SAFETY DATA SHEET



Date of issue/Date of revision

23 June 2016

Version 4

Section 1. Identification

Product name

: Teslin® Substrate

Product code

: 0193

Other means of

SP400, SP600, SP700, SP800, SP1000, SP1200, SP1400, SP1800

identification

TS600, TS700, TS800, TS1000, TS1200, TS1400

HD700, 11HD, 14HD, Digital 1000, FG700, FG1000

Product type

: Article.

Relevant identified uses of the substance or mixture and uses advised against

Product use

: Industrial applications.

Use of the substance/

: Printing operations.

mixture

Uses advised against

: None identified.

Manufacturer

: PPG Industries, Inc. One PPG Place

Pittsburgh, PA 15272

PPG Industries Chemicals BV PO Box 181, 9930 - AD, Delfzijl, The Netherlands

Emergency telephone

number

: (412) 434-4515 (U.S.)

+33 (0)3 27 14 97 00 (Eu)

Technical Phone Number

: 1-800-437-8318 (Teslin)

Section 2. Hazards identification

OSHA/HCS status

: This product is considered an article. The end use is dependent upon the manufactured

shape and design, and this article will not pose an exposure hazard under normal

conditions.

Classification of the substance or mixture Article.

GHS label elements

Signal word

: No signal word.

Hazard statements

: No known significant effects or critical hazards.

Precautionary statements

Prevention

: Not applicable.

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Section 2. Hazards identification

Response

: Not applicable.

Storage

: Not applicable.

Disposal

: Not applicable.

Supplemental label

elements

: Emits toxic fumes when heated.

Hazards not otherwise

: None known.

classified

Section 3. Composition/information on ingredients

Substance/mixture

Product name

: Teslin® Substrate

Other means of identification

: SP400, SP600, SP700, SP800, SP1000, SP1200, SP1400, SP1800

TS600, TS700, TS800, TS1000, TS1200, TS1400

HD700, 11HD, 14HD, Digital 1000, FG700, FG1000

Ingredient name	%	CAS number
Teslin® Substrate	100	Not applicable.

These products are continuous, homogeneous materials containing polyolefins and inert fillers formed into a sheet composing a microporous void structure.

SUB codes represent substances without registered CAS Numbers.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.

Description of necessary first aid measures

Eye contact

: Not a likely route of exposure. : Not a likely route of exposure.

Inhalation Skin contact

: No irritation would be expected on contact with skin.

Ingestion

: Not a likely route of exposure.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

: No known significant effects or critical hazards.

Inhalation

No known significant effects or critical hazards.

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Section 4. First aid measures

Skin contact

: No known significant effects or critical hazards.

Ingestion

: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact

: No specific data.

Inhalation

: No specific data.

Skin contact

: No specific data.

Ingestion

: No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

: Treat symptomatically.

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

Extinguishing media

Suitable extinguishing

media

: In case of fire, use water spray (fog), foam, dry chemical or CO2.

Unsuitable extinguishing

media

: None known.

Specific hazards arising

from the chemical

Hazardous thermal decomposition products

: No specific fire or explosion hazard.

: When burned, the combustion products are similar to those organic compounds with equivalent components. Prediction of actual combustion decomposition products would

be influenced by temperature, oxygen and/or other gases in the area.

Special protective actions

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.

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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency

: No special protection is required.

personnel

For emergency responders: No special protection is required.

Environmental precautions : None known.

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Section 6. Accidental release measures

Methods and materials for containment and cleaning up

Small spill

: Not applicable

Large spill

: Not applicable

Reference to other sections : See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene : Workers should wash hands and face before eating, drinking and smoking.

