

SAFETY DATA SHEET

Authoring Date 21-Feb-2017 Revision date 21-Feb-2017

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code

1AP01B0A03

Product name

FUSION-G MK BLACK-H P582V TH

Recommended Use

Printing ink

Manufacturer

Supplier / Importer

DIC Graphics Corporation

DIC Graphics (Thailand) Co., Ltd

Tokvo Plant.

35-58, Sakashita 3-chome,

159/34 SERM-MIT TOWER 20th Floor, Soi Asoke, Sukhumvit 21 Road, Kwang North Klongtoey, Khet Wattana, Bangkok 10110,

Itabashi-ku, Tokyo 174-8520, Japan

Thailandx

TEL:+81-3-5392-0972

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Emergency TEL: 02-260-6630-7

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin corrosion/irritation	Category 3 - (H316)
Carcinogenicity	Category 2 - (H351)
Specific target organ toxicity (repeated exposure)	Category 1 - (H372)
Category 1 lung.	
Acute aquatic toxicity	Category 3 - (H402)

Label elements



Signal word

Danger

Hazard statements

H316 - Causes mild skin irritation

H351 - Suspected of causing cancer

H372 - Causes damage to organs through prolonged or repeated exposure

H402 - Harmful to aquatic life

-- THA / EN --

Precautionary Statements - Prevention

- · Obtain special instructions before use
- · Do not handle until all safety precautions have been read and understood
- Wear protective gloves/protective clothing/eye protection/face protection
- Do not breathe dust/fume/gas/mist/vapors/spray
- · Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- · Avoid release to the environment

Precautionary Statements - Response

- IF exposed or concerned: Call a POISON CENTER or doctor
- · If skin irritation occurs: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

· Dispose of contents/container to an approved waste disposal plant

Other Information

Other hazards

Not Applicable

Hazards not otherwise classified (HNOC)

Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical identity

No information available

Pure substance/mixture

Mixture

Chemical Name	CAS No	EC No	weight-%
Vegetable oils	-		35-45
Synthetic resins	-		20-30
CARBON BLACK	1333-86-4	215-609-9	15-25
Mineral oil	-		5-10
Additives	-		1-5
Pigment	-		1-5
Cobalt compounds	-		<1

4. FIRST AID MEASURES

First aid measures

Inhalation

Remove to fresh air

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician

Ingestion

Clean mouth with water and drink afterwards plenty of water

Most important symptoms and effects, both acute and delayed

Symptoms

None known.

Disclaimer 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.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment

Unsuitable Extinguishing Media No data available

Specific extinguishing methods If impossible to extinguish, protect surroundings and allow fire to burn itself out

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Ensure adequate ventilation, especially in confined areas

Environmental precautions

Collect spillage

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so

Methods for cleaning up

Use personal protective equipment as required Take up mechanically, placing in appropriate containers for disposal Clean contaminated surface thoroughly Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry Avoid creating

dust

7. HANDLING AND STORAGE

Precautions for safe handling Advice on safe handling

Ensure adequate ventilation, especially

in confined areas

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Please see "Exposure Limits", if the table is indicated here.

Chemical Name	ACGIH	Thailand
CARBON BLACK	TWA: 3 mg/m³ inhalable fraction	
1333-86-4		

Engineering Controls

Ensure adequate ventilation, especially in confined areas

---- THA / EN ------

Personal protective equipment (PPE)

Hand Protection

Gloves made of plastic or rubber

Eye/face protection

Wear safety glasses with side shields (or goggles)

General Hygiene Considerations





9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Solid Appearance paste Color

black

Odor Odor Threshold

Characteristic odor No data available

Remarks • Method

Property Values No data available pН Melting point/freezing point No data available Boiling point/boiling range No data available Flash point 140 °C / 284 °F **Evaporation rate** No data available Flammability (solid, gas) No data available

Flammability Limits in Air Upper flammability limits Lower flammability limit Vapor Pressure

No data available No data available Vapor density No data available Specific gravity No data available Solubility(ies)

Partition coefficient **Autoignition temperature Decomposition temperature** Kinematic viscosity **Dynamic viscosity**

No data available No data available No data available No data available

No data available

No data available

Other Information

Molecular weight No data available **Explosive properties** No data available Oxidizing properties No data available Softening point No data available **VOC Content (%)** No data available Density No data available **Bulk density** No data available

10. STABILITY AND REACTIVITY

Reactivity

No information available

-- THA / EN ---

Stability

Stable under normal conditions

Possibility of Hazardous Reactions

None under normal processing

Hazardous polymerization

None under normal processing.

Conditions to avoid

Heat, flames and sparks

Incompatible materials

Hazardous Decomposition Products

None under normal use conditions

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

No data available

Eye contact

No data available

Skin Contact

No data available

Ingestion

No data available

Information on toxicological effects

Acute toxicity LD/LC50 values that relevant for classification.

Component	Oral LD50	Dermal LD50	Inhalation LC50
CARBON BLACK 1333-86-4 (15-25)	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen

The table below indicates whether each agency has listed	any ingredient as a carcinogen
Chemical Name	IARC
CARBON BLACK	Group 2B

Group 2B - Possibly Carcinogenic to Humans.

