

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

1 Identification

- **Product identifier**
- **Trade name:** Pexalyn® SR
- **Product Description** synthetic resin
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Tackifier resin for hot melt adhesives
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Pinova, Inc.
2801 Cook Street
Brunswick, Georgia, USA 31520
MSDS@pinovasolutions.com
- **Information department:**
Pinova, Inc. - Regulatory Affairs Department
msds@pinovasolutions.com
- **Emergency telephone number:**
Within USA and Canada: 1-800-CHEMTREC (424-9300)
Outside the USA and Canada: 1-703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**
Combustible Dust May form combustible dust concentrations in air.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
- **Information concerning particular hazards for human and environment:**
WARNING!
Static charges generated by emptying package in or near flammable vapors may cause flash fire. May form flammable dust-air mixtures.
May cause eye irritation by mechanical abrasion.
May cause skin irritation by mechanical abrasion.
Inhalation may cause respiratory tract irritation.
May cause allergic skin reaction (sensitization) in susceptible individuals.
Surfaces subject to spills may become slippery.
POTENTIAL HEALTH EFFECTS
Prolonged exposure to smoke or fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing, or breathing difficulty. Repeated exposure may lead to respiratory sensitization (asthma) in susceptible individuals.
GENERAL HYGIENIC PRACTICES - Avoid contact with eyes, skin, and clothing. Avoid breathing dust or fumes. Handle in areas with adequate ventilation.
Refer to SDS Section 8, Exposure Controls/Personal Protection, for further information.
Refer to Section 5 for Hazardous Combustion Products, and Section 10 for Hazardous Decomposition/Hazardous Polymerization Products.
The product does not have to be labeled due to the calculation procedure of international guidelines.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

- **Label elements**
- **GHS label elements**
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** Void
- **Signal word** Warning

(Contd. on page 2)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: **Pexalyn® SR**

(Contd. of page 1)

- **Hazard statements**

May form combustible dust concentrations in air.

- **Precautionary statements**

- P202 *Do not handle until all safety precautions have been read and understood.*
 P210 *Keep away from heat/sparks/open flames/hot surfaces. - No smoking.*
 P234 *Keep only in original container.*
 P243 *Take precautionary measures against static discharge.*
 P261 *Avoid breathing dust/fume/gas/mist/vapors/spray*
 P262 *Do not get in eyes, on skin, or on clothing.*
 P264 *Wash thoroughly after handling.*
 P270 *Do not eat, drink or smoke when using this product.*
 P280 *Wear protective gloves / eye protection.*
 P284 *In case of inadequate ventilation wear respiratory protection.*
 P301+P312 *If swallowed: Call a doctor if you feel unwell.*
 P301+P330+P331 *If swallowed: Rinse mouth. Do NOT induce vomiting.*
 P302+P352 *If on skin: Wash with plenty of soap and water.*
 P304+P312 *IF INHALED: Call a doctor if you feel unwell.*
 P304+P341 *If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.*
 P305+P351+P338 *If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
 P314 *Get medical advice/attention if you feel unwell.*
 P333+P313 *If skin irritation or rash occurs: Get medical advice/attention.*
 P363 *Wash contaminated clothing before reuse.*
 P402+P404 *Store in a dry place. Store in a closed container.*
 P403+P233 *Store in a well-ventilated place. Keep container tightly closed.*
 P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 0
 Fire = 1
 Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = 0
 Fire = 1
 Reactivity = 0

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:** Void

(Contd. on page 3)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: Pexalyn® SR

(Contd. of page 2)

· **Additional information:**

This product is considered hazardous according to the OSHA Hazard Communication Standard 29CFR1910.1200 due to flammable dust potential.

If this product is heated or used at temperatures sufficient to produce smoke or fumes, refer to SDS Section 8, Recommended Exposure Limits and Personal Protective Equipment.

4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Remove to fresh air. Get medical attention if nasal, throat or lung irritation develops.

· **After skin contact:**

Wash thoroughly with soap and water. Remove contaminated clothing. Get medical attention if irritation persists. Thoroughly wash clothing before reuse. See Note to Physician.

HOT MOLTEN product: Immediately cool skin burns with water and cold packs for at least 15 minutes.

Do NOT put ice directly on the skin. Do NOT attempt to remove solidified resin from the skin as severe tissue damage may result.

· **After eye contact:**

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get medical attention if irritation persists.

· **After swallowing:**

Not an ingestion hazard under anticipated conditions of use.

For accidental ingestion: Do NOT induce vomiting. Get immediate medical attention.

· **Information for doctor:**

This product contains rosin or a rosin derivative. Rosin and some of its derivatives have been reported to cause an allergic skin reaction (sensitization) in susceptible individuals after repeated or prolonged skin contact. Smoke or fumes generated by heating product may lead to respiratory sensitization (asthma) in susceptible individuals.

For HOT MOLTEN or HOT LIQUID product: Material should not be forcibly removed from the skin. Mineral oil may be used to loosen and soften the material.

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

No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

Water spray, dry chemical, foam, carbon dioxide or clean extinguishing agents may be used on fires involving this product.

Use fire fighting measures that suit the environment.