Conditions for safe storage, : Store in accordance with local regulations. Store in a dry, cool and well-ventilated area.

including any incompatibilities

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name			Exposure limits		
Peslir	® Substrate	Non	e.		
	Key to abbreviations	n la lamaia			
Α	= Acceptable Maximum Peak	S	= Potential skin absorption		
ACGIH	= American Conference of Governmental Industrial Hygienists.	SR	= Respiratory sensitization		
C	= Ceiling Limit	SS	= Skin sensitization		
F	= Fume	STEL	= Short term Exposure limit values		
IPEL	= Internal Permissible Exposure Limit	TD	= Total dust		
AHRC	= Occupational Safety and Health Administration.	TLV	= Threshold Limit Value		
R	= Respirable	TWA	= Time Weighted Average		
Z	= OSHA 29 CFR 1910.1200 Subpart Z - Toxic and Hazardous Substances				

Consult local authorities for acceptable exposure limits.

procedures

Recommended monitoring: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls

: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

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Section 8. Exposure controls/personal protection

Individual protection measures

: Wash hands, forearms and face thoroughly after handling chemical products, before Hygiene measures

eating, smoking and using the lavatory and at the end of the working period. Ensure

that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Skin protection

: None.

Hand protection

: None. : None. : None.

Body protection Other skin protection Respiratory protection

None : None.

Section 9. Physical and chemical properties

Appearance

Gloves

Physical state

: Solid.

Color

White.

Odor

Odorless.

Odor threshold

Not available.

pH

Not available.

Melting point

Not available.

Boiling point

Not available.

Flash point

Closed cup: Not applicable.

Material supports

combustion.

: Yes.

Auto-ignition temperature

: Not available.

Decomposition temperature

: Not available.

Flammability (solid, gas)

: Not available.

Lower and upper explosive

: Not available.

(flammable) limits

: Not available.

Evaporation rate

Not available.

Vapor pressure Vapor density

Not available.

Relative density

Not available.

Partition coefficient: n-

Insoluble

Not available.

octanol/water

Not Applicable

Viscosity Volatility

Solubility

0% (w/w)

% Solid. (w/w)

100

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Section 10. Stability and reactivity

Reactivity

: No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: The product is stable.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: When exposed to high temperatures may produce hazardous decomposition products.

Refer to protective measures listed in sections 7 and 8.

Incompatible materials

: None known.

Hazardous decomposition

products

 Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary : Various cytotoxicity tests have been conducted and the results showed that this product

was nontoxic to mammalian cells in culture.

Irritation/Corrosion

Conclusion/Summary

Skin : No known significant effects or critical hazards.

Eyes : No known significant effects or critical hazards.

Respiratory Sensitization : No known significant effects or critical hazards.

Conclusion/Summary

Skin : No known significant effects or critical hazards.Respiratory : No known significant effects or critical hazards.

<u>Mutagenicity</u>

Conclusion/Summary: No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary: No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary: No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary: No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

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Section 11. Toxicological information

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Potential acute health effects

Eye contact: No known significant effects or critical hazards.Inhalation: No known significant effects or critical hazards.Skin contact: No known significant effects or critical hazards.Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: No specific data.Inhalation: No specific data.Skin contact: No specific data.Ingestion: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Conclusion/Summary : No known significant effects or critical hazards.

Short term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate : No known significant effects or critical hazards.

effects

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

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.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

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Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Conclusion/Summary

: This product would not be biodegradable and should be disposed of in a manner

consistent with local regulations for polyolefin products.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Section 13. Disposal considerations

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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

14. Transport information

	DOT	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-		etouttoria menjurus (1
Transport hazard class (es)	-	-	Terror Secretary and the property
Packing group	-	-	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Environmental hazards Marine pollutant substances	No. Not applicable.	No. Not applicable.	No. Not applicable.

Additional information

DOT

: None identified.

IMDG

: None identified.

IATA

: None identified.

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14. Transport information

Special precautions for user: -

Section 15. Regulatory information

United States

United States inventory (TSCA 8b): All components are listed or exempted.

SARA 302/304

SARA 304 RQ

: Not applicable.

Composition/information on ingredients

No products were found.

SARA 311/312

Classification

: Not applicable.

Composition/information on ingredients

No products were found.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health

Flammability: 0 Physical hazards:

0

(*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Health :

Flammability: 0

Instability: 0

Other information

: Teslin and the PPG logo are registered trademarks of PPG Industries Ohio, Inc.

Date of previous issue

: 4/1/2016

Organization that prepared

: EHS

the MSDS

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

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Indicates information that has changed from previously issued version.

Disclaimer

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Section 16. Other information

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by PPG, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.

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