

SAFETY DATA SHEET

Revision Date: 06/17/2021

Print Date: 05/18/2022

SDS Number: R0189266

Version: 1.6

Chargepac™ 12 COAGULANT
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 registered in various countries
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SECTION 1. IDENTIFICATION

Product identifier

Trade name : Chargepac™ 12
 COAGULANT
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 registered in various countries

Recommended use of the chemical and restrictions on use

| | |
|---|--|
| Details of the supplier of the safety data sheet Solenis LLC 500 Hercules Road Wilmington, Delaware 19808 United States of America (USA) RegulatoryRequestsNA@solenis.com | Emergency telephone number 1-844-SOLENIS (844-765-3647) Product Information Contact your local Solenis representative |
|---|--|

SECTION 2. HAZARDS IDENTIFICATION

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

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

GHS label elements

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

Other hazards

Material can create slippery conditions.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

| Chemical name | CAS-No. | Classification | Concentration (%) |
|---------------|--------------|--|-------------------|
| ALUMINUM SALT | Trade Secret | This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom | >= 20 - < 30 |

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Actual concentration is withheld as a trade secret

2012).

SECTION 4. FIRST AID MEASURES

- | | |
|---|---|
| General advice | : No hazards which require special first aid measures. |
| If inhaled | : If breathed in, move person into fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician. |
| In case of skin contact | : First aid is not normally required. However, it is recommended that exposed areas be cleaned by washing with soap and water. |
| In case of eye contact | : Remove contact lenses. Protect unharmed eye. |
| If swallowed | : Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. |
| Most important symptoms and effects, both acute and delayed | : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea) irritation (nose, throat, airways) |
| Notes to physician | : No hazards which require special first aid measures. |

SECTION 5. FIREFIGHTING MEASURES

- | | |
|--------------------------------------|---|
| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray Foam Carbon dioxide (CO ₂) Dry chemical |
| Specific hazards during firefighting | : Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazardous combustion products | : Carbon monoxide Carbon dioxide (CO ₂) nitrogen oxides (NO _x) Chlorine compounds |

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aluminum oxides

- | | |
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| Specific extinguishing methods | : Product is compatible with standard fire-fighting agents. |
| Further information | : Material can create slippery conditions. Water may cause extremely slippery conditions. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |
| Special protective equipment for firefighters | : In the event of fire, wear self-contained breathing apparatus. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | |
|---|--|
| Personal precautions, protective equipment and emergency procedures | : Material can create slippery conditions. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed. Comply with all applicable federal, state, and local regulations. |
| Environmental precautions | : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : Keep in suitable, closed containers for disposal. |

SECTION 7. HANDLING AND STORAGE

- | | |
|---|--|
| Advice on protection against fire and explosion | : Normal measures for preventive fire protection. |
| Advice on safe handling | : Avoid spillage on floor as the product can become very slippery. Smoking, eating and drinking should be prohibited in the application area. For personal protection see section 8. |
| Conditions for safe storage | : Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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 | : No decomposition if stored and applied as directed. |

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---------------|--------------|-------------------------------------|---|-----------|
| ALUMINUM SALT | Trade Secret | TWA | 2 mg/m ³ (Aluminium) | OSHA P0 |
| | | TWA | 2 mg/m ³ (Aluminium) | NIOSH REL |

Engineering measures

- : General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, 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.

Personal protective equipment

- | | |
|--------------------------|--|
| Respiratory protection | : No personal respiratory protective equipment normally required. |
| Eye protection | : Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed into eyes. |
| Skin and body protection | : Wear as appropriate: Safety shoes Wear resistant gloves (consult your safety equipment supplier). |
| Hygiene measures | : General industrial hygiene practice. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|-----------------|---------------------|
| Appearance | : liquid |
| Colour | : light yellow |
| Odour | : No data available |
| Odour Threshold | : No data available |
| pH | : 3.2 |

