Product	Jacobi Polyurethane Elegant Finish
Revision date	12 September 2018
Revision	1

Safety Data Sheet (SDS)

Section 1: Identification of the substance/preparation and of the company/undertaking

1.1 Product identifier

Product name	**Jacobi Polyurethane Elegant Finish**
Synonyms, Trade names	No information available.

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

Identified uses	Paint or paint related material.
Uses advised against	No uses advised against are identified.

1.3 Details of the supplier of the safety data sheet

Supplier	FSW Coatings Ltd Virginia Co Cavan Ireland Tel: 353 49854 7209
Contact person	info@fsw.ie

1.4 Emergency telephone number

Emergency telephone	+ 353 49854 7209 (Between 0900 and 1700 hrs Monday-Friday)
National emergency telephone number	Emergency Contact Number + 353 49854 7209 (Between 0900 and 1700 hrs Monday-Friday)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and chemical hazards	Flam. Liq 3- H226
Human health	Asp. Tox - H304
Environment	Not classified

2.2 Label elements

Contains

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Hydrocarbons, C10, aromatics, <1% naphthalene

Label in accordance with (EC) no. 1272/2008

Signal word

Danger

Hazard statements

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.

Precautionary statements

Prevention
P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
Storage
P403 + P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards

None known.

Section 3: Composition/identification of ingredients

3.1 Substance

Not applicable.

3.2 Mixtures

Name	Product identifier	Reg. EU 1272/2008	%
titanium dioxide	CAS-No.: 13463-67-7 EC No.: 236-675-5 REACH Reg No.: 01-2119489379-17-0002		10-30%
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	CAS-No.: EC No.: 919-857-5	Asp. Tox - H304, Flam. Liq 3- H226, STOT SE 3 - H336	10-30%
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	CAS-No.: EC No.: 918-481-9 REACH Reg No.: 01-2119457273-39-XXXX	Asp. Tox - H304	1-10%
1-methoxy-2-propanol monopropylene glycol methyl ether	CAS-No.: 107-98-2 EC No.: 203-539-1	Flam. Liq 3- H226, STOT SE 3 - H336	1-10%
docusate sodium	CAS-No.: 577-11-7 EC No.: 209-406-4 REACH Reg No.: 01-2119491296-29-0000	Skin Irrit.2 - H315, Eye Dam. 1 - H318	0.1-1%
2-ethylhexanoic acid, zirconium salt	CAS-No.: 22464-99-9 EC No.: 245-018-1	Repr. 2 - H361d	0.1-1%
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics	CAS-No.: 64742-48-9 EC No.: 919-857-5 REACH Reg No.: 01-2119463258-33-xxxx	STOT SE 3 - H336, Asp. Tox - H304, Flam. Liq 3- H226	0.1-1%
2-butanone oxime ethyl methyl ketoxime ethyl methyl ketone oxime	CAS-No.: 96-29-7 EC No.: 202-496-6	Acute Tox 4 - H312, Skin. Sens 1 - H317, Eye Dam. 1 - H318, Carc. 2 - H351	0.1-1%
Isopropoxyethanol	CAS-No.: 109-59-1 EC No.: 203-685-6 REACH Reg No.: 1-2119494720-35-xxxx	Acute Tox 4 - H312, Acute Tox 4 - H332, Skin Irrit.2 - H315, Eye Irrit.2A - H319, Flam. Liq 3- H226	0.1-1%
propane-1,2-diol	CAS-No.: 57-55-6 EC No.: 200-338-0		0.1-1%
cobalt bis(2-ethylhexanoate)	CAS-No.: 136-52-7 EC No.: 205-250-6	Aquatic Acute 1 - H400, Aquatic Chronic 3 - H412, Eye Irrit.2A - H319, Repr. 2 - H361, Skin. Sens 1 A- H317	0.1-1%
Hydrocarbons, C10, aromatics, <1% naphthalene	CAS-No.: EC No.: 918-811-1 REACH Reg No.: 01-2119463583-34-0000	Aquatic Chronic 2 - H411, Asp. Tox - H304, STOT SE 3 - H336	0.1-1%
nonane	CAS-No.: 111-84-2 EC No.: 203-913-4	Aquatic Chronic 1 - H410, Skin Irrit.2 - H315, Asp. Tox - H304, Flam. Liq 3- H226, STOT SE 3 - H336	0.1-1%
Ethanol	CAS-No.: 64-17-5 EC No.: 200-578-6 REACH Reg No.: 01-2119457610-43	Eye Irrit.2A - H319, Flam. Liq 2- H225	0.1-1%
Naphthalene	CAS-No.: 91-20-3 EC No.: 202-049-5 REACH Reg No.: 01-2119561346-37-XXXX	Acute Tox 4 - H302, Carc. 2 - H351, Aquatic Acute 1 - H400, Aquatic Chronic 1 - H410	0.1-1%
propionic acid	CAS-No.: 79-09-4 EC No.: 201-176-3	Skin Corr. 1B - H314	0.1-1%
octane	CAS-No.: 111-65-9 EC No.: 203-892-1	Aquatic Chronic 1 - H410, Skin Irrit.2 - H315, Asp. Tox - H304, Flam. Liq 2- H225, STOT SE 3 - H336	0.1-1%

