

Material Safety Data Sheet



1. Product and company identification

Product name	SPENT FCC CATALYST
MSDS #	0000002511
Historic MSDS #:	04129000 (Amoco); 3222 (BP)
Code	0000002511
Product use	Industrial applications
Supplier	Teamco, Inc. 10000 Findlay Rd. Findlay, OH 45840
EMERGENCY HEALTH INFORMATION:	1 (877) 627-5463
EMERGENCY SPILL INFORMATION:	1 (877) 627-5463
OTHER PRODUCT INFORMATION	419 421-3070

2. Hazards identification

Physical state	Solid.
Color	Gray. Granules.
Emergency overview	DANGER ! CAUSES RESPIRATORY TRACT AND SKIN BURNS. CAUSES EYE IRRITATION. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. CANCER HAZARD CONTAINS MATERIAL WHICH CAN CAUSE CANCER Avoid exposure - obtain special instructions before use. Do not get in eyes, on skin or clothing. Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Routes of entry	Skin Contact. Eye contact. Inhalation. Ingestion.
Potential health effects	
Eyes	Causes eye irritation.
Skin	Corrosive to the skin. Causes skin burns. May cause allergic skin reaction. Contains material which can cause cancer. See toxicological Information (section 11).
Inhalation	Causes respiratory tract burns. May cause allergic respiratory reaction. Contains material which can cause cancer. May contain nickel, which can cause cancer. See toxicological Information (section 11). Contains material which causes damage to the following organs: lungs and nose/sinuses.
Ingestion	Ingestion may cause gastrointestinal irritation and diarrhea.
See toxicological Information (section 11).	

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3. Composition/information on ingredients

Ingredient name	CAS #	%
Silica, amorphous	7631-86-9	40 - 75
Aluminum oxide	1344-28-1	25 - 60
Nickel	7440-02-0	0 - 0.15

4. First aid measures

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin contact	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Thoroughly clean shoes before reuse. Wash contaminated clothing before reuse. In the event of any complaints or symptoms, avoid further exposure. Chemical burns must be treated promptly by a physician. Get medical attention immediately.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Chemical burns must be treated promptly by a physician. Get medical attention immediately.

5. Fire-fighting measures

Flammability of the product	Non-flammable.
Fire/explosion hazards	No specific fire or explosion hazard.
Unusual fire/explosion hazards	None identified.
Extinguishing media	
Suitable	Use an extinguishing agent suitable for surrounding fires.
Not suitable	Do not use water jet.
Fire-fighting procedures	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Hazardous combustion products	Some metallic oxides.
Protective clothing (fire)	Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode.

6. Accidental release measures

Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Personal protection in case of a large spill	Chemical splash goggles. Chemical resistant protective suit. Boots. Chemical resistant gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. CAUTION: The protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are not known, or if concentrations exceed the protection limits of air-purifying respirator.

Methods and materials for containment and clean-up

Large spill	Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.
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7. Handling and storage

Handling

Put on appropriate personal protective equipment (see Section 8). Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes, on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Storage

Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10). Keep container tightly closed and sealed until ready for use. Containers that are opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name

Occupational exposure limits

Silica, amorphous

ACGIH (United States).

TWA: 10 mg/m³ 8 hour(s). Form: As Silica, Amorphous -- Diatomaceous Earth (Uncalcined) Inhalable

Aluminum oxide

ACGIH TLV (United States, 1/2007).

TWA: 10 mg/m³ 8 hour(s).

NIOSH REL (United States, 12/2001).

TWA: 5 mg/m³, (as Al) 10 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 5 mg/m³ 8 hour(s). Form: Respirable fraction

TWA: 15 mg/m³ 8 hour(s). Form: Total dust

Nickel

ACGIH TLV (United States, 1/2007).

TWA: 1.5 mg/m³ 8 hour(s). Form: Metallic form

NIOSH REL (United States, 12/2001).

TWA: 0.015 mg/m³, (as Ni) 10 hour(s).

OSHA PEL (United States, 11/2006).

TWA: 1 mg/m³, (as Ni) 8 hour(s).

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Some states may enforce more stringent exposure limits.

Control Measures

Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures

Ensure that eyewash stations and safety showers are close to the work-station location. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

Personal protection

Eyes

Avoid contact with eyes. Chemical splash goggles. Goggles, face shield, or other full-face protection if potential exists for direct exposure to dust.