· **Special hazards arising from the substance or mixture**

If heated to combustion, the following substances may be formed:

Carbon monoxide (CO)

Carbon Dioxide (CO₂)

Aldehydes

Carboxylic acids

Smoke

(Contd. on page 4)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: Pexalyn® SR

(Contd. of page 3)

- **Advice for firefighters**
- **Protective equipment:**
Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear when fighting fires involving this product.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ventilate area. Avoid dust formation.
Clean up spills immediately.
If product is not contaminated, scoop into clean containers for use. If product is contaminated, scoop into containers, and dispose appropriately. In case of accidental spill or release, refer to Section 8, Personal Protective Equipment and General Hygiene Practices.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ground all equipment.
Blanket vessel with inert gas when emptying bags where flammable vapors may be present.
Ground operator and pour material slowly into conductive, grounded chute.
For large bags (1000 lbs or greater) a ground cable **MUST** be attached to the bag ground connection.
For **HOT MOLTEN** or **HOT LIQUID** product: Use personal protective equipment as indicated in Section 8: Exposure Controls/Personal Protection.
- **Information about protection against explosions and fires:**
Avoid conditions that generate dust; product may form flammable dust-air mixtures.
Avoid emptying package in or near flammable vapors; static charges may cause flash fire.
Keep away from heat, flame, sparks and other ignition sources.
Spontaneous heating may occur if stored in a non-ventilated area at elevated temperatures.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool, dry, well-ventilated area.
Keep container closed when not in use.
Control inventory.
Rotate stock periodically.
Check old product for deterioration regularly.
Use oldest material first.
Refer to technical literature for additional handling and storage measures.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

USA

(Contd. on page 5)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: **Pexalyn® SR**

(Contd. of page 4)

8 Exposure controls/personal protection

- **Additional information about design of technical systems:**

Eyewash fountains and safety showers should be easily accessible.

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Discharge from the ventilation system should comply with applicable air pollution control regulations.

Keep floors clean and dry. Clean up spills immediately.

Eliminate ignition sources and prevent build-up of static electrical charges.

Completely isolate and thoroughly clean all equipment, piping, or vessels before beginning maintenance or repairs.

Keep area clean. Product will burn.

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Additional Occupational Exposure Limit Values for possible hazards during processing:**

PARTICULATES (INSOLUBLE) NOT OTHERWISE SPECIFIED (PNOS): If used under conditions that generate particulates, the ACGIH TLV-TWA of 3 mg/m³ respirable fraction (10mg/m³ total) should be observed.

ROSIN PYROLYSIS FUMES: If this product is heated to temperatures sufficient to produce smoke or fumes, maintain exposure to resin acids to the lowest achievable concentration using recommended engineering controls and personal protective equipment.

- **Additional information:** *The lists that were valid during the creation were used as basis.*

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Avoid contact with eyes, skin, and clothing.

Avoid breathing dust or fumes.

Handle in areas with adequate ventilation.

Avoid contamination of food, beverages, or smoking materials.

Wash thoroughly after handling, and before eating, drinking or smoking.

Remove contaminated clothing promptly and clean thoroughly before reuse.

- **Breathing equipment:**

Appropriate respiratory protection is required when exposure to airborne contaminants may exceed acceptable limits. Respirators should be selected and used in accordance with OSHA, Subpart I (29 CFR 1910.134) and manufacturers recommendations.

- **Protection of hands:**

Impervious gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material should be made based on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** *Safety glasses*

(Contd. on page 6)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: **Pexalyn® SR**

(Contd. of page 5)

- **Body protection:**

Appropriate protective clothing

Personnel exposed to HOT MOLTEN or HOT LIQUID material should wear protective clothing that provides protection against thermal burns. Required Protective Equipment: a) Longsleeved protective shirt, long pants and work shoes; b) Hard hat and face shield; c) Long-cuff gloves (Gauntlet type-extending beyond wrist); d) Lined rain suit with protective hood or shoulder shroud or e) Full aluminized or thermal suit with hood.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form: Solid or flake

Color: Light yellow

- **Odor:** Slight rosin odor

- **Percent Volatile:** Negligible at 20 °C

- **Specific Gravity:** 1.03 g/ml @ 20 °C

- **Change in condition**

Softening Point 77 - 87 °C (171 - 189 °F) (Ring & Ball)

- **Flash point:** 200 °C (392 °F)

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/dust mixtures are possible.

- **Vapor pressure:** negligible @ 20 °C

- **Density:** Not determined.

- **Bulk density:** Not determined

- **Vapour density:** heavier than air

- **Evaporation rate:** slower than butyl acetate

- **Solubility in / Miscibility with**

Water: negligible at 20 °C

- **Solvent content:**

Organic solvents: 0.0 %

Solids content: 100.0 %

- **Other information:** No further relevant information available.

10 Stability and reactivity

- **Reactivity**

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:**

Stable under recommended handling and storage conditions.

- **Possibility of hazardous reactions**

Not anticipated under normal or recommended handling and storage conditions.

- **Conditions to avoid:** No further relevant information available.

