

SAFETY DATA SHEET

VERADEL A-201 to A-702 NT

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the substance or mixture

Product name : VERADEL A-201 to A-702 NT
Product grade(s) : Veradel A-201 NT
Veradel A-301 NT
Veradel A-702 NT

1.2. Use of the Substance/Mixture

Recommended use : - For further information, please contact: Supplier

1.3. Company/Undertaking Identification

Address : SOLVAY ADVANCED POLYMERS, LLC
4500 McGINNIS FERRY ROAD
USA- 30005-3914 ALPHARETTA

Telephone : +17707728200

Telefax : +17707728213

1.4. Emergency and contact telephone numbers

Emergency telephone : 1 (770) 772 8577
1 (770) 772-8880
+32-55-339505 (Europe) [Other Product Information]

E-mail address :

2. HAZARDS IDENTIFICATION

Appearance : pellets, powder
Colour : amber
Odour : odourless

- Hazardous decomposition products formed under fire conditions.
- Product dust may be irritating to eyes, skin and respiratory system.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance name (CAS-No. / EC-No. / Annex-1)	Concentration (W/W)	Classification	R-phrases(s)
Polyethersulfone (- / - / -)	>= 99 %		



4. FIRST AID MEASURES

4.1. Inhalation

- Remove to fresh air.
- If symptoms persist, call a physician.

4.2. Eye contact

- Flush eyes with running water for several minutes, while keeping the eyelids wide open.
- If eye irritation persists, consult a specialist.

4.3. Skin contact

- Cool skin rapidly with cold water after contact with hot polymer.
- Do not peel polymer from the skin.
- Obtain medical attention.

4.4. Ingestion

- Never give anything by mouth to an unconscious person.
- If a large amount is swallowed, get medical attention.

5. FIRE-FIGHTING MEASURES

5.1. Suitable extinguishing media

- powder
- Foam
- Water
- Water spray
- Carbon dioxide (CO₂)

5.2. Extinguishing media which shall not be used for safety reasons

- None.

5.3. Special exposure hazards in a fire

- Combustible material
- In a fire, the polymer melts, producing droplets which may propagate fire.
- Once started, a fire will tend to self extinguish (see section 9).
- Risk of dust explosion.
- Heating can release hazardous gases.

5.4. Special protective equipment for fire-fighters

- In the event of fire, wear self-contained breathing apparatus.
- Fire fighters must wear fire resistant personnel protective equipment.

5.5. Other information

- Avoid dust formation.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions

- Sweep up to prevent slipping hazard.
- Avoid dust formation.
- Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

- Should not be released into the environment.
- Do not flush into surface water or sanitary sewer system.

6.3. Methods for cleaning up

- Sweep up and shovel into suitable containers for disposal.
- Avoid dust formation.



- Keep in properly labelled containers.
- Keep in suitable, closed containers for disposal.
- Treat recovered material as described in the section "Disposal considerations".

7. HANDLING AND STORAGE

7.1. Handling

- Take measures to prevent the build up of electrostatic charge.
- Ensure all equipment is electrically grounded before beginning transfer operations.
- Use only equipment and materials which are compatible with the product.
- To avoid thermal decomposition, do not overheat.

7.2. Storage

- Keep container closed.
- Keep away from heat and sources of ignition.

7.3. Specific use(s)

- For further information, please contact: Supplier

7.4. Other information

- Keep away from open flames, hot surfaces and sources of ignition.
- To avoid thermal decomposition, do not overheat.
- Avoid dust formation.
- Refer to protective measures listed in sections 7 and 8.
- Do not smoke.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Exposure Limit Values

- ACGIH: US. ACGIH Threshold Limit Values 2008
time weighted average = 10 mg/m³
Remarks: Inhalable particles.

8.2. Exposure controls

- Provide local ventilation appropriate to the product decomposition risk (see section 10).
- Provide appropriate exhaust ventilation at places where dust is formed.
- Refer to protective measures listed in sections 7 and 8.

8.2.1. Occupational exposure controls

8.2.1.1. *Respiratory protection*

- In case of insufficient ventilation, wear suitable respiratory equipment.
- When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Use only respiratory protection that conforms to international/ national standards.

8.2.1.2. *Hand protection*

- When handling hot material, use heat resistant gloves.

8.2.1.3. *Eye protection*

- Safety glasses with side-shields
- Dust proof goggles, if dusty.

8.2.1.4. *Skin and body protection*

- Long sleeved clothing

8.2.1.5. *Hygiene measures*

- When using do not eat, drink or smoke.
- Wash hands before breaks and at the end of workday.



