



SAFETY DATA SHEET

IMERYS

Revision date 16-Feb-2023

Revision Number 1

1. Identification

Product identifier

Product Name DiaFil 110

Other means of identification

Synonyms

- Natural Diatomaceous Earth
- Amorphous Silica
- Kieselguhr
- Diatomite

Recommended use of the chemical and restrictions on use

Recommended use Functional filler or filter aid in a variety of applications.

Restrictions on use Food ingredient.

Details of the supplier of the safety data sheet

Supplier Address

Imerys Filtration Minerals, Inc
100 Mansell Court East, Ste 300
Roswell, GA 30076 USA
+1-770-645-3300

Manufacturer Address

Imerys Filtration Minerals, Inc.
100 Front Street
Fernley, NV 89408 USA
+1-775-575-2536

Emergency telephone number

Company Phone Number +1-770-645-3300

Emergency Telephone CHEMTREC: +1-800-424-9300
CHEMTREC International Number: +1 703-741-5970

2. Hazard(s) identification

Classification

Specific target organ toxicity (repeated exposure)

Not classified

Appearance Powder
Label elements

Physical state Solid

Odor Odorless

None

Hazard statements

Precautionary Statements - Prevention

Do not breathe dusts or mists
 Do not eat, drink or smoke when using this product
 In case of inadequate ventilation wear respiratory protection

Precautionary Statements - Response

Get medical advice/attention if you feel unwell

Precautionary Statements - Storage

Store in a dry place. Store in a closed container
 Store in a well-ventilated place

Precautionary Statements - Disposal

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable

Other information

Repeated and prolonged exposure to large amounts of dust can cause lung injury (pneumoconiosis).

3. Composition/information on ingredients

Substance

Synonyms Natural Diatomaceous Earth. Amorphous Silica. Kieselguhr. Diatomite.

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
Diatomaceous Earth	61790-53-2	100	-	-

Composition Comments

The Environmental Protection Agency (EPA) has listed this product as a UVCB substance (Unknown or Variable Composition, complex reaction products or of biological materials).

4. First-aid measures

Description of first aid measures**General advice**

No acute or delayed symptoms are expected under normal conditions of use and with proper personal protective equipment (PPE). Do not breathe dust. Get medical attention if irritation or other symptoms occur.

Inhalation

Move victim to fresh air.

Eye contact

Rinse eyes. Keep eye wide open while rinsing.

Skin contact

Wash with soap and water. In the case of skin irritation or allergic reactions see a physician.

Ingestion

Not an expected route of exposure. Clean mouth with water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed**Symptoms**

No acute or delayed symptoms are expected under normal conditions of use and with proper personal protective equipment (PPE).

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the

	surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.
Specific hazards arising from the chemical	No information available.
Hazardous combustion products	None.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid generation of dust. Do not breathe dust. If respirator is required, use of a MSHA/OSHA/NIOSH/STPS approved respirator is recommended. Spilled materials may cause slippery conditions when wet. Care should be exercised when walking on spills on floors or concrete pads.
Other information	Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment	Keep out of drains, sewers, ditches and waterways.
Methods for cleaning up	Avoid dry sweeping and use water spraying or vacuum cleaning systems to prevent airborne dust generation. Vacuum, pump or scoop spilled material into containers for reclaiming or disposal. Do not discharge into drains, watercourses or onto the ground.

7. Handling and storage

Precautions for safe handling

Advice on safe handling	Avoid generation of dust. Do not breathe dust. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Product on floor when wetted will become slippery and may present a hazard; wear anti-slip boots.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.
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8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
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Diatomaceous Earth 61790-53-2	**	TWA: 20 mppcf TWA: (80)/(%) SiO ₂ mg/m ³ (vacated) TWA: 6 mg/m ³ Silica, amorphous <1% Crystalline silica : (80)/(%) SiO ₂ mg/m ³ TWA	-
Chemical name	Alberta	British Columbia	Ontario
Diatomaceous Earth 61790-53-2		TWA: 4 mg/m ³ TWA: 1.5 mg/m ³	TWA: 6 mg/m ³

Other information

** No TLV established. It is recommended that airborne concentrations be kept below 3 mg/m³ (respirable particles) and 10 mg/m³ (inhalable particles) for insoluble particles of low toxicity for which no TLV has been established. See Appendix B of the TLV booklet for guidelines.

Appropriate engineering controls**Engineering controls**

Minimize airborne dust generation. Ensure adequate ventilation, especially in confined areas. Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below specified exposure limits. Use proper respiratory and personal protective equipment. MSHA/OSHA/NIOSH/STPS approved respirator recommended.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Hand protection

Wear suitable gloves. Appropriate protection (e.g. gloves, barrier cream) is recommended for workers who suffer from dermatitis or sensitive skin.

