| Ashland always solving | Page: 1 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 08/18/2022 |
| | Print Date: 10/27/2023 |
| | SDS Number: 000000303961 |
| Viatel™ DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) | Version: 1.0 |
| ™ Trademark, Ashland or its subsidiaries, registered in various countries 952401 | |

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

| Trade name Description | ViateI[™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) Poly(D,L-lactide-co-glycolide) (PLGA) ™ Trademark, Ashland or its subsidiaries, registered in various countries | |
|---|---|--|
| Substance name | Poly D,L-lactide-co-glycolide (PLGA) Co polymer | |
| Substance No. CAS-No. | 26780-50-7 | |
| Relevant identified uses of the substance or mixture and uses advised against | | |

Rel Recommended use : Pharmaceutical

| Details of the supplier of the safety data sheet | Emergency telephone number 1-800-ASHLAND (1-800-274-5263) |
|--|--|
| Ashland P.O. Box 2219 | Regulatory information |
| Columbus, OH 43216 United States of America (USA) | 1-614-790-3333 (customer service) |
| 1-614-790-3333 (USA) | Product Information 1-614-790-3333 (USA) |
| EHSProductSafety@ashland.com | |

SECTION 2. HAZARDS IDENTIFICATION

| GHS Classification Combustible Dust | : |
|--|--|
| GHS label elements Signal Word | : Warning |
| Hazard Statements | : May form combustible dust concentrations in air. |
| Other hazards None known. | |

| Ashland always solving | Page: 2 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 08/18/2022 |
| | Print Date: 10/27/2023 |
| | SDS Number: 000000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) [™] Trademark, Ashland or its subsidiaries, registered in various countries 952401 | Version: 1.0 |

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Substance

Hazardous components No hazardous ingredients

SECTION 4. FIRST AID MEASURES

| General advice | Do not leave the victim unattended. | |
|-------------------------|---|----|
| If inhaled | If unconscious, place in recovery position and seek medica advice. If symptoms persist, call a physician. | al |
| In case of skin contact | Wash off with soap and plenty of water. | |
| In case of eye contact | Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist. | |
| If swallowed | Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. | |
| Notes to physician | Treat symptomatically. | |

SECTION 5. FIREFIGHTING MEASURES

| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. | |
|--------------------------------|--|--|
| Hazardous combustion products | : No hazardous combustion products are known | |
| Specific extinguishing methods | : | |
| Further information | : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. | |

| Ashland always solving | Page: 3 |
|--|---|
| SAFETY DATA SHEET | Revision Date: 08/18/2022 |
| | Print Date: 10/27/2023 |
| | SDS Number: 000000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) [™] Trademark, Ashland or its subsidiaries, registered in various countries 952401 | Version: 1.0 |
| Special protective equipment : Wear self-cont for firefighters necessary. | ained breathing apparatus for firefighting if |

necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions, protective equipment and emergency procedures | se personal protective equipment. void dust formation. | |
|---|---|---|
| Environmental precautions | revent further leakage or spillage if safe t the product contaminates rivers and lake spective authorities. | |
| Methods and materials for containment and cleaning up | ck up and arrange disposal without creat weep up and shovel. eep in suitable, closed containers for disp | 0 |

SECTION 7. HANDLING AND STORAGE

| Advice on protection against fire and explosion | : | Provide appropriate exhaust ventilation at places where dust is formed. |
|---|---|--|
| Advice on safe handling | : | For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. |
| Conditions for safe storage | : | Electrical installations / working materials must comply with the technological safety standards. |
| Materials to avoid | : | No materials to be especially mentioned. |
| Further information on storage stability | : | When stored in the original packaging at low temperatures (- 15°C), recommended shelf life is three years. |

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

| Ashlaj always solv | | T ^M | | Page: 4 |
|--|---------|--|-----------------------|---|
| SAFETY DATA SHEET | | | | Revision Date: 08/18/2022 |
| | | | | Print Date: 10/27/2023 |
| | | | | SDS Number: 000000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lac (PLGA) [™] Trademark, Ashland or its subs in various countries 952401 | sidiari | | | Version: 1.0 |
| Personal protective equipm Respiratory protection | ient | approved filter combination. Where concen unknown, or a | with trati carl | t or aerosol formation use respirator with an hin the capabilities of the respirator/filter ons are above recommended limits or are tridge type respirator is not adequate, wear e supplied-air respirator. |
| Hand protection Material Break through time Glove thickness | | butyl-rubber 480 min > 0.5 mm | | |
| Remarks | : | protective glov should be disc | ve pi arde | nrough time can be obtained from the roducer and this has to be observed. Gloves ed and replaced if there is any indication of emical breakthrough. |
| Eye protection | : | Safety glasses | 6 | |
| Skin and body protection | : | Work uniform | or la | aboratory coat. |
| Hygiene measures | : | General indust | trial | hygiene practice. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | : granules |
|------------------------------|-------------------------|
| Physical state | : solid |
| Colour | : tan |
| Odour | : odourless |
| Odour Threshold | : Not applicable |
| рН | : Not applicable |
| Melting point/freezing point | : not determined |
| Boiling point/boiling range | : not determined |
| Flash point | : not determined |
| Evaporation rate | : Not applicable |
| Upper explosion limit | : Upper explosion limit |

