



Safety Data Sheet MPI-86G

Page 1 of 3
Date Revised 12/18/2014
Supersedes 2/2010

1 Product and Company identification:

Product Name: **MPI-86G**
Manufacturer: Met-L-Chek Company
1639 Euclid Street
Santa Monica, California, 90404, U.S.A.
Phone: +1-310-450-1111
Fax : +1-310-452-4046
E-mail: info@met-l-chek.com
Web: www.met-l-chek.com

Emergency Phone #: Chemtrec +1-800-424-9300 in U.S.A.; outside U.S.A. 001-703-527-3887

Recommended Use: NDT magnetic particle inspection, grey dry method, per ASTM E-709 & ASTM E-1444.
Restrictions on Use: not established
Prepared by: Met-L-Chek Company 12/17/2014

2 Hazards identification:

GHS: Classification:

Carcinogenicity (category 2)
Combustible dust

Pictograms:



Signal Word: Warning

Hazard Statements: H351: Suspected of causing cancer.

Precautionary statements:

- P102:** Keep out of reach of children.
- P201:** Obtain special instructions before use.
- P202:** Do not handle until all safety precautions have been read and understood.
- P261:** Avoid breathing dust/fumes/gas/mist/vapors/spray.
- P264:** Wash thoroughly after handling.
- P280:** Wear protective glove/clothing/eye protection/face protection.
- P284:** In case of inadequate ventilation wear respiratory protection.
- P405:** Store locked up..

OSHA Hazards: combustible dust

HMIS Classification: Health hazard-1, Flammability-1, Reactivity-0.

3 Composition/information on ingredients:

Ingredient(s)	CAS #	% by Weight
Iron powder	7439-89-6	> 90
Titanium Dioxide (alternative CAS#1317-70-0)	13463-67-7	< 10

4 First-aid measures:

GHS response statements:

- IF SWALLOWED:** Immediately call a poison center/doctor. Do Not induce vomiting
- IF ON SKIN:** Wash with plenty of water. If skin irritation occurs, get medical advice/attention.
- IF INHALED:** Remove person to fresh air and keep comfortable for breathing, get medical advice/attention if you feel unwell.
- IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easily to do. Continue rinsing, get medical attention.
- IF ON CLOTHING:** Take off contaminated clothing and wash it before reuse.

5 Fire-fighting measures:

Suitable extinguishing agents: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂). Apply extinguishing media carefully to avoid creating airborne dust. Do not use water jet as an extinguisher, as this will spread the fire.

Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard..

Special protective equipment for fire-fighters: Wear self-contained respiratory protective device. Wear fully protective suit.

6 Accidental release measures:

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Use only non-sparking tools. Wear appropriate personal protective equipment. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Large Spills: Sweep or shovel up material and place in a clearly labeled container for waste. Following product recovery, flush area with water.

Small Spills: Collect dust using a vacuum cleaner equipped with HEPA filter.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

7 Handling and storage:

Precautions for safe handling: Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Explosion proof exhaust ventilation is recommended. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid prolonged exposure.

Conditions for safe storage: Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep away from heat, sparks and open flame.

8 Exposure controls/personal protection:

Eye Protection: Chemical splash goggles, face shield.

Skin Protection: Wear resistant gloves such as Nitrile Rubber, impervious clothing, apron and boots are suggested as well.

Ventilation System: A system of local or general exhaust is recommended to keep employee exposure below the airborne exposure limits. If exposure limit is exceeded an approved dust respirator must be worn or self contained breathing apparatus.

Exposure Limits: US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.100)

Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)	PEL	15 mg/M ³ Total dust
	TWA	10 mg/M ³

General hygiene considerations: When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.



9. Physical properties: (bulk material)

Form: grey powder

Melting Point: 1535°C (2795°F) .

Density: 2.5 g/cm³ at 20°C(68°F)

Vapor Pressure :not applicable

10. Stability and reactivity:

Reactivity: Stable under ordinary conditions of use and storage, under fire conditions will form carbon dioxide.

Hazardous Polymerization: Will not occur.

Incompatibilities: strong oxidizing agents.

11 Toxicological information:

Acute toxicity: expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Oral LD50 Rat 30g/Kg

Skin corrosion/irritation: Prolonged skin contact may cause temporary irritation.

Eye damage/eye irritation: Direct contact with eyes may cause temporary irritation.

Respiratory sensitization: Not a respiratory sensitizer.

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Page 3 of 3
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Germ cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: Suspected of causing cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity: Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7) 2B
Possibly carcinogenic to humans.

Reproductive toxicity: This product is not expected to cause reproductive or developmental effects.

Chronic effects: Prolonged inhalation may be harmful.

12 Ecological information:

General notes: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Aquatic ecotoxicity:

Iron Powder (CAS 7439-89-6)	Fish	LC50	Channel catfish (<i>Ictalurus punctatus</i>)	> 500 mg/l, 96 hours
Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)	Crustacea	EC50	Water flea (<i>Daphnia magna</i>)	> 1000 mg/l, 48 hours
	Fish	LC50	Mummichog (<i>Fundulus heteroclitus</i>)	> 1000 mg/l, 96 hours

Persistence/degradability: No data

Other adverse effects: No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13 Disposal considerations:

Disposal instructions: Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transportation information:

USA DOT Information

Shipping name: not regulated

IATA/IMDG

Shipping name not regulated

115. Regulatory information:

U.S. Federal regulations: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): not listed.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): not listed.

CERCLA Hazardous Substance List (40 CFR 302.4): not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA: Immediate hazard -No; Delayed hazard -Yes; Fire hazard -Yes; Pressure hazard-No; Reactivity hazard-No.

SARA 302 Extremely hazardous substance: not listed.

SARA 311/312 Hazardous Chemical: yes.

SARA 313 (TRI reporting): not regulated.

California Proposition 65:- Warning: This product contains a chemical known to the State of California to cause cancer, Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)

Massachusetts Right to Know: Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)

New Jersey Right to Know:- Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)

Pennsylvania Right to Know:- Titanium Dioxide (alternative CAS # 1317-70-0) (CAS 13463-67-7)

Canada Domestic Substances List (DSL) yes.

Canada Non-Domestic Substances List (NDSL) no.

China (IECSC) yes.

European inventory yes.

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information:

The information accumulated herein is believed to be accurate but does not purport to be all inclusive and shall be used only as a guide. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances with regard to proper safety precautions.

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