphatic Polyisocyanate recommended exposure limit: 0.5 mg/m³
 Manufacturer of P-series glycol ether recommended exposure limit: 20 ppm TWA

Section 4: First Aid Measures

INHALATION: Remove to fresh air. If not breathing, provide CPR (cardio pulmonary resuscitation). Get immediate medical attention.
 SKIN CONTACT: Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing.
 EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.
 INGESTION: If swallowed do not induce vomiting, give large quantities of water to drink. Never give anything to an unconscious person. Get immediate medical attention.

Section 5: Fire-fighting Measures

FLASH POINT: 148 °F Minimum (Open cup)
 FLAMMABLE LIMITS IN AIR (% by vol): Not measured
 EXTINGUISHING MEDIA: Foam, Dry Chemical Powder, or Carbon Dioxide
 SPECIAL FIREFIGHTING PROCEDURES: None
 UNUSUAL FIRE AND EXPLOSION HAZARDS: Emits toxic fumes under fire conditions.

Section 6: Accidental Release Measures

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

- Wear proper protective equipment as specified in Section 8: Exposure Controls/Personal Protection
- Warn other workers of spill and contain spill.
- Recover spill by using absorbent and sweeping up waste material.
- In case of large spills, dike the spill, if possible. Call emergency services.
- Place material into a chemical waste container.
- Eliminate all sources of ignition and ventilate area.
- Prevent spills or contaminated rinse water from entering sewers or watercourses.

DISPOSAL METHOD: disposal should be made in accordance with federal, state, and local regulations. Incineration is recommended.

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Section 7: Handling and Storage

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

- Store upright in a cool, dry place.
- Keep container closed when not in use.
- Prevent build-up of electro-static charges (e.g. by grounding).
- Keep away from heat, sparks, flame, direct sunlight and other possible sources of ignition.
- Do not store with peroxides and oxidizing materials.
- Use only with adequate ventilation.
- Do not inhale vapors.
- Avoid spilling and releasing vapor.
- Wear proper protective equipment when handling this material.
- Avoid contact with skin, eyes or clothing.
- Wash hands and face after handling this material.
- Keep out of reach of children.
- Follow all applicable local regulations for handling and storage.
- Utilize chemical segregation.

INFORMATION ON EMPTIED CONTAINER

- Dispose of this container according to local, state, and federal laws in your country.
- Do not reuse this container. This container may be hazardous when emptied.
- Residues will be explosive or flammable.
- Do not puncture or cut this container.
- Do not weld on or near this container.

SPECIFIC USES:

- This product is intended for use as a hardwood floor finish.

Section 8: Exposure Controls/Personal Protection

VENTILATION: Always provide good general, mechanical room ventilation where this chemical/material is used.

SPECIAL VENTILATION CONTROLS: Use this material inside totally enclosed equipment, or use it with local exhaust ventilation at points where vapors can be released into the workspace air.

RESPIRATORY PROTECTION: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or the CEN European Standards (EU). Use a NIOSH/MSHA or European Standard (EN) approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

PROTECTIVE GLOVES:

Neoprene, butyl, or nitrile rubber gloves are recommended.

EYE PROTECTION: Recommend eye protection using safety glasses or goggles.

SKIN PROTECTION: Suitable protective clothing to prevent skin contact

WORK/HYGIENE PRACTICES: Avoid breathing vapor. Avoid contact with eyes. Wash hands after handling.

EXPOSURE LIMITS Reference Section 2

OTHER EQUIPMENT: Make safety shower, eyewash stations, and hand washing equipment available in the work area.

Section 9: Physical and Chemical Properties

APPEARANCE - COLOR: Clear

PHYSICAL STATE: Liquid

ODOR: Solvent Odor

PRODUCT CRITERIA

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ODOR THRESHOLD	Not applicable for product
PH	Not applicable for product
FLASH POINT:	148 °F
LOWER EXPLOSIVE LIMIT; UPPER EXPLOSIVE LIMIT	Not applicable for product
FLAMMABILITY (Solid, gas)	Not flammable
EXPLOSIVE PROPERTIES	Not applicable for product
OXIDIZING PROPERTIES	Not applicable for product
SPECIFIC GRAVITY (@25 °C):	1.06 Kg/L
EVAPORATION RATE:	Less than n-butyl acetate
% VOLATILE by VOLUME	30-35
PARTITION COEFFICIENT	Not applicable for product

SPECIFIC GRAVITY (@25 °C):	1.06 Kg/L
EVAPORATION RATE:	Less than n-butyl acetate
% VOLATILE by VOLUME	30-35
PARTITION COEFFICIENT	Not applicable for product
AUTO IGNITION TEMPERATURE	Not applicable for product
DECOMPOSITION TEMPERATURE	Not applicable for product
BOILING POINT:	Not applicable for product
MELTING POINT:	>212 °F
VAPOR PRESSURE	Not applicable for product
VAPOR DENSITY (AIR = 1)	Heavier than air
SOLUBILITY IN WATER:	Not applicable for product
WATER SOLUBILITY IN THE SOLVENT	Not soluble
FREEZING POINT:	Not applicable for product
VISCOSITY	Not applicable for product
VOC CONTENT	Not applicable for product

Section 10: Stability and Reactivity

STABILITY:	Stable under normal conditions.
CONDITIONS TO AVOID:	Avoid heat. Closed containers may explode due to build up of pressure.
INCOMPATIBILITY (MATERIALS TO AVOID):	Strong oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon monoxide and carbon dioxide
HAZARDOUS POLYMERIZATION:	Will not occur

Section 11: Toxicological Information

There is no toxicological information available for the product mixture.

