

SAFETY DATA SHEET

2K High Solids Universal Gloss Binder

Date: 23-06-2017

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SECTION 1: IDENTIFICATION OF PRODUCT AND COMPANY

1.1 Product Identifier

Product name: 2K High Solids Gloss Binder
 Product Code: FL2030/2

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

Intended use: For Paint for metal.
 Uses advised against: Not suitable for use in homeworner (DIY) applications

1.3 Details of supplier of the safety data sheet

Details of company: FLP Group
 Unit 1 Clayfields Industrial Estate
 Tickhill Road
 Doncaster
 DN4 8QG
 +44 (0) 1302 571571
sales@flpgroup.co.uk

1.4 Emergency telephone number

Emergency Tel: +44 (0) 1302 571571

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

Classification under CLP: Flam. Liq. 3: H226; Skin Irrit. 2: H315; Eye. Irrit. 2: H319; STOT SE 3: H335; STOT RE 2: H373; Aquatic Chronic 3: H412.
 Most important adverse effects: Flammable. Harmful by inhalation and in contact with skin. Irritating to skin.

2.2 Label elements

Hazard statements: H226 Flammable liquid and vapour.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H412 Harmful to aquatic life with long lasting effects.
 Signal words: Warning
 Hazard pictograms: GHS02: Flame
 GHS07: Exclamation mark
 GHS08: Health hazard



Precautionary statements: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P260 Do not breathe fume/gas/mist/vapours/spray.
 P280 Wear protective gloves/clothing and eye/face protection.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a POISON CENTER/ doctor if you feel unwell.

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P403+P233 Store in a well-ventilated place. Keep container tightly closed.

2.3 Other hazards

Other hazards:

No other known hazards.

PBT:

This substance is not identified as a PBT substance.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous ingredients:

EINECS	CAS	CLP Classification	Percent
Aromatic hydrocarbons, C8 REACH No.: 01-2119486136-34			
292-694-9	90989-38-1	Flam. Liq. 3 H226. Dermal Acute Tox. 4 H312. Inhal Acute Tox. 4 H332. Asp. Tox. 1 H304. Skin Irrit. 2 H315. Eye Irrit. 2 H319. STOT SE 3 H335. STOT RE 2 H373	≥25% - <30%
2-methoxy-1-methylethyl acetate REACH No.: 01-2119475791-29			
203-603-9	108-65-6	Flam. Liq. 3 H226	≥15% - <20%
Hydrocarbons, C9, aromatics REACH No.: 01-2119455851-35			
918-668-5		Flam. Liq. 3 H226. Asp. Tox. 1 H304. STOT SE 3 H335. STOT SE 3 H336. Aquatic Chronic 2 H411.	≥5% - <7%
Polyurethane			
		Skin Irrit. 2 H315	≥1% - <3%
2-butanone oxime REACH No.: 01-2119539477-28			
202-496-6	96-29-7	Carc. 2 H351. Eye Dam. 1 H318. Skin Sens. 1,1A, 1B H317. Dermal Acute Tox. 4 H312	≥0.1% - <0.5%
(2-methoxymethylethoxy) propanol REACH No.: 01-2119450011-60			
252-104-2	34590-94-8		<0.1%
Methanol REACH No.: 01-2119433307-44			
200-659-6	67-56-1	Flam. Liq. 2 H225. STOT SE 1 H370. Oral Acute Tox. 3 H301. Dermal Acute Tox. 3 H311. Inhal Acute Tox. 3 H331	<0.1%

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Skin contact:

Remove contaminated clothing immediately and dispose of safely. After contact with skin, wash immediately with soap and plenty of water.

Eye contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Protect uninjured eye.

Ingestion:

Do NOT induce vomiting.

Inhalation: Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of inhalation, consult a doctor immediately and show him packing or label.

4.2 Most Important symptoms and effects, both acute and delayed

None known

4.3 Indication of any immediate medical attention and special treatment needed

In case of accident or un-wellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

Extinguishing media: CO2, powder extinguisher, foam, water spray. Extinguishing media which must not be used for safety reasons: Water jet.

5.2 Special hazards arising from the substance or mixture

Exposure hazards: Burning produces heavy smoke. Do not inhale explosion and/or combustion gases (carbon monoxide, carbon dioxide, oxides of nitrogen)

5.3 Advice for fire-fighters

Advice for fire-fighters: Use suitable breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Remove all sources of ignition. Wear personal protection equipment. Wear breathing apparatus if exposed to vapours/dusts/aerosols. See protective measures under point 7 and 8.

6.2 Environmental precautions

Environmental precautions: Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Clean-up procedures: Suitable material for collection: inert absorbent material (e.g. sand, vermiculite) after the product has been recovered, rinse the area and materials involved.

