

**Vespel<sup>®</sup> SP-21 parts and shapes**

Version 3.0

Revision Date 06/18/2015

Ref. 150000003783

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

**SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name	:	Vespel <sup>®</sup> SP-21 parts and shapes
Product Grade/Type	:	SP-21 DF parts, SP-21 machined parts and shapes
<hr/>		
Product Use	:	Solid parts & shapes
Restrictions on use	:	For manufacturing and research use only
Manufacturer/Supplier	:	DuPont 974 Centre Road Wilmington, DE 19805, USA
Product Information	:	+1-800-441-7515 (outside the U.S. +1-302-774-1000)
Medical Emergency	:	1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency	:	CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

**SECTION 2. HAZARDS IDENTIFICATION**

**Product hazard category**  
Combustible dust

**Label content**

Pictogram	:	not required
Signal word	:	Warning
Hazardous warnings	:	May form combustible dust concentrations in air.
Hazardous prevention measures	:	not required

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**Other hazards**

If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

This product does not contain any components that require disclosure according to OSHA Hazard Communication Standard 2012.

**SECTION 4. FIRST AID MEASURES**

General advice	: No applicable data available.
Inhalation	: Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Skin contact	: The material is not likely to be hazardous by skin contact, but cleaning the skin after use is advisable.
Eye contact	: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
Ingestion	: No specific intervention is indicated. Consult a physician if necessary.
Most important symptoms/effects, acute and delayed	: No applicable data available.
Protection of first-aiders	: No applicable data available.
Notes to physician	: No applicable data available.

**SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media	: Water, Foam, Dry chemical, Carbon dioxide (CO <sub>2</sub> )
Unsuitable extinguishing media	: No applicable data available.

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Specific hazards : Not a fire or explosion hazard. Does not burn without an external flame.  
(see also section 10) Carbon monoxide, Carbon dioxide.

Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

Further information : Evacuate personnel and keep upwind of fire.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel) : No applicable data available.

Environmental precautions : Do not discharge to streams, ponds, lakes or sewers.

Spill Cleanup : Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Spills of fine material should be cleaned using gentle sweeping or vacuuming. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used. Non-sparking tools should be used.

Accidental Release Measures : No applicable data available.

**SECTION 7. HANDLING AND STORAGE**

Handling (Personnel) : Avoid breathing dust or fibres. Avoid eye, skin, or clothing contact with dusts or fibers generated by machining the parts or shapes. Remove and wash contaminated clothing before re-use. Wash thoroughly with soap and water after performing operations that involve fiber or dust handling. Disposable clothing contaminated with fibers should be bagged in plastic and properly labeled for disposal. Minimize dust generation and accumulation. Clean up fines, dusts, and/or fibers with high efficiency particulate air (HEPA) filtered vacuum equipment. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

Handling (Physical Aspects) : No applicable data available.

Dust explosion class : No applicable data available.

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- Storage : Keep container closed to prevent contamination. Keep in an area equipped with sprinklers.
- Storage period : No applicable data available.
- Storage temperature : No applicable data available.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Engineering controls : Wet machining is the preferred method since the liquid both cools the parts and reduces dust generation. Aqueous-based coolants are preferred. Organic-based cutting fluids may degrade the in-use performance of the product and should not be used. Clean parts after cutting or before use. As with any wet machining technique, mist collection systems should be used. If parts require cleaning after dry machining, rinse with deionized water. If parts require cleaning after wet machining, remove cutting fluids with soap and water. Ensure adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Provide appropriate exhaust ventilation at places where dust is formed. Any process that has the potential to generate dust should be performed using engineering controls, such as isolation, enclosures, local exhaust ventilation, wetting with coolant, or dust collection systems, to control airborne fibers and dusts below applicable limits. Avoid significant deposits of material which may become airborne and form combustible dust clouds.
- Personal protective equipment
- Respiratory protection : Additives in this product do not present a respiration hazard unless the product is ground to a powder of respirable size and the dust is inhaled. All dusts are potentially injurious to the respiratory tract if respirable particles are generated and inhaled. A respiratory protection program that meets country requirements must be followed whenever workplace conditions warrant respirator use. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer. Consult the OSHA respiratory protection information located at 29CFR 1910.134. Use a positive pressure air supplied respirator if exposure levels are not known or there are any other circumstances where air purifying respirators may not provide adequate protection.
- Hand protection : Additional protection: Wear leather or cotton gloves when grinding, sawing, routing, drilling or sanding.
- Skin and body protection : Remove and wash contaminated clothing before re-use.



