BYK-371

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	BYK-371
Product Use Description	:	Surface Additive
Company	:	BYK USA Inc. 524 South Cherry Street Wallingford CT 06492
Prepared by	:	J.Nole, Safety; M.McCutcheon, Regulatory
Telephone	:	(203) 265-2086
Visit our web site	:	www.byk.com
E-mail address	:	ehs.byk.usa@altana.com
Emergency telephone number	:	CHEMTREC 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview

Form	:	liquid
Colour	:	light yellow
Odour	:	aromatic

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR1910.1200)

Potential Health Effects

Eyes	:	Contact will probably cause irritation.
Skin	:	Contact will probably cause irritation.
Ingestion	:	May irritate the digestive tract and cause same symptoms as inhalation; high dosages may result in unconsciousness.
Inhalation	:	High concentrations of vapors may be irritating to the respiratory tract. May cause headaches, dizziness, nausea and vomiting. May cause CNS depression (drowsiness, loss of coordination and fatigue).
Chronic Exposure	:	Absorption of ingredients (solvents) by inhalation and/or repeated skin contact has caused injury to liver, kidney, brain, respiratory system, blood, and/or bone marrow in laboratory animals Animal studies have shown Xylene to cause fetotoxic effects at dosage levels at or near maternal toxicity levels. Excessive inhalation of Xylene has caused hearing loss in laboratory animals. Hexane used in conjunction w/Xylene greatly increased this effect. Chronic skin contact w/Xylene

has caused dermatitis. Ingestion of Ethanol can increase effects of overexposure to Xylene.
Ethylbenzene is an IARC Group 2B carcinogen based on animal studies (increased tumors in rats and mice).

Aggravated Medical Condition : May be aggravating to some
skin conditions
asthma-type conditions
pre-existing liver and/or kidney disorders

Primary Routes of Entry : Skin contact
Skin absorption
Inhalation
Eyes
Ingestion

Carcinogenicity:

IARC	Ethylbenzene	100-41-4

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH	Ethylbenzene	100-41-4

Environmental Effects

Environmental Effects : No information available.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Solution of an acrylfunctional polyester modified polydimethylsiloxane

Hazardous components

Ethylbenzene is a component of Xylene.

Component	CAS-No.	Weight percent
Xylene	1330-20-7	30.00 - 60.00
Ethylbenzene	100-41-4	10.00 - 30.00

SECTION 4. FIRST AID MEASURES

First aid procedures

Inhalation	:	Remove to fresh air. Administer artificial respiration if necessary. Get medical aid as soon as possible.
Skin contact	:	Remove contaminated clothing. Wash thoroughly with soap and water.
Eye contact	:	Immediately flush with plenty of water for at least 20 minutes. Get medical aid.
Ingestion	:	Do not induce vomiting; aspiration hazard. Dilute with 1-2 glasses of water. Get medical aid. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs.

Notes to physician

Risks	:	No information available.

SECTION 5. FIRE-FIGHTING MEASURES

Flammable properties

Flash point	:	26 °C (78.80 °F) Method: 48 (Abel-Pensky)
Ignition temperature	:	> 200 °C (> 392 °F) Method: calculated
Lower explosion limit	:	1.20 %(V)
Upper explosion limit	:	7.00 %(V)
Suitable extinguishing media	:	Foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	No information available.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus.
Specific hazards during fire fighting	:	Cool closed containers exposed to fire with water spray. Will not explode on mechanical impact.
Hazardous decomposition	:	Carbon oxides

products due to incomplete combustion.		silicone compounds formaldehyde
Further information	:	Keep away from heat and sources of ignition. Keep away from oxidizing agents.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	:	Eliminate all sources of ignition. Ventilate area if indoors. Wear self-contained breathing apparatus and full protective clothing.
Environmental precautions	:	Prevent spilled material from entering the ground, water and/or air by using appropriate containment methods.
Methods for containment	:	Stop leak. Dike and contain spill.
Methods for cleaning up	:	Pump into salvage tanks and/or absorb with suitable material. Use sparkless shovels to remove material.
Additional advice	:	No further information is available.