The full text for all hazard statements are displayed in section 16.

Composition comments	The data shown are in accordance with the latest EC Directives.

Section 4: First aid measures

4.1 Description of first aid measures

General information	General first aid, rest, warmth and fresh air.
Inhalation	Remove the affected person to fresh air, obtain medical attention if symptoms persist.
Ingestion	Rinse mouth thoroughly. Get medical attention immediately.
Skin contact	Remove affected person from source of contamination Remove contaminated clothes and rinse skin thoroughly with water. Wash skin with soap and water Get medical attention if symptoms persist.
Eye contact	Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Rinse with a gentle stream water for at least 15 minutes. Get prompt medical attention.

4.2 Most important symptoms and effects, both acute and delayed

General information	No information available.
Inhalation	Inhalation of mist or vapor may cause respiratory tract irritation.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Prolonged contact may cause redness and/or tearing.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to the physician	Treat symptomatically.

Section 5: Fire-fighting measures

5.1 Extinguishing media

Extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use dry chemical, CO2, water spray (fog) or foam.
Unsuitable extinguishing media	None noted.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products	When heated, toxic and corrosive vapours/gases may be formed
Unusual fire & explosion hazards	No unusual fire or explosion hazards noted.
Specific hazards	If heated, harmful vapours may be formed.

5.3 Advice for firefighters

Special fire fighting procedures	Avoid breathing fire vapours. Keep up-wind to avoid fumes. Fight advanced or massive fires from safe distance or protected location. Do not scatter spilled material with more water than needed to fight the fire Do not get water inside container
Protective equipment for firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, use open fire or other sources of ignition. Make safe all sources of ignition. Avoid contact with skin and eyes.
For emergency responders	Follow safe handling advice and personal protective equipment recommendations for normal use of product.

6.2 Environmental precautions

Environmental precautions	Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency

or other appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Spill clean up methods Stop leak if possible without risk. Wear necessary protective equipment. Absorb spillage with non-combustible, absorbent material. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Wash thoroughly after dealing with a spillage.

6.4 Reference to other sections

Reference to other sections For personal protection, see section 8 For waste disposal, see section 13. See section 1 for emergency contact.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling Read and follow manufacturer's recommendations. Do not handle broken packages without protective equipment. Avoid spilling, skin and eye contact. Do not use contact lenses. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist. Ensure adequate ventilation. Vapours are heavier than air and may spread along floors. Do not eat, drink or smoke when using the product.

7.2 Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly closed original container in a dry, cool and well-ventilated place. Keep upright. Keep locked up and out of reach of children. Avoid storing for very long periods. Keep container tightly sealed when not in use. Bags or containers, which are opened, must be carefully resealed to prevent leakage. Avoid contact with oxidising agents. Store away from acids. Store separate from alkalis. Store in cool dry areas away from direct sunlight or sources of ignition. Store away form other chemicals.

Storage class No information available.

7.3 Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

Usage description Use only according to directions. Replace and tighten cap after use.