| Ashlan always solvin | g | Page: 5 |
|--|---|---------------------------|
| SAFETY DATA SHEET | | Revision Date: 08/18/2022 |
| | | Print Date: 10/27/2023 |
| | | SDS Number: 000000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactid | e-co-glycolide) | Version: 1.0 |
| (PLGA) ™ Trademark, Ashland or its subsidin various countries 952401 | iaries, registered | |
| Lower explosion limit | not determined : Lower explosion not determined | on limit |
| Vapour pressure | : Not applicable | |
| Relative vapour density | : Not applicable | |
| Relative density | : No data availa | ble |
| Density | : not determined | d |
| Solubility(ies) Water solubility | : not determined | d |
| Solubility in other solvents | : No data availa | ble |
| Partition coefficient: n- octanol/water | : not determined | d |
| Thermal decomposition | : No data availa | ble |
| Viscosity Viscosity, dynamic | : Not applicable | |
| Viscosity, kinematic | : Not applicable | |
| Oxidizing properties | : Not applicable | |
| | | |

SECTION 10. STABILITY AND REACTIVITY

| Reactivity | : No dangerous reaction known under conditions of normal use. |
|------------------------------------|---|
| Chemical stability | : Stable under normal conditions. |
| Possibility of hazardous reactions | : Dust may form explosive mixture in air. |
| Conditions to avoid | : Protect from frost, heat and sunlight. |
| Incompatible materials | : Strong bases Oxidizing agents Strong acids |
| Hazardous decomposition products | Carbon dioxide (CO2) Carbon monoxide |

| Ashland always solving | Page: 6 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 08/18/2022 |
| | Print Date: 10/27/2023 |
| | SDS Number: 00000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) [™] Trademark, Ashland or its subsidiaries, registered in various countries 952401 | Version: 1.0 |

SECTION 11. TOXICOLOGICAL INFORMATION

| Information on likely routes of | : | Inhalation |
|---------------------------------|---|--------------|
| exposure | | Eye contact |
| | | Skin contact |
| | | Ingestion |

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Unlikely to cause eye irritation or injury., Product dust may be irritating to eyes, skin and respiratory system.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information. Germ cell mutagenicity Not classified based on available information. Carcinogenicity Not classified based on available information. **Reproductive toxicity** Not classified based on available information. STOT - single exposure Not classified based on available information. STOT - repeated exposure Not classified based on available information. Aspiration toxicity Not classified based on available information. **Further information** Product: Remarks: No data available **Carcinogenicity:** IARC No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. NTP No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen

| Ashland always solving | Page: 7 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 08/18/2022 |
| | Print Date: 10/27/2023 |
| | SDS Number: 000000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) [™] Trademark, Ashland or its subsidiaries, registered in various countries 952401 | Version: 1.0 |

by NTP.

SECTION 12. ECOLOGICAL INFORMATION

| Ecotoxicity <u>Product:</u> Ecotoxicology Assessment Short-term (acute) aquatic hazard | : Not classified based on available information. |
|---|--|
| Long-term (chronic) aquatic hazard | : Not classified based on available information. |
| Persistence and degradabili No data available Bioaccumulative potential No data available Mobility in soil No data available Other adverse effects No data available Product: | ty |
| Additional ecological information | : No data available |

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

| Contaminated packaging | : Empty containers should be taken to an approved waste |
|------------------------|---|
| | handling site for recycling or disposal. |

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

| ID NUMBER | PROPER SHIPPING NAME | *HAZARD | SUBSIDIARY | PACKING | MARINE |
|-----------|----------------------|---------|------------|---------|-------------|
| | | CLASS | HAZARDS | GROUP | POLLUTANT / |
| | | | | | LTD. QTY. |

