

Safety data sheet

Catalyst PuriStar® R3-15 Tablets 5x3mm

Revision date : 2006/08/31
Version: 3.0

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(30054478/MDS_GEN_US/EN)

1. Substance/preparation and company identification

Company

BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

2. Composition/information on ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
1314-13-2		Zinc oxide
1317-38-0		copper oxide
1344-28-1		Aluminum oxide
7782-42-5		graphite

3. Hazard identification

Emergency overview

WARNING: MAY BE HARMFUL IF SWALLOWED.
CAUSES EYE IRRITATION.
CAUSES RESPIRATORY TRACT IRRITATION.
INGESTION MAY CAUSE GASTRIC DISTURBANCES.

Avoid contact with the skin, eyes and clothing.

Avoid inhalation of dusts.

Use with local exhaust ventilation.

Wear a NIOSH-certified (or equivalent) particulate respirator.

Wear safety glasses with side-shields.

Wear chemical resistant protective gloves.

Wear protective clothing.

Eye wash fountains and safety showers must be easily accessible.

Potential health effects

Primary routes of exposure

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:

Information on: Copper oxide

Inhalation of fumes may result in irritation to the eyes, nose and respiratory system and may produce metal fume fever. Acute ingestion may produce metallic taste, severe nausea, vomiting, abdominal pain, diarrhea and hemolysis.

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Information on: Zinc oxide

Inhalation of zinc dusts may result in respiratory irritation. Inhalation of zinc fumes may cause "metal fume fever". Symptoms of metal fume fever include metallic taste, dryness, and irritation of the throat, difficult breathing, weakness, fatigue and fever.

Irritation:

Irritating to eyes. Mechanical irritation effects from dust exposure are possible at ambient temperature.

4. First-aid measures

General advice:

Remove contaminated clothing. Working clothes should be kept away from other articles.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. If breathing difficulties develop, aid in breathing and seek immediate medical attention.

If on skin:

Wash off thoroughly with ample water.

If irritation develops, seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. Seek medical attention.

If swallowed:

Rinse mouth and then drink plenty of water.

Do not induce vomiting. Seek medical attention.

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions), administer chelate formers.

5. Fire-fighting measures

Flammability: does not ignite

Suitable extinguishing media:

water, dry extinguishing media, foam, carbon dioxide

Hazards during fire-fighting:

No particular hazards known.

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Contaminated extinguishing water must be disposed of in accordance with official regulations. Product itself is non-combustible; fire extinguishing method of surrounding areas must be considered.

NFPA Hazard codes:

Health : 2 Fire: 0 Reactivity: 0 Special:

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6. Accidental release measures

Personal precautions:

Avoid dust formation.

Environmental precautions:

Discharge into the environment must be avoided.

Cleanup:

For small amounts: Sweep/shovel up.

For large amounts: Sweep/shovel up.

7. Handling and storage

Handling

General advice:

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

See MSDS section 5 - Fire fighting measures.

Storage

General advice:

Containers should be stored tightly sealed in a dry place.

8. Exposure controls and personal protection

Components with workplace control parameters

Zinc oxide	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 2 mg/m3 Respirable fraction ; STEL value 10 mg/m3 Respirable fraction ;
Aluminum oxide	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 10 mg/m3 ;
graphite	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ; TWA value 15 millions of particles per cubic foot of air ;
	ACGIH	TWA value 2 mg/m3 Respirable fraction ;

Advice on system design:

Provide local exhaust ventilation to control dust.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) particulate respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields.

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Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:

Avoid inhalation of dust. Wear protective clothing as necessary to minimize contact. Hands and/or face should be washed before breaks and at the end of the shift. Store work clothing separately.

9. Physical and chemical properties

Form:	tablets	
Odour:	odourless	
Colour:	black	
pH value:	approx. 8	
Bulk density:	approx. 1,300 kg/m ³	
Solubility in water:		springly soluble

10. Stability and reactivity

Conditions to avoid:

No conditions known that should be avoided.

Substances to avoid:

No substances known that should be avoided.

Hazardous reactions:

The product is chemically stable.

Decomposition products:

No hazardous decomposition products known.

Thermal decomposition:

No decomposition if correctly stored and handled.

11. Toxicological information

Acute toxicity

Oral:

LD50/rat: > 2,000 mg/kg

Skin irritation:

rabbit: non-irritant (Draize test)

Eye irritation :

rabbit: Irritant. (Draize test)

12. Ecological information

Environmental fate and transport

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Biodegradation:

Evaluation: The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

Environmental toxicity

Toxicity to microorganisms:

bacterium/EC10 (17 h): > 2,000 mg/l
bacterium/EC50 (4 h): > 6.2 mg/l

Other ecotoxicological advice:

Contains heavy metals and should not be allowed to reach ground or open waters.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

Container disposal:

Uncleaned empties should be disposed of in the same manner as the contents.

14. Transport information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(contains ZINC OXIDE)
Hazard class: 9
ID number: UN 3077
Packing group: III
Marine pollutant: YES

Air transport

IATA/ICAO

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
contains (ZINC OXIDE)
Hazard class: 9
ID number: UN 3077
Packing group: III

15. Regulatory information

Federal Regulations

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Registration status:
TSCA, US released / listed

OSHA hazard category: Chronic target organ effects reported, OSHA PEL established, ACGIH TLV established

SARA hazard categories (EPCRA 311/312): Acute, Chronic

SARA 313:

<u>CAS Number</u>	<u>Chemical name</u>
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1317-38-0	copper oxide
1344-28-1	Aluminum oxide

State regulations

State RTK

<u>CAS Number</u>	<u>Chemical name</u>	<u>State RTK</u>
1314-13-2	Zinc oxide	MA, NJ, PA
1317-38-0	copper oxide	NJ
1344-28-1	Aluminum oxide	MA, NJ, PA

16. Other information

HMIS III rating

Health: 2 Flammability: 0 Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Local contact information

prod_reg@basf.com

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