Skin and body

Avoid contact with skin. Wear clothing and footwear that cannot be penetrated by chemicals or oil.

Respiratory

Use adequate ventilation. Avoid breathing dust. If ventilation is inadequate, use a NIOSH certified N95 or P95 particulate respirator (42 CFR 84).

Hands

Wear gloves that cannot be penetrated by chemicals or oil.

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and

with a full assessment of the working conditions.

Consult your supervisor or S.O.P. for special handling directions

9. Physical and chemical properties

Physical state	Solid.
Color	Gray. Granules.
Specific gravity	>1
pH	4-7 Aqueous solution (water)
Solubility	Insoluble in cold water.

10. Stability and reactivity

Stability and reactivity	The product is stable.
Conditions to avoid	None identified.
Incompatibility with various substances	Reactive or incompatible with the following materials: oxidizing materials and acids.
Hazardous decomposition products	Some metallic oxides.
Hazardous polymerization	Will not occur.

11. Toxicological information

Classification

Product/ingredient name	IARC	NTP	OSHA
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Silica, amorphous	3	-	-
Nickel	2B	Possible	-

IARC :

2B - Possible carcinogen to human.

3 - Not classifiable as a human carcinogen.

NTP :

Possible - Reasonably Anticipated To Be Human Carcinogens.

Other Toxicity Data Nickel compounds have been classified by IARC as carcinogenic to humans and by NTP as reasonably anticipated to be human carcinogens.

Other information

Potential chronic health effects

Carcinogenicity Contains material which may cause cancer Risk of cancer depends on duration and level of exposure.

Reproductive effects Nickel may cause effects on the genetic material in reproductive cells.

Medical conditions aggravated by over-exposure Pre-existing respiratory and skin disorders may be aggravated by over-exposure to this product.

12. Ecological information

No testing has been performed by the manufacturer.

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13. Disposal considerations

Waste information

The generation of waste should be avoided or minimised wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

NOTE: The generator of waste has the responsibility for proper waste identification (based on characteristic(s) or listing), transportation and disposal

14. Transport information

International transport regulations

Regulatory information	UN number	Proper shipping name	Class	Packing group	Additional information
DOT Classification	Not regulated.	Not regulated.	----	-	----
TDG Classification	Not determined.	Not determined.	Not determined.	-	Not determined.
IMDG Classification	Not determined.	Not determined.	Not determined.	-	Not determined.
IATA/ICAO Classification	Not determined.	Not determined.	Not determined.	-	Not determined.

15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: alumina

SARA 311/312 MSDS distribution - hazard identification: SPENT FCC CATALYST: Immediate (Acute) Health Hazard, Delayed (Chronic) Health Hazard

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	alumina	1344-28-1	25 - 60
	Nickel	7440-02-0	0 - 0.15
Supplier notification	alumina	1344-28-1	25 - 60
	Nickel	7440-02-0	0 - 0.15

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):

CERCLA: Hazardous substances.: Nickel: 100 lbs. (45.36 kg);

State regulations

Massachusetts Substances

Massachusetts RTK: The following components are listed: AMORPHOUS SILICA;ALUMINUM OXIDE

New Jersey Hazardous Substances

New Jersey Hazardous Substances: The following components are listed: SILICA, AMORPHOUS (FUMED); ALUMINUM OXIDE;NICKEL

Pennsylvania RTK Hazardous Substances

Pennsylvania RTK: The following components are listed: SILICA; ALUMINUM OXIDE (AL2O3);NICKEL

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

Inventories

Canada inventory: All components are listed or exempted.

Europe inventory: All components are listed or exempted.

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory (ENCS): Not determined.

Korea inventory (KECI): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

16. Other information

Label requirements

DANGER !

CAUSES RESPIRATORY TRACT AND SKIN BURNS.

CAUSES EYE IRRITATION.

MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION.

CANCER HAZARD

CONTAINS MATERIAL WHICH CAN CAUSE CANCER

HMIS® Rating :

Health * 3
Flammability 0
Physical Hazard 0
Personal protection X

National Fire
Protection
Association (U.S.A.)



History

Date of issue

11/15/2007.

Date of previous issue

No Previous Validation.

Prepared by

Product Stewardship

Notice to reader

NOTICE : This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.

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