MX_DG

| Not dangerous goods |
|---------------------|
| |

| Ashland always solving | Page: 8 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 08/18/2022 |
| | Print Date: 10/27/2023 |
| | SDS Number: 00000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) [™] Trademark, Ashland or its subsidiaries, registered in various countries 952401 | Version: 1.0 |

INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

TDG_INWT_C

Not dangerous goods

TDG_RAIL_C

Not dangerous goods

TDG_ROAD_C

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

CFR_RAIL_C

Not dangerous goods

U.S. DOT - ROAD

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

| Marine pollutant | no |
|------------------|----|
| | |

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

| Ashland always solving | Page: 9 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 08/18/2022 |
| | Print Date: 10/27/2023 |
| | SDS Number: 000000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) [™] Trademark, Ashland or its subsidiaries, registered in various countries 952401 | Version: 1.0 |

SECTION 15. REGULATORY INFORMATION

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

| SARA 311/312 Hazards | Combustible Dust | |
|--|---|--|
| SARA 302 | This material does not contain any components with a section 302 EHS TPQ. | |
| SARA 313 | This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. | |
| Pennsylvania Right To Know 3,6-dimethyl-1,4 with 1,4-dioxand | 1-dioxane-2,5-dione,polymer 26780-50-7 e-2,5-dione | |
| New Jersey Right To Know | | |

3,6-dimethyl-1,4-dioxane-2,5-dione,polymer 26780-50-7 with 1,4-dioxane-2,5-dione

Poly[3,6-dimehthyl-1,4-dioxane-2,5-dione] 97-73-4

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

| The components of this product are reported in the following inventories: | | |
|---|--|--|
| TCSI | : Not in compliance with the inventory | |

| Ashland always solving | Page: 10 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 08/18/2022 |
| | Print Date: 10/27/2023 |
| | SDS Number: 000000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) [™] Trademark, Ashland or its subsidiaries, registered in various countries 952401 | Version: 1.0 |

| AIIC | : Not in compliance with the inventory |
|-------|---|
| DSL | : This product contains the following components that are not on the Canadian DSL nor NDSL. |
| ENCS | : Not in compliance with the inventory |
| ISHL | : Not in compliance with the inventory |
| PICCS | : Not in compliance with the inventory |
| KECI | : Exempt |
| NZIOC | : Not in compliance with the inventory |
| TSCA | : This product is regulated under the United States Food and Drug Act (FDA). |

Inventories

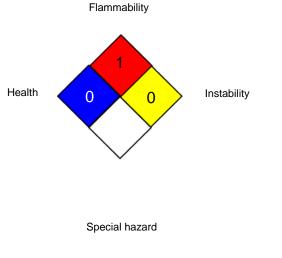
AIIC (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TECI (Thailand), TSCA (USA)
Other regulations
US. Drug Enforcement Not applicable
Administration (DEA) Listed
Precursor and Essential
Chemicals (21 CFR 1310)

SECTION 16. OTHER INFORMATION

Further information

| Ashland always solving | Page: 11 |
|--|---------------------------|
| SAFETY DATA SHEET | Revision Date: 08/18/2022 |
| | Print Date: 10/27/2023 |
| | SDS Number: 000000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) [™] Trademark, Ashland or its subsidiaries, registered in various countries 952401 | Version: 1.0 |

NFPA 704:



HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of H-Statements

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL -Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS -Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA -National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate;

| Ashland always solving | | Page: 12 |
|---|--|---------------------------|
| SAFETY DATA SHEET | | Revision Date: 08/18/2022 |
| | | Print Date: 10/27/2023 |
| | | SDS Number: 000000303961 |
| Viatel [™] DLG 5002 A Poly(D,L-lactide-co-glycolide) (PLGA) [™] Trademark, Ashland or its subsidiaries, registered in various countries 952401 | | Version: 1.0 |
| NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self- Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand | | |

This sds has been prepared by Ashland. (http://www.ashland.com)

vPvB - Very Persistent and Very Bioaccumulative

| Sources of key data used to compile the Safety Data Sheet | Ashland internal data including own and sponsored test reports European Union Law with content from the Official Journal of the European Union. European Chemicals Agency; the EU authority implementing the EU's chemicals legislation for companies. The German Water Hazard Classes. ReachCentrum; a series of support services to help comply with REACH regulations. The European Commission; proposing legislation, administering and implementing EU policies, and enforcing EU law. The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport. Cefic, the European Chemical Industry Council. ESIS European Chemical Substances Information System |
|---|---|
| | |

Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods;

Revision Date

: 08/18/2022

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. US / EN