Section 8: Exposure controls/Personal protection

8.1 Control parameters

Component	STD	TWA (8 Hrs)		STEL (15mins)		Notes
titanium dioxide	OEL		10 mg/m^3			
titanium dioxide	OEL		4 mg/m^3			
1-methoxy-2-propanol monopropylene glycol methyl ether	OEL	100 ppm	375 mg/m^3	150 ppm	568 mg/m^3	
2-butanone oxime ethyl methyl ketoxime ethyl methyl ketone oxime	OEL	3 ppm	10 mg/m^3	10 ppm	33 mg/m^3	
Isopropoxyethanol	OEL	25 ppm	106 mg/m^3			
propane-1,2-diol	OEL	150 ppm	470 mg/m^3			
propane-1,2-diol	OEL		10 mg/m^3			
nonane	OEL	200 ppm	1050 mg/m^3			
Ethanol	OEL			1000 ppm		
Naphthalene	OEL	10 ppm	50 mg/m^3	15 ppm	75 mg/m^3	
propionic acid	OEL	10 ppm	31 mg/m^3	20 ppm	62 mg/m^3	
octane	OEL	300 ppm	1450 mg/m^3			

Ingredient comments Ireland, Occupational Exposure Limits 2018.

8.2 Exposure Controls

Protective equipment

Engineering measures	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.
Respiratory equipment	Use type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. Use respirators and components tested and approved under appropriate government standards such as CEN (EU).
Hand protection	Use suitable protective gloves if there is a risk of skin contact. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Change gloves regularly. Nitrile rubber. Break through time: 480 min. Glove thickness: > 0, 33 mm. Chloroprene. Break through time: 480 min. Glove thickness: > 0, 6 mm.
Eye protection	Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU).
Other protection	No information available.
Hygiene measures	DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.
Process conditions	Keep container tightly sealed when not in use.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	White opaque.
Odour	Faint hydrocarbon odour.
Odour threshold - lower	No information available.
Odour threshold - upper	No information available.
pH-Value, Conc. Solution	No information available.
pH-Value, Diluted solution	No information available.
Melting point	May start to solidify at the temperatures below 2°C.This is based on data for the following ingredient: water.
Initial boiling point and boiling range	142 °C
Flash point	Closed cup: 230C
Evaporation rate	Highest known value: 0.04 (Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics) Weighted average: 0.02compared with butyl acetate.
Flammability state	No information available.
Flammability limit - lower(%)	0.60
Flammability limit - upper(%)	7.00
Vapour pressure	Highest known value: 0.1 to 0.3 kPa (0.8 to 2.3 mm Hg) (at 20°C) (Naphtha (petroleum), hydrotreated heavy). Weighted average: 0.17 kPa (1.28 mm Hg) (at 20°C)
Vapour density (air=1)	Highest known value: 4.5 (Air = 1) (Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics).
Relative density	1.4g/cm^3 @ 20.00 °C
Bulk density	No information available.
Solubility	No information available.
Decomposition temperature	No information available.

Partition coefficient; n-Octanol/Water	No information available.
Auto ignition temperature (°C)	Auto ignition temperature Lowest known value: >221°C (>429.8°F) (Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, < 2% aromatics).
Viscosity	Kinematic (room temperature): >4 cm2/s Kinematic (40°C): >0.21 cm2/s
Explosive properties	No information available.
Oxidising properties	No information available.

9.2 Other information

Molecular weight	No information available.
Volatile organic compound	No information available.
Other information	None noted.

Section 10: Stability and reactivity

10.1 Reactivity

Reactivity	Reacts with acids and strong oxidizing agents.

10.2 Chemical stability

Stability	Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

Hazardous reactions	For information on hazardous reaction see section 10.1.
Hazardous polymerisation	Unknown.
Polymerisation description	Unknown.

10.4 Conditions to Avoid

Conditions to avoid	Avoid exposure to high temperatures or direct sunlight. Protect from frost.

10.5 Incompatible materials

Materials to avoid	Strong oxidising substances. Strong acids. Do not mix with other chemicals unless listed on directions.