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### Exposure Guidelines Exposure Limit Values

This product does not contain any exposure limits that require disclosure according to OSHA Hazard Communication Standard 2012.

### Non-Constituent(s)

Dust (inhalable and respirable fraction)			
Permissible exposure limit:	(OSHA)	5 mg/m <sup>3</sup>	8 hr. TWA Respirable fraction.
Permissible exposure limit:	(OSHA)	15 mg/m <sup>3</sup>	8 hr. TWA Total dust.
TLV	(ACGIH)	3 mg/m <sup>3</sup>	TWA Respirable particles.
TLV	(ACGIH)	10 mg/m <sup>3</sup>	TWA Inhalable particles.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

Physical state : solid  
Form : Solid parts & shapes  
Color : tan

Odor : none

Odor threshold : No applicable data available.

pH : Not applicable

Melting point/freezing point : Melting point  
Decomposes without melting.

Boiling point/boiling range : Boiling point/boiling range  
Not applicable

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Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: May form combustible dust concentrations in air.
Upper explosion limit	: Not applicable
Lower explosion limit	: Not applicable
Vapor pressure	: Not applicable
Vapor density	: Not applicable
Specific gravity (Relative density)	: > 1
Water solubility	: insoluble
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: Not applicable
Decomposition temperature	: >550 °C
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Stable at normal ambient temperature and pressure.
Chemical stability	: Stable at normal ambient temperature and pressure.
Possibility of hazardous reactions	: Polymerization will not occur.
Conditions to avoid	: Temperature > 450 °C (> 842 °F) Abnormally long processing time or high temperatures can produce irritating and toxic fumes.

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- Incompatible materials : Strong acids Strong bases, Strong oxidizing agents
- Hazardous decomposition products : Hazardous thermal decomposition products may include: traces of hydrogen cyanide, traces of isocyanic acid (HNCO) , Carbon monoxide , Carbon dioxide

**SECTION 11. TOXICOLOGICAL INFORMATION**

- VespeI<sup>®</sup> SP-21 parts and shapes  
Further information : No data is available on the product itself. For additional toxicity data, write to the company address or call the non-emergency number shown in Section 1.

**Carcinogenicity**

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

**SECTION 12. ECOLOGICAL INFORMATION**

- Additional ecological information : No data is available on the product itself. Toxicity is expected to be low based on insolubility in water.

**SECTION 13. DISPOSAL CONSIDERATIONS**

- Waste disposal methods - Product : Preferred options for disposal are recycling or incineration with energy recovery. The high fuel value of this product makes incineration very desirable for material that cannot be recycled. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.
- Contaminated packaging : No applicable data available.

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**SECTION 14. TRANSPORT INFORMATION**

Not classified as dangerous in the meaning of transport regulations.

**SECTION 15. REGULATORY INFORMATION**

- |  |   |  |
|--|---|--|
| TSCA (US) Status                       | : | In compliance with TSCA Inventory requirements for commercial purposes.  |
| SARA 313 Regulated Chemical(s)         | : | 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.          |
| PA Right to Know Regulated Chemical(s) | : | Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): Graphite                                       |
| NJ Right to Know Regulated Chemical(s) | : | Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Graphite |
| California Prop. 65                    | : | Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known  |

**SECTION 16. OTHER INFORMATION**

- |                      |   |  |
|----------------------|---|--|
| Restrictions for use | : | Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications and DuPont CAUTION Regarding Medical Applications. |
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Revision Date : 06/18/2015

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.

Significant change from previous version is denoted with a double bar.



## Vespe<sup>®</sup>l SP-21 parts and shapes

### Warning

**Hazard statements:** May form combustible dust concentrations in air.

**Supplemental information:** If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

Refer to Safety Data Sheet (SDS) for further information.

DuPont  
974 Centre Road, Wilmington, DE 19805, USA

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