8.2.2. Environmental exposure controls

- Dispose of rinse water in accordance with local and national regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. General Information (appearance, odour)**

Appearance	:	pellets, powder
Colour	:	amber
Odour	:	odourless

9.2. Important health safety and environmental information

pH	:	<i>Remarks: not applicable</i>
Boiling point/boiling range	:	<i>Remarks: not applicable</i>
Flash point	:	<i>Remarks: not applicable</i>
Flammability	:	
Explosive properties	:	<u>Upper explosion limit:</u> <i>Remarks: no data available</i> <u>Lower explosion limit:</u> <i>Remarks: no data available</i> <u>Explosion danger:</u> <i>Remarks: Risk of dust explosion.</i>
Vapour pressure	:	<i>Remarks: not applicable</i>
Relative density / Density	:	1,37 - 1,65
Solubility	:	Water <i>Remarks: negligible</i>
Partition coefficient: n-octanol/water	:	<i>Remarks: not applicable</i>

9.3. Other data

	:	220 °C <i>Remarks: Softening point</i>
Decomposition temperature	:	430 °C

10. STABILITY AND REACTIVITY**10.1. Stability**

- Stable under normal conditions.
- Hazardous Polymerisation/Polymerization: no

10.2. Conditions to avoid

- Heat, flames and sparks.
- To avoid thermal decomposition, do not overheat.
- Avoid dust formation.
- The normal temperature for processing this resin exceeds the decomposition and/or ignition temperature of some other polymeric resins, such as polyacetal, polyvinyl chloride (PVC), polypropylene, etc. If PVC or any other resin with a decomposition temperature below 371°C / 700°F



is molded or handled in your equipment, these materials can rapidly decompose and/or react with this resin at the temperatures used to process this resin. Inadvertent contamination of this resin with these materials from the material handling system or other equipment can result in a rapid, possibly violent release of decomposition fumes, when the contaminated material is brought to processing temperature. To avoid, thoroughly clean molding and other processing equipment prior to changeover and prevent cross contamination of material handling systems.

10.3. Materials to avoid

- Polymeric resins

10.4. Hazardous decomposition products

- Carbon monoxide, Sulphur oxides, Hydrocarbons, The release of other hazardous decomposition products is possible.

11. TOXICOLOGICAL INFORMATION

11.1 Toxicological data

Possible hazards (summary)

- The product is biologically inert.
- Product dust may be irritating to eyes, skin and respiratory system.
- Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

11.2. Health effects

Inhalation

- Mechanical irritation from the particulates generated by the product.
- Thermal decomposition can lead to release of hazardous gases and vapors

Eye contact

- Mechanical irritation from the particulates generated by the product.

Skin contact

- Mechanical irritation from the particulates generated by the product.

Ingestion

- Low ingestion hazard.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity effects

Acute toxicity

- Remarks: no data available

Chronic toxicity

- Remarks: no data available

12.2. Mobility

- Remarks: no data available

12.3. Persistence and degradability

Abiotic degradation

- Result: no data available

Biodegradation

- Remarks: no data available

12.4. Bioaccumulative potential

- Result: no data available

12.5. Other adverse effects

- no data available



12.6. Possible hazards (summary)

- The product is biologically inert.
- Ingestion of solids may cause harm to wildlife due to intestinal mechanical blockage or starvation from false feeling of satiation.

13. DISPOSAL CONSIDERATIONS**13.1. Waste from residues / unused products**

- In accordance with local and national regulations.
- Refer to manufacturer/supplier for information on recovery/recycling.
- Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.
- Can be landfilled, when in compliance with local regulations.

13.2. Packaging treatment

- Empty containers.
- Dispose of as unused product.

14. TRANSPORT INFORMATION

- Sea (IMO/IMDG)
- not regulated
- Air (ICAO/IATA)
- not regulated

15. REGULATORY INFORMATION**15.1. Labels****15.2. Inventory Information**

Toxic Substance Control Act list (TSCA)	: -	Listed on inventory.
EU list of existing chemical substances (EINECS)	: -	In compliance with inventory.
Canadian Domestic Substances List (DSL)	: -	Listed on inventory.
Japanese Existing and New Chemical Substances (MITI List) (ENCS)	: -	Listed on inventory.
Korean Existing Chemicals List (ECL)	: -	Listed on inventory.
Australian Inventory of Chemical Substances (AICS)	: -	Listed on inventory.
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	: -	Listed on inventory.
Inventory of Existing Chemical Substances (China) (IECS)	: -	Listed on inventory.

16. OTHER INFORMATION**16.1. Administrative information**

- New (MSDS)

This SDS is only intended for the indicated country to which it is applicable. Safety datasheets applicable in other countries/regions are available upon request. Please check with your local Sales representative. The information given corresponds to the current state of our knowledge and experience of the product, and is not exhaustive. This applies to product which conforms to the specification, unless otherwise stated. In this case of combinations and mixtures one must make sure that no new dangers can arise. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and protection of human welfare and the environment.