SECTION 7. HANDLING AND STORAGE

Handling

Handling	:	Harmful in contact with skin. Avoid contact with skin and eyes. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Handle as an industrial chemical. Keep container tightly closed. Keep away from oxidizing agents.

Storage

Advice on common storage	:	Keep product and empty container away from heat and sources of ignition. Take precautionary measures against static discharges. Keep in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Xylene	1330-20-7	TWA	100 ppm	2007-01-01	ACGIH

		STEL	150 ppm	2007-01-01	ACGIH
		TWA	100 ppm 435 mg/m3	1997-08-04	OSHA P1
		TWA	100 ppm 435 mg/m3	1989-01-19	OSHA P0
		STEL	150 ppm 655 mg/m3	1989-01-19	OSHA P0
Ethylbenzene	100-41-4	TWA	100 ppm	2009-01-01	ACGIH
		STEL	125 ppm	2009-01-01	ACGIH
		TWA	100 ppm 435 mg/m3	1997-08-04	OSHA P1
		TWA	100 ppm 435 mg/m3	1989-01-19	OSHA P0
		STEL	125 ppm 545 mg/m3	1989-01-19	OSHA P0

Engineering measures

Engineering measures : Use with local exhaust ventilation.

Personal protective equipment

Eye protection : Safety Glasses
Goggles

Hand protection : Viton

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection	:	Unless air monitoring demonstrates vapor/mist/dust levels are below the PEL/TLV wear a properly fitted respirator (NIOSH approved) or dust mask during exposure.
Hygiene measures	:	Clean long legged, long sleeved work clothes. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	liquid
Colour	:	light yellow
Odour	:	aromatic
Odor Threshold	:	no data available
Flash point	:	26 °C (78.80 °F) Method: 48 (Abel-Pensky)
Ignition temperature	:	> 200 °C (> 392 °F) Method: calculated
Lower explosion limit	:	1.20 %(V)
Upper explosion limit	:	7.00 %(V)
pH	:	no data available
Freezing point	:	no data available
Initial boiling point	:	137 °C (278.60 °F)
Vapour pressure	:	8.0000000 hPa at 20 °C (68.00 °F) Method: calculated
Evaporation rate	:	no data available
Density	:	0.9450 g/cm3 at 20 °C (68.00 °F)Method: DIN EN ISO 2811-3
Bulk density	:	not applicable
Water solubility	:	immiscible
Partition coefficient: n-octanol/water	:	no data available
Viscosity, kinematic	:	at 20 °C (68.00 °F) no data available at 40 °C (104.00 °F) no data available
Relative vapour density	:	no data available

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	:	None known.
Materials to avoid	:	Strong oxidizing agents
Hazardous decomposition products	:	None expected
Chemical stability	:	Stable; polymerization will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Product)	:	LD50 rat Dose: > 6,000.000000 mg/kg Method: OECD Test Guideline 401 active ingredient
Acute oral toxicity (Component)	:	Component: 1330-20-7 Xylene LD50 rat Dose: 3,523 mg/kg Component: 100-41-4 Ethylbenzene LD50 rat Dose: 3,500 mg/kg
Acute dermal toxicity (Component)	:	Component: 1330-20-7 Xylene LD50 rabbit Dose: 1,700 mg/kg Component: 100-41-4 Ethylbenzene LD50 rabbit Dose: 5,510 mg/kg
Acute inhalation toxicity (Component)	:	Component: 1330-20-7 Xylene LC50 rat Dose: 5000 ppm Exposure time: 4 h Component: 100-41-4 Ethylbenzene LC50 no data available
Skin irritation (Product)	:	rabbit Result: No skin irritation Method: OECD Test Guideline 404 active ingredient

Skin irritation (Component)	:	Component: 1330-20-7 Xylene rabbit Result: Moderate skin irritation Component: 100-41-4 Ethylbenzene rabbit Result: Moderate skin irritation
Eye irritation (Product)	:	rabbit Result: No eye irritation Method: OECD Test Guideline 405 active ingredient
Eye irritation(Component)	:	Component: 1330-20-7 Xylene rabbit Result: Eye irritation Component: 100-41-4 Ethylbenzene rabbit Result: Moderate eye irritation
Sensitisation (Product)	:	no data available

SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information (Product)	:	There is no data available for this product.

