



# FASCAT (R) 4208X Catalyst

Material Safety Data Sheet

Arkema Inc.

## 1 PRODUCT AND COMPANY IDENTIFICATION

### Functional Additives

2000 Market Street  
21st Floor  
Philadelphia, PA 19103-3222

### EMERGENCY PHONE NUMBERS:

Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887  
Medical: Rocky Mountain Poison Control Center  
(866) 767-5089 (24Hrs)

Information Telephone Numbers	Phone Number	Available Hrs
Customer Service Number	(800) 331-7654	8:00 AM - 5:00 PM EST

Product Name FASCAT (R) 4208X Catalyst  
Product Synonym(s)

Chemical Family Organotin  
Chemical Formula NA  
Chemical Name NA  
EPA Reg Num NA  
Product Use Catalyst

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
Xylene	1330-20-7	40-50	Y
Dibutyltin bis(2-ethylhexoate)	2781-10-4	50-60	Y

The substance(s) marked with a "Y" in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200)

The components of this product are all on the TSCA Inventory list.

## 3 HAZARDS IDENTIFICATION

### Emergency Overview

Clear, colorless to light straw liquid with a characteristic odor.

DANGER!  
CAUSES EYE AND SKIN IRRITATION.  
HARMFUL IF ABSORBED THROUGH SKIN.  
HARMFUL IF SWALLOWED.  
CAUSES RESPIRATORY TRACT IRRITATION.  
EXTREMELY FLAMMABLE LIQUID AND VAPOR.  
VAPOR MAY CAUSE FLASH FIRE.  
CAUSES LIVER AND KIDNEY DAMAGE

### Potential Health Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on single exposure animal tests, it is considered to be moderately toxic if swallowed, slightly to highly toxic if absorbed through skin, and prolonged contact caused corrosive damage to skin. A number of other organotin compounds have been shown to be moderate to severe irritants to eyes, as well as upper respiratory tract irritants.



**4 FIRST AID MEASURES**

POISON, Get medical attention. Call a Poison Control Center.

IN CASE OF CONTACT, immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Destroy contaminated shoes.

IF SWALLOWED, do NOT induce vomiting. Give water to drink. Get medical attention immediately. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

IF INHALED, remove to fresh air. If breathing is difficult, get medical attention.

**5 FIRE FIGHTING MEASURES**

**Fire and Explosive Properties**

Auto-Ignition Temperature	867 deg F		
Flash Point	78 deg F	Flash Point Method	TCC
Flammable Limits- Upper	1 deg F		
Lower	7 deg F		

**Extinguishing Media**

Use carbon dioxide, foam, dry chemical.

**Fire Fighting Instructions**

Do NOT use a solid stream of water. A solid stream of water can spread fire. Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

**Fire and Explosion Hazards**

Vapors can travel to a source of ignition and flash back. Avoid breathing fumes from fire exposed material.

**6 ACCIDENTAL RELEASE MEASURES**

**In Case of Spill or Leak**

Stop the leak, if possible. Ventilate the space involved. Contain, sweep up, place in container for disposal. Prevent waterway contamination. Construct a dike to prevent spreading. Collect run-off water and transfer to drums or tanks for later disposal. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Clean up procedures: Transfer to containers, in preparation for later disposal. Avoid generation of dusts. Remove from spill location. Flush area with water spray, collect rinsate.

**7 HANDLING AND STORAGE**

**Handling**

Do not taste or swallow. Do not get in eyes, on skin or on clothing. Avoid breathing vapor. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. CONTAINER HAZARDOUS WHEN EMPTY. Emptied container retains vapor and product residue. Follow labeled warnings even after container is emptied. RESIDUAL VAPORS MAY EXPLODE ON IGNITION. DO NOT CUT, DRILL GRIND

## 7 HANDLING AND STORAGE

OR WELD ON OR NEAR THIS CONTAINER. Improper disposal or reuse of this container may be dangerous and/or illegal.

### Storage

Store in well ventilated area away from heat and sources of ignition such as flame, sparks and static electricity. Ensure that all storage and handling equipment is properly rated, grounded and installed to satisfy electrical classification requirements. Static electricity may accumulate and create a fire hazard. All storage containers, including containers such as drums, cylinders and IBC's, must be bonded and grounded during filling and emptying operations. Store away from oxidizers and reactive materials. Keep container tightly closed. Observe all federal, state and local regulations and National Fire Protection Association (NFPA) Codes which pertain to the specific local conditions of storage and use, including OSHA 29 CFR 1910.106 and NFPA 30, 70, 77, and 497.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Engineering Controls

Investigate engineering techniques to reduce exposures below airborne exposure limits. Provide ventilation if necessary to control exposure levels below airborne exposure limits (see below). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

### Eye / Face Protection

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available.

### Skin Protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear chemical goggles, a face shield, and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing promptly and wash before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash skin thoroughly after handling.

### Respiratory Protection

Avoid breathing vapor or mist. When airborne exposure limits are exceeded (see below), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and chemical goggles. Consult OSHA Standard (29 CFR § 1910.10 to determine required type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

### Airborne Exposure Guidelines for Ingredients

Exposure Limit	Value
<b>Xylene</b>	
ACGIH STEL	- 150 ppm (651 mg/m <sup>3</sup> )
ACGIH TWA	- 100 ppm (434 mg/m <sup>3</sup> )
OSHA TWA PEL	- 100 ppm (435 mg/m <sup>3</sup> )
<b>Dibutyltin bis(2-ethylhexoate)</b>	
ACGIH Skin designator	- Y
ACGIH STEL	-Organic tin compounds, as Sn 0.2 mg/m <sup>3</sup>
ACGIH TWA	-Organic tin compounds, as Sn 0.1 mg/m <sup>3</sup>

**Dibutyltin bis(2-ethylhexoate)**

ARKEMA 12-hour TWA	-Mono- and dibutyl tin compounds, as Sn	0.07 mg/m <sup>3</sup>
OSHA TWA PEL	-Organic tin compounds, as Sn	0.1 mg/m <sup>3</sup>

-Only those components with exposure limits are printed in this section.

-Skin contact limits designated with a "Y" above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption may be required.

-ACGIH Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic reactions.

-WEEL-AIHA Sensitizer designator with a value of "Y" above means that exposure to this material may cause allergic skin reactions.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

## Appearance/Odor

Clear, colorless to light straw liquid with a characteristic odor.

pH	NE
Specific Gravity	0.97
Vapor Pressure	NE
Vapor Density	NE
Melting Point	NE
Freezing Point	NE
Boiling Point	NE
Solubility In Water	Slight
Solubility in Other Materials	NE
Evaporation Rate	NE
Particle Size	NE
Percent Volatile	NE
Molecular Weight	NE-mixture
n-Octanol/Water Partition Coefficient	NE
Oil/Water Partition Coefficient	NE

**10 STABILITY AND REACTIVITY****Stability**

This material is chemically stable under normal and anticipated storage and handling conditions.

**Hazardous Polymerization**

Does not occur.

**Incompatibility**

Contact with bases and reducing agents may result in a low energy release.

**Hazardous Decomposition Products**

None known.

**11 TOXICOLOGICAL INFORMATION****Toxicological Information**

Data on this material and/or its components are summarized below.

**11 TOXICOLOGICAL INFORMATION****Dibutyltin bis(2-ethylhexoate)**

Single exposure (acute) studies indicate that this material is moderately toxic if swallowed (rat LD50 136 mg/kg) and slightly to highly toxic if absorbed through skin (rabbit LD50 125-4,000 mg/kg). Prolonged skin contact (24 hour, occluded) to rabbits caused severe irritation to corrosive damage. Oral administration to rabbits, rats, and mice produced liver effects. Repeated oral administration to mice produced yellow discoloration of the skin, internal organs, and urine. Some other dibutyltin compounds have caused birth defects in rat studies.

**Xylene**

Occupational exposure to some solvents has produced hearing loss. Repeated exposure of humans and guinea pigs in controlled skin contact studies produced severe skin irritation, but no skin allergy. Prolonged or repeated overexposure by inhalation has caused mild and reversible liver and kidney effects in humans. No increase in the incidence of tumors and no evidence of toxicity were observed in long-term oral studies of rats conducted by the National Toxicology Program (NTP). Birth defects were noted in the offspring of rabbits, rats and mice after oral administration and inhalation during pregnancy, but only at dosages that produced significant adverse effects in the mother. No effects were noted on the ability of male or female rats to reproduce following inhalation exposure. No genetic changes were observed in tests using bacteria, animal or human cells, or animals.

**12 ECOLOGICAL INFORMATION****Ecotoxicological Information**

Data on this material and/or its components are summarized below.

This material is practically non-toxic to *Daphnia magna* (24-hr IC50 165 mg/l) and slightly toxic to fathead minnow (96-hr LC50 27 mg/l), rainbow trout (96-hr LC50 13.5 mg/l) and bluegill sunfish (96-hr LC50 12.1-15 mg/l).

**Chemical Fate Information**

Data on this material and/or its components are summarized below.

This material is degraded in standard biodegradability tests. The log Pow ranges from 2.77 to 3.2, with low bioconcentration factors. Volatilization is the dominant transport mechanism.

**13 DISPOSAL CONSIDERATIONS****Waste Disposal**

Recover, reclaim or recycle when practical. Dispose of in an approved landfill if allowed locally. Comply with federal, state, and local regulations. Dispose of in a permitted waste management facility if incineration or landfill is not practical.

**14 TRANSPORT INFORMATION**

DOT Name	Flammable Liquid, Toxic, NOS 3 (6.1), UN 1992, PGIII
DOT Technical Name	[Xylene, Dibutyltin (2-ethylhexoate)]
DOT Hazard Class	3(6.1)
UN Number	UN1992
DOT Packing Group	PG III
RQ	100 lbs. (Xylene)
Marine Pollutant	When shipped by vessel this product is a MARINE POLLUTANT



15 REGULATORY INFORMATION

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370)

Immediate (Acute) Health	Y	Fire	Y
Delayed (Chronic) Health	Y	Reactive	N
		Sudden Release of Pressure	N

The components of this product are all on the TSCA Inventory list.

Ingredient Related Regulatory Information:

SARA Reportable Quantities

CERCLA RQ

SARA TPQ

Xylene	100 LBS	
Dibutyltin bis(2-ethylhexoate)	NE	

SARA Title III, Section 313

This product does contain chemical(s) which are defined as toxic chemicals under and 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. See Section 2

Xylene

Massachusetts Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Massachusetts Right to Know Substance List.

- Dibutyltin bis(2-ethylhexoate)
- Xylene

New Jersey Right to Know

This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right-to-Know Substances List.

- Dibutyltin bis(2-ethylhexoate)
- Xylene

Pennsylvania Environmental Hazard

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Environmental Hazard List.

- Xylene

Pennsylvania Right to Know

This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List.

- Xylene

16 OTHER INFORMATION

Revision Information

Revision Date	12 SEP 2007	Revision Number	14
Supersedes Revision Dated	02-JAN-2007		

Revision Summary

Update color in section 9

Key

NE= Not Established NA= Not Applicable (R) = Registered Trademark

FASCAT is a registered trademark of Arkema Inc.



## **FASCAT (R) 4208X Catalyst**

Material Safety Data Sheet

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