

SAFETY DATA SHEET



Vydyne 21SPF

In accordance with the Standard for Classification and Labeling of Chemical Substance and Material Safety Data Sheet, Article 10 Paragraph 1

Section 1. Chemical product and company identification

A. **Product name** : Vydyne 21SPF

B. **Relevant identified uses of the substance or mixture and uses advised against**

Identified uses

Plastics.

Section 2. Hazards identification

A. **Hazard classification** : Not classified.

B. **GHS label elements, including precautionary statements**

Signal word : No signal word.

Hazard statements : No known significant effects or critical hazards.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention : Not applicable.

Response : Not applicable.

Storage : Not applicable.

Disposal : Not applicable.

C. **Other hazards which do not result in classification** : Heated material can cause thermal burns. Vapor may be irritating to eyes and respiratory system.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Chemical name : Polymer

Other means of identification : Polyamide solid.

CAS number/other identifiers

CAS number : 32131-17-2

EC number : Mixture.

Product code : Not available.

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Section 3. Composition/information on ingredients

Ingredient name	Common name	CAS number	%
Poly[imino(1,6-dioxo-1,6-hexanediy)imino-1,6-hexanediy]	Nylon 6,6 - Pure	32131-17-2	99 - 100

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

- A. Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- B. Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- C. Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- D. Ingestion** : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
- E. Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

- A. Extinguishing media**
- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.
- B. Specific hazards arising from the chemical** : No specific fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides

Section 5. Fire-fighting measures

- C. Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Section 6. Accidental release measures

- A. Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- B. Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- C. Methods and materials for containment and cleaning up**
- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

- A. Precautions for safe handling**
- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
- B. Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

- A. Control parameters**
- Occupational exposure limits**
- None.
- B. Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Section 8. Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

C. Personal protective equipment

Respiratory protection : Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9. Physical and chemical properties

A. Appearance

Physical state : Solid. [Pellets.]

Color : White to yellowish.

B. Odor : Odorless.

C. Odor threshold : Not applicable.

D. pH : Not applicable.

E. Melting/freezing point : 257 to 267°C (494.6 to 512.6°F)

F. Boiling point/boiling range : Not available.

G. Flash point : Not available.

H. Evaporation rate : Not available.

I. Flammability (solid, gas) : Not available.

J. Lower and upper explosive (flammable) limits : Not available.

K. Vapor pressure : Not available.

L. Solubility : Not available.

M. Vapor density : Not available.

N. Relative density : Not available.

O. Partition coefficient: n-octanol/water : Not available.

Section 9. Physical and chemical properties

- P. Auto-ignition temperature** : Not available.
- Q. Decomposition temperature** : >300°C (>572°F)
- R. Viscosity** : Not available.
- S. Molecular weight** : Not applicable.

Section 10. Stability and reactivity

- A. Chemical stability** : The product is stable.
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.
- B. Conditions to avoid** : No specific data.
- C. Incompatible materials** : No specific data.
- D. Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

- A. Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.
- Potential acute health effects**
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Eye contact** : No known significant effects or critical hazards.
- Over-exposure signs/symptoms**
- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin contact** : No specific data.
- Eye contact** : No specific data.
- B. Health hazards**
- Acute toxicity**
Not available.
- Irritation/Corrosion**
Not available.
- Sensitization**
Not available.
- Mutagenicity**
Not available.
- Carcinogenicity**

Section 11. Toxicological information

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Potential chronic health effects

Chronic toxicity

Not available.

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Other information : Adverse symptoms include the following: None known.
Adverse symptoms may include the following: None known.
Adverse symptoms sometimes include the following: None known.

ATE value

Not available.

Section 12. Ecological information

A. Ecotoxicity

Not available.

Conclusion/Summary : Not toxic.

B. Persistence and degradability

Not available.

C. Bioaccumulative potential

Not available.

D. Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

E. Other adverse effects : No known significant effects or critical hazards.

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Section 13. Disposal considerations

- A. Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
- B. Disposal precautions** : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	UN	IMDG	IATA
A. UN number	Not regulated.	Not regulated.	Not regulated.
B. UN proper shipping name	-	-	-
C. Transport hazard class(es)	-	-	-
D. Packing group	-	-	-
E. Environmental hazards	No.	No.	No.
F. Additional information	-	-	-

- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

A. Regulation according to ISHA

ISHA Article 37 : None of the components are listed.

ISHA Article 38 : None of the components are listed.

Article 2 of Youth : Not applicable.

Protection Act on Substances Hazardous to Youth

Exposure Limits of Chemical Substances and Physical Factors

None of the components have an OEL.

Exposure Standards established for Harmful Factors : None of the components are listed.

Section 15. Regulatory information

- Harmful Factors Subject to Work Environment Measurement** : None of the components are listed.
- Harmful Factors Subject to Special Health Check-up** : None of the components are listed.
- Hazardous Substances Subject to Control** : None of the components are listed.
- B. Regulation according to TCCA**
- TCCA Toxic chemicals** : Not applicable
- TCCA Observational chemicals** : None of the components are listed.
- TCCA Article 32 (Banned)** : None of the components are listed.
- TCCA Article 32 (Restricted)** : None of the components are listed.
- TCCA Article 17 (TRI)** : None of the components are listed.
- Korea inventory** : All components are listed or exempted.
- Accident Precaution chemicals** : None of the components are listed.
- C. Dangerous Materials Safety Management Act** : Not available.
- D. Wastes regulation** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- E. Regulation according to other foreign laws**
- Europe inventory** : Not determined.
- United States inventory (TSCA 8b)** : All components are listed or exempted.
- Japan inventory** : All components are listed or exempted.
- Safety, health and environmental regulations specific for the product** : No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

- A. References** : Not available.
- B. Date of issue/Date of revision** : 10/30/2013.
- C. Version** : 1
- Date of printing** : 10/30/2013.
- D. Other**
- Indicates information that has changed from previously issued version.**
- Key to abbreviations** : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient

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Section 16. Other information

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.