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| | | |
|--|---|---|
| Melting point/freezing point | : | No data available |
| Boiling point/boiling range | : | 212 °F / 100 °C (1,013.333333 hPa) Calculated Phase Transition Liquid/Gas |
| Flash point | : | Not applicable |
| Evaporation rate | : | > 1 Ethyl Ether |
| Flammability (solid, gas) | : | No data available |
| 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 | : | 23.333333 hPa (68 °F / 20 °C) Calculated Vapor Pressure |
| Relative vapour density | : | > 1 AIR=1 |
| Relative density | : | No data available |
| Density | : | ca. 1.20 g/cm3 |
| Solubility(ies) | | |
| Water solubility | : | No data available |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity | | |
| Viscosity, dynamic | : | No data available |
| Viscosity, kinematic | : | No data available |
| Oxidizing properties | : | No data available |

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

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| | |
|------------------------------------|---|
| Chemical stability | : Stable under recommended storage conditions. |
| Possibility of hazardous reactions | : Product will not undergo hazardous polymerization. |
| Conditions to avoid | : Keep away from heat, flame, sparks and other ignition sources. excessive heat Freezing temperatures. |
| Incompatible materials | : aluminum Copper Iron Strong bases strong mineral acids Strong oxidizing agents |
| Hazardous decomposition products | : Carbon monoxide Carbon dioxide (CO ₂) Nitrogen oxides (NO _x) aluminum oxides chlorine compounds |

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Not classified based on available information.

Components:**ALUMINUM SALT:**

Acute oral toxicity : LD50 (Rat, female): 9,187 mg/kg

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg
Assessment: No adverse effect has been observed in acute dermal toxicity tests.**Skin corrosion/irritation**

Not classified based on available information.

Components:**ALUMINUM SALT:**

Result : Not irritating to skin

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks : Unlikely to cause eye irritation or injury.

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Components:**ALUMINUM SALT:**

Result : Mildly irritating to eyes

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.

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 by NTP.

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

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity****Product:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 1.48 mg/l

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Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.48 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD Test Guideline 202

Ecotoxicology Assessment

Acute aquatic toxicity : Acute aquatic toxicity Category 2; Toxic to aquatic life.
Acute aquatic toxicity Category 2; Toxic to aquatic life.

Chronic aquatic toxicity : Not classified based on available information.

Components:

ALUMINUM SALT:

Toxicity to fish : (Danio rerio (zebra fish)): 186 mg/l
Exposure time: 96 h
Test Type: static test

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 56.48 mg/l
Exposure time: 7 d

Persistence and degradability

Product:

Biochemical Oxygen Demand (BOD) : Biochemical oxygen demand within 5 days
170,000 mg/l
Remarks: Based on a similar product formulation.

Chemical Oxygen Demand (COD) : 293,800 mg/l
Remarks: Based on a similar product formulation.

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

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SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.

The product should not be allowed to enter drains, water courses or the soil.

Contaminated packaging

: Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION**International Regulations****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

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION**EPCRA - Emergency Planning and Community Right-to-Know Act****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

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.

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California Prop. 65

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

The components of this product are reported in the following inventories:

| | |
|-------|--|
| TCSI | : On the inventory, or in compliance with the inventory |
| TSCA | : All substances listed as active on the TSCA inventory |
| AIIC | : On the inventory, or in compliance with the inventory |
| DSL | : All components of this product are on the Canadian DSL |
| ENCS | : On the inventory, or in compliance with the inventory |
| KECI | : On the inventory, or in compliance with the inventory |
| PICCS | : On the inventory, or in compliance with the inventory |
| IECSC | : On the inventory, or in compliance with the inventory |

TSCA list

No substances are subject to a Significant New Use Rule.

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

SECTION 16. OTHER INFORMATION

Further information

Revision Date : 06/17/2021

Full text of other abbreviations

| | |
|-----------------|---|
| NIOSH REL | : USA. NIOSH Recommended Exposure Limits |
| OSHA P0 | : USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000 |
| NIOSH REL / TWA | : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| OSHA P0 / TWA | : 8-hour time weighted average |

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

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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 Substance 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

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

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. This SDS has been prepared by the Solenis Environmental Health and Safety Department.

US / EN