10.6 Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicological information	No information available.
Acute toxicity (Oral LD50)	No information available.
Acute toxicity (Dermal LD50)	No information available.
Acute toxicity (Inhalation LD50)	No information available.
Serious eye damage/irritation	No information available.
Skin corrosion/irritation	No information available.
Respiratory sensitisation	No information available.
Skin sensitisation	No information available.

Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Specific target organ toxicity - Single exposure:	
STOT - Single exposure	No information available.
Specific target organ toxicity - Repeated exposure:	
STOT - Repeated exposure	No information available.
Inhalation	Inhalation of mist or vapor may cause respiratory tract irritation.
Ingestion	May cause discomfort if swallowed. May cause stomach pain or vomiting.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Prolonged contact may cause redness and/or tearing.
Waste management	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
Routes of entry	No information available.
Target organs	No target organs specified.
Aspiration hazards:	No information available.
Reproductive toxicity:	No information available.

Section 12: Ecological information

12.1 Toxicity

Acute toxicity - Fish	No information available.
Acute toxicity - Aquatic invertebrates	No information available.
Acute toxicity - Aquatic plants	No information available.
Acute toxicity - Microorganisms	No information available.
Chronic toxicity - Fish	No information available.
Chronic toxicity - Aquatic invertebrates	No information available.
Chronic toxicity - Aquatic plants	No information available.
Chronic toxicity - Microorganisms	No information available.
Ecotoxicity	The product contains substances which are toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.
Eco toxilogical information	No ecological toxicity available on the overall finished product.

12.2 Persistence and degradability

Degradability	The degradability of the product has not been stated.
Biological oxygen demand	No information available.
Chemical oxygen demand	No information available.

12.3 Bioaccumulative potential

Bioaccumulative potential	No data available on bioaccumulation.
Bioaccumulation factor	No information available.
Partition coefficient; n-Octanol/Water	No information available.

12.4 Mobility in soil

Mobility	No information available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	The product does not contain any PBT or vPvB Substances.

12.6 Other adverse effects

Other adverse effects	None known.

Section 13: Disposal considerations

Waste management — When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1 Waste treatment methods

Disposal methods — Dispose of waste and residues in accordance with local authority requirements, and in accordance with all local, national and international regulations.

Section 14: Transport information

14.1 UN number

UN no. (ADR)	UN1263
UN no. (IMDG)	UN1263
UN no. (IATA)	UN1263

14.2 UN proper shipping name

ADR proper shipping name	PAINT or PAINT RELATED MATERIAL
IMDG proper shipping name	PAINT or PAINT RELATED MATERIAL
IATA proper shipping name	PAINT

14.3 Transport hazard class(es)

ADR class	3
IMDG class	3
IATA class	3

Transport labels

14.4 Packing group

ADR/RID/ADN packing group	III
IMDG packing group	III
IATA packing group	III

14.5 Environmental hazards

ADR	No
IMDG	No
IATA	No

14.6 Special precautions for user

EMS	F-E, S-E
Emergency action code	A3 A72 A192
Hazard no. (ADR)	30
Tunnel restriction code	(D/E)

14.7 Transport in bulk according to annex II of MARPOL73/78 and the IBC code

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/Legislation specific for the substance or mixture

EU legislation — Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Reach Regulation (EC) No 453/2010. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 453/2010 of 20th May 2010 amending regulation (EC) No 1907/2006.

Approved code of practice	2018 Code of Practice for the Chemical Agents Regulations in accordance with section 60 of the Safety, Health and Welfare at Work Act 2005 (No. 10 of 2005).
Chemical safety assessment	No chemical safety assessment has been carried out.

Section 16: Other information

General information	This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010.
Revision comments	This is a first issue.
Revision date	12 September 2018
Revision	1
Safety data sheet status	Approved.

Hazard statements in full

EUH066	Repeated exposure may cause skin dryness or cracking.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H361	Suspected of damaging fertility or the unborn child .
H319	Causes serious eye irritation.
H312	Harmful in contact with skin.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer .
H332	Harmful if inhaled.
H302	Harmful if swallowed.
H400	Very toxic to aquatic life.
H412	Harmful to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H335	May cause respiratory irritation.
H410	Very toxic to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapour.
H360	May damage fertility or the unborn child .
H314	Causes severe skin burns and eye damage.

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.