6.4 Reference to other sections

Reference to other sections: See also section 8 and 13

SECTION 7: HANDLING & STORAGE

7.1 Precautions for safe handling

Handling requirements: Avoid contact with skin and eyes, inhalation of vapours and mists. Use localized ventilation system. Don't use empty container before they have been cleaned. Before making transfer operations, assure that there aren't any incompatible material residuals in the

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containers. Contained clothing should be changed before entering eating areas. Do not eat or drink while working. See also section 8 for recommended protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight. Keep away from food, drink and feed. See chapter 10.5 Instructions as regards storage premises: Keep container tightly closed in a cool, well-ventilated place, away from heat.

7.3 Specific end use(s)

Specific end use(s): See chapter 1.2.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters

Aromatic hydrocarbons, C8 - CAS: 90989-38-1

ACGIH - LTE: 434 mg/m³, 100 ppm - STE: 651 mg/m³, 150 ppm

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

EU - LTE(8h): 275 mg/m³, 50 ppm - STE: 550 mg/m³, 100 ppm - Notes: Indicative

Occupational Exposure Limit Values [2, 3] and Limit Values for Occupational Exposure [4] (for references see bibliography) WEL -- Country: UNITED KINGDOM - LTE: 274 mg/m³, 50 ppm -

STE: 548 mg/m³, 100ppm

Hydrocarbons, C9, aromatics

ACGIH - LTE: 100 mg/m³

(2-methoxymethylethoxy) propanol - CAS: 34590-94-8

EU - LTE(8h): 308 mg/m³, 50 ppm - Notes: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography) ACGIH - LTE(8h): 100 ppm - STE: 150 ppm - Notes: Skin - Eye and URT irr, CNS impair

Methanol - CAS: 67-56-1

WEL -- Country: UNITED KINGDOM - LTE: 266 mg/m³, 200 ppm - STE: 333 mg/m³, 250 ppm EU - LTE(8h): 260 mg/m³, 200 ppm - Notes: Bold-type: Indicative Occupational Exposure Limit Values [2,3] and Limit Values for Occupational Exposure [4] (for references see bibliography) ACGIH - LTE(8h): 200 ppm - STE: 250 ppm - Notes: Skin BEI - Headache, eye dam, dizziness, nausea

DNEL Exposure Limit Values

Aromatic hydrocarbons, C8 - CAS: 90989-38-1

Worker Professional: 0.077 mg/l - Consumer: 0.0148 mg/l - Exposure: Human Inhalation -

Frequency: Long Term, systemic effects Worker Professional: 180 mg/kg - Exposure: Human

Dermal - Frequency: Long Term, systemic effects Consumer: 1.6 mg/kg - Exposure: Human Oral

- Frequency: Long Term, systemic effects

Hydrocarbons, C9, aromatics

Worker Professional: 25 mg/l - Consumer: 11 mg/kg - Exposure: Human Dermal - Frequency:

Long Term, systemic effects Worker Professional: 0.150 mg/l - Consumer: 0.032 mg/l -

Exposure: Human Inhalation - Frequency: Long Term, systemic effects Consumer: 11 mg/kg -

Exposure: Human Oral - Frequency: Long Term, systemic effects

PNEC Exposure Limit Values

Aromatic hydrocarbons, C8 - CAS: 90989-38-1

Target: Marine water - Value: 0.327 mg/l

Target: Fresh Water - Value: 0.327 mg/l

Target: Marine water sediments - Value: 12.46 mg/kg

Target: Fresh Water - Value: 12.46 mg/kg

Target: Soil (agricultural) - Value: 2.31 mg/kg

8.2 Exposure controls

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Eye protection:	Use close fitting safety goggles, don't use eye lens.
Skin protection:	Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
Hands protection:	Use protective gloves that provides comprehensive protection, e.g. NBR (nitrile rubber), FKM (fluoro rubber). The selection of suitable gloves does not only depend on the material, but also on other quality characteristics and varies from manufacturer to another one, and on the manner and times of use of the mixture.
Respiratory protection:	Combination filtering device (DIN EN 141).
Environmental exposure controls:	See chapter 6.2

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance and colour:	thick liquid
Odour:	of solvent
Odour threshold:	not available
pH:	not available
Melting point / freezing point:	not available
Initial boiling point and boiling range:	not available
Solid/gas flammability:	not applicable
Flammability or explosive limits:	
Upper:	not available
Lower:	not available
Vapour density:	not available
Flash point:	>23 °C
Evaporation rate:	not available
Vapour pressure:	not available
Relative density:	1.02 ÷ 1.18
Solubility in water:	not soluble
Solubility in oil:	not available
Partition coefficient (n-octanol/water):	not available
Auto-ignition temperature:	not available
Decomposition temperature:	not available
Viscosity:	100 ÷ 150 sec. ISO-DIN cup 6 mm (20°C)
Explosive properties:	none
Oxidizing properties:	none

9.2 Other information

Miscibility:	not available
Conductivity:	not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Reactivity:	Stable under normal conditions
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10.2 Chemical stability