GHS Required Criteria	Toxicity Criteria	Toxicity Information	Comments	Chemical Constituent
Acute Toxicity	LD50 Oral Rat	>5000 mg/kg		Polyisocyanate
	LC50 Inhalation Rat	390-453 mg/kg 4 hours	Aerosol	Polyisocyanate
	LD50 Dermal Rabbit	>5000 mg/kg		Polyisocyanate
	LD50 Oral Rat	3300 mg/kg		P series glycol ethers
	LD50 Dermal Rabbit	>2000 mg/kg		P series glycol ethers
	LC50 Inhalation Rat	>792 ppm 4 hours		P series glycol ethers
Skin Corrosion/Irritation	Rabbit Draize test	Slightly		Polyisocyanate
Serious Eye Damage / Eye Irritation	Rabbit Draize test	Slightly		Polyisocyanate
Respiratory or Skin Sensitization		No information is available.		
Germ Cell Mutagenicity		No information is available.		
Carcinogenicity		Not listed	NTP	
		Not listed	IARC	
		Not listed	OSHA	
Reproductive Toxicity		No information is available.		
STOST -- Single Exposure	Inhalation:	May cause respiratory irritation		P series glycol ethers
STOST -- Repeated Exposure		No information is available.		
Aspiration Hazard		No information is available.		
Ames test		Negative		Polyisocyanate

STOST = Specific Target Organ Systemic Toxicity

OTHER INFORMATION:

Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

Section 12: Ecological Information

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BIODEGRADATION:	Not readily biodegradable	Polyisocyanate
BIOACCUMULATION:	No information is available.	
ECO TOXICITY:	LC50 – Zebra fish >100mg/l -96 hour	Polyisocyanate
	EC50 – Daphnia magna (Water flea) – >100 mg/l – 24 hour	Polyisocyanate
	EC50 – Desmodemus subspicatus (green algae) – >1000 mg/l – 72 hour	Polyisocyanate
MOBILITY:	No information is available.	

Note: Not all of the ingredients have been tested for Ecotoxicity.

Section 13: Disposal Considerations

WASTE FROM RESIDUES / UNUSED PRODUCTS:

Follow the waste disposal requirements of your country, state, or local authorities.

CONTAMINATED PACKAGING:

Recommend contaminated packaging material should be disposed of as stated above for residues and unused product.

RINSATE: Do not dispose of rinse water containing product in a sanitary sewer system or storm water drainage system.

Section 14: Transport Information

DOT TRANSPORT: Non-bulk **Not Regulated**

ADR = International Carriage of Dangerous Goods by Road Not Regulated

RAIL TRANSPORT: Not Regulated

SEA TRANSPORT: IMDG Not Regulated

AIR TRANSPORT: IATA/ICAO Not Regulated

Section 15: Regulatory Information

Directive 1999/45/EC

LABEL FOR SUPPLY:



IRRITANT

RISK PHRASES:

R-Phrase: R36 Irritating to Eyes
R38 Irritating to Skin
S-Phrase: S24 Avoid contact with Skin
S25 Avoid contact with Eyes

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:

This product is in compliance with rules, regulations, and orders of TSCA. All components are listed on the TSCA Inventory.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. This information must be included in all MSDS's that are copied and distributed for the material.

The Section 313 toxic chemicals contained in this product are: None

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.

The California proposition 65 chemical(s) contained in this product are: None

STATE RIGHT TO KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.

The California proposition 65 chemical(s) contained in this product are: None

STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

Florida Toxic Substance(s):	Not listed
Massachusetts's hazardous substance(s):	Homopolymer of hexamethylene Diisocyanate Polyisocyanate based on HDI
Pennsylvania hazardous substance code(s):	Not listed
New Jersey	Homopolymer of hexamethylene Diisocyanate
Illinois	Not listed
Michigan	Not listed

CANADA:

This MSDS/SDS will be non-compliant 3 years after the issue date. This MSDS contains all of the information required by the Controlled Products Regulations (CPR).

WHMIS-INFORMATION:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR), SOR/88-66, Current to February 20, 2012. The classes of controlled products listed in the CPR, Section 32, Part IV, have been reviewed and based on Professional Judgment this product has been determined to not be WHMIS controlled.

EUROPEAN UNION:

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Directive 1999/45/EC, Regulation (EC) No 1272/2008 on classification, labeling and packaging (CLP) of substances and mixtures.

WGK: 0 (German Federal Water Management Act) (Water Hazard Class)

Section 16: Other Information

European Community Hazards Identification:

R: None
S: None
Danger Symbol(s): None

Revision Comments: Initial version February 5, 2014
Revision Number: 0
Information Sources: RTECS, REACH, OSHA 29CFR 1910.1200

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