- **Incompatible materials:** Incompatible with: oxidizing agents

(Contd. on page 7)

USA

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: Pexalyn® SR

(Contd. of page 6)

· **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

COMPONENT - modified rosin: Acute oral LD50 (rat): >4.0 g/kg; (mouse): >3.0 g/kg; (guinea pig): >2.5 g/kg. Acute dermal LD50 (rabbit): >2.5 g/kg. Ninety-day oral subacute no effect level (rat): NOEL = 0.2-1.0% in diet. Signs of toxicity included refusal to eat, weight loss and death at highest level, depressed weight gain and liver enlargement. Two-year chronic oral no effect level (rat, dog): NOEL = 0.05% in diet. Signs of toxicity included temporary weight depression and liver enlargement in both species.

· **Primary irritant effect:**

- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

· **Sensitization:**

No human toxicity studies have been carried out with this product. Due to the physical nature of this material, may cause eye, skin and respiratory irritation by mechanical abrasion.

· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information

· **Toxicity**

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.

· **Behavior in environmental systems:**

- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.

· **Ecotoxicological effects:**

- **Remark:** No ecological studies have been carried out on this product.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: **Pexalyn® SR**

(Contd. of page 7)

- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Landfilling in a permitted solid or hazardous waste facility if recommended.
Handling, transportation, and disposal of material should be conducted in a manner to prevent a nuisance dust hazard. Fully containerize the material before handling, and protect from exposure to the outdoors. Ensure there are no restrictions on disposing of bulk or semi-bulk quantities of waste material. Disposal should be in accordance with all Federal, State and local regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---|--|
| <ul style="list-style-type: none"> · UN-Number · DOT, ADR, ADN, IMDG, IATA | Void |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT, ADR, ADN, IMDG, IATA | Void |
| <ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class | Void |
| <ul style="list-style-type: none"> · Packing group · DOT, ADR, IMDG, IATA | Void |
| <ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: | No |
| <ul style="list-style-type: none"> · Special precautions for user | Not applicable. |
| <ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| <ul style="list-style-type: none"> · Transport/Additional information: · DOT · Remarks: | <p>This product is not subject to DOT regulations.</p> <p>For specific information regarding transportation of this product, please call the Pinova representative at (888) 807-2958</p> |
| <ul style="list-style-type: none"> · UN "Model Regulation": | - |

USA

(Contd. on page 9)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: Pexalyn® SR

(Contd. of page 8)

15 Regulatory information

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

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

This product does not contain any chemicals subject to reporting under Section 313 of Title III of the Superfund Amendments and Reauthorization Act and 40CFR372.

None of the ingredients is listed.

- **SECTIONS 302/304**

This product is not an Extremely Hazardous Substance subject to reporting under 40CFR355.

- **SECTION 311 AND 312**

NHH: Not a health hazard

HC-3: Fire hazard

- **CERCLA**

This product does not contain any chemicals subject to reporting as a CERCLA Hazardous Substance under 40CFR302.4.

- **RCRA**

This product is not a hazardous waste as listed in 40CFR261.33. It does not exhibit any of the hazardous characteristics listed in 40CFR261, Subpart C.

- **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **IARC (International Agency for Research on Cancer)** None of the ingredients is listed.

- **NTP (National Toxicology Program)** None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

(Contd. on page 10)

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: **Pexalyn® SR**

(Contd. of page 9)

- **Hazard pictograms** Void
- **Signal word** Warning
- **Hazard statements**
May form combustible dust concentrations in air.
- **Precautionary statements**
 - P202 Do not handle until all safety precautions have been read and understood.
 - P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 - P234 Keep only in original container.
 - P243 Take precautionary measures against static discharge.
 - P261 Avoid breathing dust/fume/gas/mist/vapors/spray
 - P262 Do not get in eyes, on skin, or on clothing.
 - P264 Wash thoroughly after handling.
 - P270 Do not eat, drink or smoke when using this product.
 - P280 Wear protective gloves / eye protection.
 - P284 In case of inadequate ventilation wear respiratory protection.
 - P301+P312 If swallowed: Call a doctor if you feel unwell.
 - P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
 - P302+P352 If on skin: Wash with plenty of soap and water.
 - P304+P312 IF INHALED: Call a doctor if you feel unwell.
 - P304+P341 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
 - P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P314 Get medical advice/attention if you feel unwell.
 - P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 - P363 Wash contaminated clothing before reuse.
 - P402+P404 Store in a dry place. Store in a closed container.
 - P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

DISCLAIMER: The information and recommendations contained in this Material Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Regulatory Affairs Department
- **Contact:** MSDS@pinovasolutions.com
- **Date of preparation / last revision** 04/14/2015 / 8
- **Abbreviations and acronyms:**
 - RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 - ICAO: International Civil Aviation Organisation
 - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 - IMDG: International Maritime Code for Dangerous Goods
 - DOT: US Department of Transportation
 - IATA: International Air Transport Association
 - ACGIH: American Conference of Governmental Industrial Hygienists

(Contd. on page 11)

Safety Data Sheet
acc. to OSHA HCS

Printing date 04/14/2015

Reviewed on 04/14/2015

Trade name: Pexalyn® SR

(Contd. of page 10)

EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

USA