Skin and body protection

Wear suitable protective clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Environmental exposure controls

Avoid creating dust. Do not allow into any sewer, on the ground or into any body of water.

General hygiene considerations

Do not breathe dust. Wash hands before breaks and immediately after handling the product. Barrier creams may help to protect the exposed areas of skin. Do not eat, drink or smoke when using this product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Powder
Color	beige
Odor	Odorless
Odor threshold	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	6 - 10	10% slurry in water
Melting point / freezing point	> 1710 °C / 3110 °F	
Initial boiling point and boiling range	> 2230 °C / 4046 °F	
Flash point	No data available	Not applicable
Evaporation rate	No data available	Not applicable
Flammability	No data available	Not flammable
Flammability Limit in Air		Non-explosive
Upper flammability or explosive limits	No data available	

Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	Not applicable
Relative vapor density	No data available	Not applicable
Relative density	2.3	g/cm ³
Water solubility	Insoluble in water	
Solubility in other solvents	No data available	
Partition coefficient	No data available	Not applicable
Autoignition temperature	No data available	Not applicable
Decomposition temperature		Not applicable
Kinematic viscosity	No data available	Not applicable
Dynamic viscosity	No data available	Not applicable

Other information

Explosive properties	No explosive properties predicted from the structure.	
Oxidizing properties	No oxidizing properties predicted from the structure.	
Softening point	No information available	
Molecular weight	No information available	
VOC content	Not applicable	
Liquid Density	No information available	
Bulk density	No information available	

10. Stability and reactivity

Reactivity	Stable.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	None under normal processing.
Conditions to avoid	Avoid contact with hydrofluoric acid (HF).
Incompatible materials	Hydrofluoric acid.
Hazardous decomposition products	None under normal use conditions. Silicon tetrafluoride (SiF ₄) will form upon contact with hydrofluoric acid.

11. Toxicological information**Information on likely routes of exposure**

Inhalation	Dust in high concentrations may irritate the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing pneumoconiosis.
Eye contact	May cause irritation.
Skin contact	Prolonged or repeated contact may dry skin and cause irritation.
Ingestion	May cause irritation. Not an expected route of exposure.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Unknown.
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Acute toxicity

Numerical measures of toxicity	No information available
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Prolonged contact may cause dryness of the skin.
Serious eye damage/eye irritation	Particles in the eyes may cause irritation and smarting.
Respiratory or skin sensitization	Repeated or prolonged contact may cause allergic reactions in very susceptible persons. Dust in high concentrations may irritate the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing pneumoconiosis.
Germ cell mutagenicity	None known.
Carcinogenicity	See section 2 for classified hazards based on component information.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Diatomaceous Earth 61790-53-2	-	Group 3	-	X

Legend**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Target organ effects	Lungs.
Aspiration hazard	Not classified.

12. Ecological information

Ecotoxicity	The product components are not classified as environmentally hazardous. Large or frequent spills may have hazardous effects on the environment.
Persistence and degradability	Not readily biodegradable.
Bioaccumulation	None known.
Mobility in soil	Not expected to adsorb on soil.
Other adverse effects	No information available.

13. Disposal considerations**Disposal methods**

Waste from residues/unused products	Dispose of contents/ container to an approved landfill. Dispose of in accordance with local regulations.
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Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT Not regulated
TDG Not regulated
MEX Not regulated
ICAO (air) Not regulated
IATA Not regulated
IMDG Not regulated
RID Not regulated
ADR Not regulated
ADN Not regulated

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA The product is a naturally occurring mineral and is included in the scope of the TSCA inventory per 40 CFR 710.4(b).

Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active designation
Diatomaceous Earth	61790-53-2	Present	Active

DSL/NDSL Listed on NDSL. Exempt from Canadian NDSL New Substances Notification Regulations because it is defined as naturally occurring, and either unprocessed or processed only by manual, mechanical or gravitational means; by dissolution in water; by flotation; or by heating solely to remove water; or extracted from air by any means.

EINECS/ELINCS Complies.
ENCS Listed.
IECSC Listed.
KECL Listed.
PICCS Listed.
AIIC Listed.
NZIoC Listed.
TSCI Listed.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korea Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Minnesota	Pennsylvania	Rhode Island
Diatomaceous Earth 61790-53-2	X	-	X	-	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA	Health hazards 1	Flammability 0	Instability 0	Special hazards -
HMIS	Health hazards 1	Flammability 0	Physical hazards 0	Personal protection E

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 16-Feb-2023

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet