

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

SECTION 1. IDENTIFICATION

Product name : ULTIMATE DEEP SEAL VACUUM PUMP

Manufacturer or supplier's details

Company name of supplier : APPION INC
2800 S Tejon St
Englewood, CO 80110-1208

Telephone : 3039371580
Telefax : 3039371599

Emergency telephone number :

Recommended use of the chemical and restrictions on use

Recommended use : Lubricating oil

Restrictions on use : Restricted to professional users.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Mineral oil.

Components

| Chemical name | CAS-No. | Concentration (% w/w) |
|--------------------------------------------------------|------------|-------------------------------|
| Distillates (petroleum), hydrotreated heavy paraffinic | 64742-54-7 | Trade secret (>= 80 - <= 100) |

Actual concentration is withheld as a trade secret

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

SECTION 4. FIRST AID MEASURES

- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
Keep patient warm and at rest.
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : Remove contaminated clothing. If irritation develops, get medical attention.
In case of contact, immediately flush skin with plenty of water.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
If eye irritation persists, consult a specialist.
- If swallowed : Move the victim to fresh air.
Do NOT induce vomiting.
Rinse mouth with water.
- Most important symptoms and effects, both acute and delayed : No information available.
None known.
- Notes to physician : No information available.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : High volume water jet
- Hazardous combustion products : Carbon oxides
- Further information : Standard procedure for chemical fires.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
Exposure to decomposition products may be a hazard to health.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Use personal protective equipment.
Refer to protective measures listed in sections 7 and 8.

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

- Environmental precautions : Try to prevent the material from entering drains or water courses.
Prevent further leakage or spillage if safe to do so.
Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Wash hands and face before breaks and immediately after handling the product.
- Conditions for safe storage : Store in original container.
Keep container closed when not in use.
Keep in a dry, cool and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Store in accordance with the particular national regulations.
Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|--------------------------------------------------------|------------|------------------------------------|------------------------------------------------|-----------|
| Distillates (petroleum), hydrotreated heavy paraffinic | 64742-54-7 | TWA (Mist) | 5 mg/m ³ | OSHA Z-1 |
| | | TWA (Inhalable particulate matter) | 5 mg/m ³ | ACGIH |
| | | TWA (Mist) | 5 mg/m ³ | OSHA P0 |
| | | TWA (Mist) | 5 mg/m ³ | NIOSH REL |
| | | ST (Mist) | 10 mg/m ³ | NIOSH REL |

Engineering measures : none

Personal protective equipment

Respiratory protection : Not required; except in case of aerosol formation.

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|----------------|------------------------------|----------------------------------------------------------|---------------------------|
| Version 1.0 | Revision Date: 10/15/2021 | Date of last issue: - Date of first issue: 10/15/2021 | Print Date: 01/23/2023 |
|----------------|------------------------------|----------------------------------------------------------|---------------------------|

Filter type : Filter type A-P

Hand protection
Material : Nitrile rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : For prolonged or repeated contact use protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.

Eye protection : Safety glasses with side-shields

Protective measures : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Colour : colourless

Odour : characteristic

Odour Threshold : No data available

pH : Not applicable

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : ≥ 430 °F / 221 °C
Method: open cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

Self-ignition : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : < 0.001 hPa (68 °F / 20 °C)

Relative vapour density : No data available

Relative density : 0.872 (68 °F / 20 °C)
Reference substance: Water
The value is calculated

Bulk density : No data available

Solubility(ies)
Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity
Viscosity, dynamic : No data available

Viscosity, kinematic : 70 mm²/s (104 °F / 40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

Sublimation point : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No hazards to be specially mentioned.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

Conditions to avoid : No conditions to be specially mentioned.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition products : No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Remarks: This information is not available.

Acute inhalation toxicity : Remarks: This information is not available.

Acute dermal toxicity : Remarks: This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg
Method: OECD Test Guideline 402

Skin corrosion/irritation

Product:

Remarks : This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : yes

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

Serious eye damage/eye irritation

Product:

Remarks : This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Rabbit
Result : No eye irritation
Assessment : No eye irritation
Method : OECD Test Guideline 405
GLP : yes

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Species : Guinea pig
Assessment : Does not cause skin sensitisation.
Method : OECD Test Guideline 406
Result : Does not cause skin sensitisation.
GLP : yes

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

Product:

Remarks : No data available

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Carcinogenicity - Assessment : Not classifiable as a human carcinogen.

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.

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

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 by NTP.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Reproductive toxicity - Assessment : - Fertility -
No toxicity to reproduction

Repeated dose toxicity

Product:

Remarks : This information is not available.

Aspiration toxicity

Product:

This information is not available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

No aspiration toxicity classification

Further information

Product:

Remarks : Information given is based on data on the components and the toxicology of similar products.

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203
GLP: yes

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 48 h
Test Type: Immobilization
Method: OECD Test Guideline 202
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 10 mg/l
Exposure time: 21 d
Test Type: semi-static test
Method: OECD Test Guideline 211
GLP: yes

Persistence and degradability

Product:

Biodegradability : Remarks: No data available

Physico-chemical removability : Remarks: No data available

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Biodegradability : aerobic
Inoculum: activated sludge

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

Result: Not rapidly biodegradable
Biodegradation: 3 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Partition coefficient: n-octanol/water : log Pow: > 2

Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environmental compartments : Remarks: No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No information on ecology is available.

Components:

Distillates (petroleum), hydrotreated heavy paraffinic:

Results of PBT and vPvB assessment : Non-classified vPvB substance Non-classified PBT substance

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues : The product should not be allowed to enter drains, water courses or the soil.
- Contaminated packaging : Packaging that is not properly emptied must be disposed of as the unused product. Dispose of waste product or used containers according to local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

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 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards



ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

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.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307
This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know

Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

New York City Hazardous Substances

Distillates (petroleum), hydrotreated middle 64742-46-7

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.

California Permissible Exposure Limits for Chemical Contaminants

Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7

TSCA list

No substances are subject to a Significant New Use Rule.

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

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

SECTION 16. OTHER INFORMATION

Further information

Full text of other abbreviations

| | | |
|-----------------|---|-------------------------------------------------------------------------------------------|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| NIOSH REL | : | USA. NIOSH Recommended Exposure Limits |
| OSHA P0 | : | USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| OSHA Z-1 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| NIOSH REL / TWA | : | Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| NIOSH REL / ST | : | STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday |
| OSHA P0 / TWA | : | 8-hour time weighted average |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |

AIIIC - 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; 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 Sub-

ULTIMATE DEEP SEAL VACUUM PUMP

| | | | |
|---------|----------------|---------------------------------|-------------|
| Version | Revision Date: | Date of last issue: - | Print Date: |
| 1.0 | 10/15/2021 | Date of first issue: 10/15/2021 | 01/23/2023 |

stance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 10/15/2021

This safety data sheet applies only to products as originally packed and labelled. The information contained therein may not be reproduced or modified without our express written permission. Any forwarding of this document is only permitted to the extent required by law. Any further, in particular public, dissemination of the safety data sheet (e.g. as a document for download from the Internet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.