Chemical stability:	Stable under normal conditions.
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10.3 Possibilities of hazardous reactions

Hazardous reactions:	Because of heat or fire the preparation can release carbon oxides and vapours which may be harmful to health. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.
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10.4 Conditions to avoid

Conditions to avoid: Avoid to keep near heat sources

10.5 Incompatible materials

Materials to avoid: Avoid contact with oxidizing materials or powerful oxidising agents. The product could catch fire. See chapter 10.3

10.6 Hazardous decomposition products

Hazardous decomposition products: No hazardous decomposition products when stored and handled correctly. See chapter 5.2

SECTION 11: TOXICAL INFORMATION

11.1 Information on toxicological effects

Toxicological information of the main substances found in the mixture:

Aromatic hydrocarbons, C8 - CAS: 90989-38-1

a) Acute toxicity:

Test: LC50 - Route: Inhalation Vapour - Species: Rat 27124 mg/m³ - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat 3223 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit 12126 mg/kg

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

a) Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 8530 mg/kg

Test: LD50 - Route: Skin - Species: Rat > 5000 mg/kg

Hydrocarbons, C9, aromatics

a) Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 3592 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 3160 mg/kg

Test: LC50 - Route: Inhalation Vapour - Species: Rat > 6193 mg/m³ - Duration: 4h

Methanol - CAS: 67-56-1

a) Acute toxicity:

Test: LD50 - Route: Oral - Species: Rat 5630 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit 15800 mg/kg

Test: LC50 - Route: Inhalation Vapour - Species: Rat 83.9 mg/L - Duration: 4h

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

a) Acute toxicity;

b) Skin corrosion/irritation;

c) Serious eye damage/irritation;

d) Respiratory or skin sensitisation;

e) Germ cell mutagenicity;

f) Carcinogenicity;

g) Reproductive toxicity;

h) STOT-single exposure;

i) STOT-repeated exposure;

j) Aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Aromatic hydrocarbons, C8 - CAS: 90989-38-1

a) Aquatic acute toxicity:

Endpoint: IC50 - Species: Algae 2.2 mg/l - Duration h: 72

Endpoint: EC50 - Species: Daphnia 1.0 mg/L - Duration h: 24

Endpoint: LC50 - Species: Fish 2.6 mg/l - Duration h: 96

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Hydrocarbons, C9, aromatics

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia 3.2 mg/l - Duration h: 48

Endpoint: IC50 - Species: Algae 2.9 mg/l - Duration h: 72

Endpoint: LC50 - Species: Fish 9.2 mg/l - Duration h: 96

12.2 Persistence and degradability

Not applicable

12.3 Bio accumulative potential

Not applicable

12.4 Mobility in soil

Not applicable

12.5 Results of PBT and vPvB assessment

PBT identification: This substance is not identified as a PBT substance

12.6 Other adverse effects

None

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: TRANSPORTATION INFORMATION

14.1 UN number

UN Number: 1263

14.2 UN proper shipping name

Shipping name: PAINT or PAINT RELATED MATERIAL

14.3 Transport hazard class

Transport class: 3
ADR - Hazard identification number: 30

14.4 Packaging group

Packing group: III

14.5 Environmental hazards

Environmentally hazardous: No
Marine pollutant: No

14.6 Special precautions for user

ADR-Subsidiary risks: -
ADR-S.P.: 163 640E 650
ADR-Tunnel Restriction Code: (D/E)
IATA-Passenger Aircraft: 355
IATA-Subsidiary risks: -
IATA-Cargo Aircraft: 366
IATA-S.P.: A3 A72

IATA-ERG:	3L
IMDG-EmS:	F-E, S-E
IMDG-Subsidiary risks:	-
IMDG-Storage category:	Category A
IMDG-Storage notes:	-

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable

SECTION 15: REGULATORY INFORMATION

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

Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 453/2010 (Annex II)
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)

Volatile Organic compounds - VOCs = 52.29 %

Volatile CMR substances = 0.05 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Where applicable, refer to the following Italian regulatory provisions:

Directive 82/501/EEC ("Activities linked to risks of serious accidents") and subsequent amendments.
1999/13/EC (VOC directive)

15.2 Chemical safety assessment

Not applicable

SECTION 16: OTHER INFORMATION

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.
* indicates text in the SDS which has changed since the last revision.

Phrases used in section 3:

- H226 Flammable liquid and vapour.
- H312 Harmful in contact with skin.
- H332 Harmful if inhaled.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.
- EUH066 Repeated exposure may cause skin dryness or cracking.
- H351 Suspected of causing cancer.
- H318 Causes serious eye damage.
- H317 May cause an allergic skin reaction.

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H225 Highly flammable liquid and vapour.
H370 Causes damage to organs.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.

Legal disclaimer:

The above information is believed to be correct but does not support to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.