SECTION 13. DISPOSAL CONSIDERATIONS

Further information	:	Dispose of in accordance with applicable local/municipal, state/provincial and federal regulations.

SECTION 14. TRANSPORT INFORMATION

Container sizes: 55 gallon drums, 5 or 6-gallon pails, 2oz/16oz samples)
CERCLA RQ: Drums Only (Xylene 100 pounds)

DOT	UN Number	:	1993
	Proper shipping name	:	FLAMMABLE LIQUID, N.O.S. (Xylene, Ethylbenzene)
	Class	:	3
	Packing group	:	III
	Emergency Response Guidebook Number	:	128

IATA	UN Number	:	1993
	Description of the goods	:	FLAMMABLE LIQUID, N.O.S. (Xylene, Ethylbenzene)
	Class	:	3
	Packing group	:	III
	ICAO-Labels	:	3
	Packing instruction (cargo aircraft)	:	366
	Packing instruction (passenger aircraft)	:	355
	Package Instruction (Limited quantity)	:	Y344
IMDG	UN Number	:	UN 1993
	Description of the goods	:	FLAMMABLE LIQUID, N.O.S. (Xylene, Ethylbenzene)
	Class	:	3
	Packing group	:	III
	IMDG-Labels	:	3
	EmSNumber1	:	F-E
	EmSNumber2	:	S-E
	Marine pollutant	:	no

SECTION 15. REGULATORY INFORMATION

HMIS Classification : Health hazard: 2
Chronic Health Hazard: *
Flammability: 3
Reactivity: 0
PPI:B

National Fire Protection Association (NFPA) Class : IC

Emergency Planning Community Right-To-Know (EPCRA)

SARA 302 Components : Not applicable

If listed below, this product contains toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

SARA 313 Components	: Xylene	1330-20-7	47.9%
	Ethylbenzene	100-41-4	11.9%

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard
Fire Hazard

Toxic Substances Control Act (TSCA)

TSCA Status	:	We certify that all of the components of this product are either listed on the TSCA Inventory or are not subject to the notification requirements per 40 CFR 720 30(h).
Section 4 / 12(b)	:	p-Xylene (106-42-3)

Clean Air Act & Related Information

Non-volatile (Wt)	:	38 - 42 % Method: 23 (20min/150°C) DIN EN ISO 3251
Ozone Depleting Substances	:	Not applicable.

Non-volatile information is not a specification.

Hazardous Air Pollutants

Xylene	1330-20-7
Ethylbenzene	100-41-4

If not listed above, this product does not contain HAPs at 1% or 0.1% or greater. Refer to Section 3 for HAP weight percentage.

Resource Conservation and Recovery Act

EPA Hazardous Waste Code(s)	:	D001	Ignitable
		D018	Benzene

State Laws

Massachusetts Right To Know Components	:	Xylene	1330-20-7
		Ethylbenzene	100-41-4
Pennsylvania Right To Know Components	:	Xylene	1330-20-7
		Ethylbenzene	100-41-4
			-
New Jersey Right To Know Components	:	Xylene	1330-20-7
			-
		Ethylbenzene	100-41-4
New Jersey Trade Secret Registry Number for the product (NJ TSRN)	:	800963-5265	

California Prop. 65 : WARNING! This product contains a chemical known to the State of California to cause cancer.

Components

Ethylbenzene	100-41-4
Benzene	71-43-2

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Toluene	108-88-3
Benzene	71-43-2

CONEG Heavy Metal: We certify that this product does not contain Lead, Mercury, Cadmium or hexavalent chromium in the sum concentration of 100 ppm by weight or greater.

Canadian Environmental Protection Act

Domestic Substances List

DSL Status : The following component(s) is/are not listed on the DSL:

CEPA Category : Polymer
Weight percent : 40 %
NSN Filed : Schedule 9
Max. NSN Required : Schedule 10

WHMIS Classification : B2
D2A
D2B

SECTION 16. OTHER INFORMATION

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.