MATERION

SAFETY DATA SHEET

1. Identification

Product identifier PD-144-M

Other means of identification

SDS number 1LT **Materion Code** 11 T

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Materion Electronic Materials

Address 6070 Parkland Blvd

Mayfield Heights, Ohio 44124

United States

Telephone 1.216.383.4019

E-mail Materion-PS@materion.com **Product Stewardship Director** Contact person

Emergency phone number See Section 16

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2

> Serious eye damage/eye irritation Category 2A

Specific target organ toxicity, single exposure Category 3 respiratory tract irritation

Environmental hazards Not classified. OSHA defined hazards Not classified.

Label elements



Signal word Warning

Hazard statement Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause

respiratory irritation.

Precautionary statement

Prevention Minimize dust generation and accumulation. Avoid breathing dust/fume. Wash thoroughly after

> handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse

cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off

For further information, please contact the Product Stewardship Department at +1.800.862.4118.

contaminated clothing and wash it before reuse.

Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Storage

Keep container tightly closed. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise

Supplemental information

classified (HNOC)

None known.

Material name: PD-144-M SDS US

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	<u></u>	
PD-144-M			100	

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell. If breathing has stopped, perform artificial respiration

and obtain medical help.

Skin contact Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get

medical advice/attention. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Rinse thoroughly with plenty of

water for at least 15 minutes and consult a physician. Remove contact lenses, if present and easy

to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur. Never give anything by mouth to an

unconscious person. Consult a physician.

Most important symptoms/effects, acute and

symptoms/effects, acute and delayed

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General informationIf you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

During fire, gases hazardous to health may be formed.

5. Fire-fighting measures

Suitable extinguishing media Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media None known.

Specific hazards arising from

the chemical
Special protective equipment

and precautions for firefighters

Fire fighting

equipment/instructions
Specific methods

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Use water spray to cool unopened containers. No unusual fire or explosion hazards noted.

nethodsUse standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Large Spills: Stop the flow of material, if this is without risk. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

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

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Handling and storage

Precautions for safe handling Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid contact with eyes,

skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment.

Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store away from incompatible materials (see

Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits This substance has no PEL, TLV, or other recommended exposure limit.

Biological limit values No biological exposure limits noted for the ingredient(s).

Exposure guidelines This product should be handled as OSHA Particulates, not otherwise regulated (PNOR). The time

weighted average workplace exposure limit for PNOR is 15 mg/m3 total; 5 mg/m3 respirable.

Appropriate engineering controls Good general ventilation should be used. Ventilation rates should be matched to conditions. If

> applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety

shower.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations 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 and chemical properties

Appearance Solid. Physical state Solid. **Form** Solid. Color White.

Odor Not available. Odor threshold Not available. На Not available. Not available. Melting point/freezing point Initial boiling point and boiling

range

Not available.

Flash point Not available. **Evaporation rate** Not available. Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available. Explosive limit - upper (%) Not available. Vapor pressure Not available. Vapor density Not available. Relative density Not available.

Material name: PD-144-M SDS US Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Explosive properties Not explosive.

Molecular formula LiAlO2

Oxidizing properties Not oxidizing.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid None known. Contact with incompatible materials.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not known.

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/eye

irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization Causes skin irritation.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity

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

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Specific target organ toxicity -

single exposure

May cause respiratory irritation.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

12. Ecological information

Ecotoxicity 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.

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

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 instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulationsDispose in accordance with all applicable regulations.

Hazardous waste code

The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)This substance is on the TSCA inventory and is designated "active".

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

Material name: PD-144-M SDS US

SARA 311/312 Hazardous

chemical

Yes

Classified hazard

Skin corrosion or irritation

categories Serious eye damage or eye irritation

Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

16. Other information, including date of preparation or last revision

Issue date 10-28-2022 **Revision date** 06-11-2024

Version # 03

Further information Transportation Emergency

> Call Chemtrec at: US: 800.424.9300

International: 703.741.5970 Spain: 900.868.538

Switzerland: 0800.564.402

Chemtrec's toll free, mobile-enabled number in Germany – 0800 1817059

South Korea Toll-free Number - 080-880-0468

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statutes and regulations.

Revision information Hazard(s) identification: Hazard statement

> Hazard(s) identification: Disposal Hazard(s) identification: Prevention Hazard(s) identification: Response Hazard(s) identification: Storage

Handling and storage: Conditions for safe storage, including any incompatibilities

Stability and reactivity: Conditions to avoid Regulatory information: California Proposition 65

Other information, including date of preparation or last revision: References Other information, including date of preparation or last revision: Further information Other information, including date of preparation or last revision: List of abbreviations

Material name: PD-144-M SDS US