



FASCAT (R) 4352 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) 4352 CATALYST
Product Synonym(s)

Chemical Family NA
Chemical Formula C18H15P
Chemical Name NA
EPA Reg Num NA
Product Use Catalyst

2 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient Name	CAS RegistryNumber	Typical %	OSHA
Triphenyl phosphine	603-35-0	> 99	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

White to tan flake or powder with mild odor

WARNING!

CAUSES RESPIRATORY TRACT IRRITATION.
MAY BE HARMFUL IF SWALLOWED.
MAY CAUSE NERVOUS SYSTEM INJURY AFTER REPEATED EXPOSURE BASED ON ANIMAL DATA

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 slightly toxic if swallowed, no more than slightly toxic if absorbed through skin or inhaled and slightly irritating to eyes and skin. Repeated exposure may cause an allergic skin reaction. Dusts are irritating to the upper respiratory tract. Studies with laboratory animals indicate that this material may cause nervous system injury, with possible effects such as leg weakness, tremors, loss of muscle coordination, and altered reflexes.

4 FIRST AID MEASURES

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IF IN EYES, immediately flush with plenty of water for at least 15 minutes. Get medical attention.

IF ON SKIN, flush the area with plenty of water. Remove material from clothing. Wash clothing before reuse.

IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

IF SWALLOWED, induce vomiting as directed by medical personnel. Get medical attention. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

5 FIRE FIGHTING MEASURES**Fire and Explosive Properties**

Auto-Ignition Temperature	NE		
Flash Point	180 deg C	Flash Point Method	TOC
Flammable Limits- Upper	NE		
Lower	NE		

Extinguishing Media

Use water spray, carbon dioxide, foam or dry chemical.

Fire Fighting Instructions

Contain run-off from 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

When burned, the following hazardous products of combustion can occur: Carbon monoxide Carbon dioxide
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. Shut off or remove all ignition sources. Prevent waterway contamination. Construct a dike to prevent spreading. Collect run-off 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 vapors. Place in non-sparking containers for recovery or disposal. Remove from spill location. Decontaminate area.

7 HANDLING AND STORAGE**Handling**

Do not get in eyes, on skin or on clothing. Avoid breathing dust. Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Storage

This material is not hazardous under normal storage conditions; however, material should be stored in closed containers, in a secure area to prevent container damage and subsequent spillage.

7 HANDLING AND STORAGE

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.

Eye / Face Protection

Use good industrial practice to avoid eye contact.

Skin Protection

Minimize skin contamination by following good industrial hygiene practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

Respiratory Protection

Avoid breathing dust. Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, 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

The components of this product have no established Airborne Exposure Guidelines

- 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	White to tan flake or powder with mild odor
pH	NE
Specific Gravity	1.2
Vapor Pressure	NE
Vapor Density	9.0
Melting Point	78.5 - 81.5 deg C
Freezing Point	NE
Boiling Point	377 deg C
Solubility In Water	Insoluble
Solubility in Other Materials	Xylene, toluene, acetone
Evaporation Rate	NE
Molecular Weight	262.28
Bulk Density	31 LBS/FT3

10 STABILITY AND REACTIVITY**Stability**

Does not occur.

Hazardous Polymerization

Does not occur.

Incompatibility

Acids and oxidizers

Hazardous Decomposition Products

If in fire: Carbon monoxide and carbon dioxide, fumes of phosphine and phosphorous oxides

11 TOXICOLOGICAL INFORMATION**Toxicological Information**

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

Single exposure (acute) studies indicate:

Oral - Slightly Toxic to Rats (LD50 1,150 mg/kg)

Dermal - No More Than Slightly Toxic to Rabbits (LD50 >2,000 mg/kg)

Inhalation - No More Than Slightly Toxic to Rats (1-hr LC50 >16.8 mg/l)

Eye Irritation - Slightly Irritating to Rabbits (3.3/110)

Skin Irritation - Slightly Irritating to Rabbits (24-hr exposure, 2.6/8.0)

Triphenyl Phosphine

Skin allergy was observed in tests using guinea pigs. Repeated oral administration produced liver effects in rats. Signs of nervous system toxicity including tremors, altered reflexes, loss of muscle coordination, limb weakness, convulsions and nerve damage have been observed in dogs following acute or repeated administration by the oral route and by inhalation. Nervous system effects were observed in hens after a single dose. Single oral doses produced no changes in plasma or red blood cell cholinesterase activity in rats, while repeated oral doses produced no changes in brain or plasma cholinesterase activity in dogs. No birth defects were observed in the offspring of rats following oral exposure during pregnancy, even at doses that produced adverse effects in the mothers. No genetic changes were observed in tests using bacteria, animal cells or animals.

12 ECOLOGICAL INFORMATION**Ecotoxicological Information**

This material is no more than moderately toxic to *Daphnia magna* (48-hr EC50 >5 mg/l; due to its low water solubility, a water -accommodated fraction was tested) and algae (72-hr EC50 >5 mg/l).

Chemical Fate Information

No data are available.

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 Not regulated
DOT Technical Name NA
DOT Hazard Class NA
UN Number NA
DOT Packing Group PG NA
RQ NE

15 REGULATORY INFORMATION

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

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

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

International Inventory Memo

All ingredients of this product are listed on the following international inventories:

EINECS (No. 2100360)

Canadian Domestic Substances List (DSL).

Ingredient Related Regulatory Information:

SARA Reportable Quantities

Triphenyl phosphine

CERCLA RQ

SARA TPQ

NE

16 OTHER INFORMATION

Revision Information

Revision Date 20 MAR 2007

Revision Number 10

Supercedes Revision Dated 02-JAN-2007

Revision Summary

Update section 8

Key

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

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