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

---- THA / EN -----

Aspiration hazard

No data available

Numerical measures of toxicity

Unknown Acute Toxicity

74.668 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

94.741 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

94.741 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

94.741 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

93.642 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

12. ECOLOGICAL INFORMATION

Ecotoxicity The table below indicates component(s) of known hazards to the aquatic environment.

79.927% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
CARBON BLACK			EC50(24h): > 5600 mg/L (Daphnia magna)

Persistence and degradability

No data available.

Bioaccumulation

No data available.

Mobility

No data available.

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused

Products

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

regulations

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal

14. TRANSPORT INFORMATION

IMDG

Proper shipping name Hazard Class Not regulated Not regulated

------ THA / EN ------

UN/ID no Not regulated
Packing Group Not regulated
Special Provisions none
Marine pollutant Net Applicable

Marine pollutant Not Applicable Environmental hazard Not Applicable

RID

UN/ID no Not regulated
Proper shipping name Not regulated
Hazard Class Not regulated
Packing Group Not regulated
Environmental hazard Not Applicable

Special Provisions none

ADR

UN/ID no Not regulated
Proper shipping name Not regulated
Hazard Class Not regulated
Packing Group Not regulated
Environmental hazard Not Applicable

Special Provisions none

IATA

UN/ID no Not regulated
Proper shipping name Not regulated
Hazard Class Not regulated
Packing Group Not regulated

Special Provisions none

15. REGULATORY INFORMATION

National Regulations

Hazardous Substances Act Not Applicable

Enhancement and Conservation of National Environmental Not Applicable Quality Act

Thailand - Hazardous Chemicals Not Applicable

We adopted 1.0% or more as a threshold value in case of no provision in a law.

16. OTHER INFORMATION

Authoring Date

21-Feb-2017

Revision Note Reference

LOLI Database (ChemADVISOR,Inc.)

The reference on GHS classification results

Japan National Institute of Technology and Evaluation (NITE)

EU CLP(1272/2008)Annex VI Table 3.1

--- THA / EN -----

Other information

Color & Comfort

SAFETY DATA SHEET

Authoring Date 20-Feb-2017 Revision date 20-Feb-2017

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code

1AP01C0A03

Product name

FUSION-G MK CYAN-H P582V TH

Recommended Use

Printing ink

Manufacturer

Supplier / Importer

DIC Graphics Corporation

DIC Graphics (Thailand) Co., Ltd

Tokyo Plant,

35-58, Sakashita 3-chome.

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin corrosion/irritation	Category 3 - (H316)
Acute aquatic toxicity	Category 3 - (H402)

Label elements

Signal word

Warning

Hazard statements

H316 - Causes mild skin irritation

H402 - Harmful to aquatic life

Precautionary Statements - Prevention

· Avoid release to the environment

Precautionary Statements - Response

• If skin irritation occurs: Get medical advice/attention

Precautionary Statements - Storage

• Store in a closed container

Precautionary Statements - Disposal

· Dispose of contents/container to an approved waste disposal plant

Other Information

Other hazards

--- THA / EN ---

Not Applicable

Hazards not otherwise classified (HNOC)

Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical identity

No information available

Pure substance/mixture

Mixture

Chemical Name	CAS No	EC No	weight-%
Synthetic resins	-		25-35
Vegetable oils	-		20-30
Pigment	-		15-25
Mineral oil	-		15-25
Additives	-		5-10
Cobalt compounds	-		<1

4. FIRST AID MEASURES

First aid measures

Inhalation Remove to fresh air

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician

Ingestion Clean mouth with water and drink afterwards plenty of water

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

surrounding environment

Unsuitable Extinguishing Media No data available

Specific extinguishing methods If impossible to extinguish, protect surroundings and allow fire to burn itself out

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit

----- THA / EN -----

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Ensure adequate ventilation, especially in confined areas

Environmental precautions

Collect spillage

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so

Methods for cleaning up Use personal protective equipment as required Take up mechanically, placing in

appropriate containers for disposal Clean contaminated surface thoroughly Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry Avoid creating

dust

7. HANDLING AND STORAGE

Precautions for safe handling Advice on safe handling

Ensure adequate ventilation, especially

in confined areas

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry,

cool and well-ventilated place

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Please see "Exposure Limits", if the table is indicated here.

Engineering Controls

Ensure adequate ventilation, especially in confined areas

Personal protective equipment (PPE)

Hand Protection

Gloves made of plastic or rubber

Eye/face protection

Wear safety glasses with side shields (or goggles)

General Hygiene Considerations





9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance

Solid paste

Color

blue

Odor

Odor Threshold

Characteristic odor No data available

- THA / EN ---

Property	Values	Remarks • Method
рН	No data available	Remarks Viviethou
Melting point/freezing point	No data available	
Boiling point/boiling range	No data available	
Flash point	140 °C / 284 °F	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limits in Air		
Upper flammability limits	No data available	
Lower flammability limit	No data available	
Vapor Pressure	No data available	
Vapor density	No data available	
Specific gravity	No data available	
Solubility(ies)		
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Other Information		
Molecular weight	No data available	
Explosive properties	No data available	
Oxidizing properties	No data available	
Softening point	No data available	
VOC Content (%)	No data available	
Density	No data available	
Bulk density	No data available	

10. STABILITY AND REACTIVITY

Reactivity

No information available

Stability

Stable under normal conditions

Possibility of Hazardous Reactions

None under normal processing

Hazardous polymerization

None under normal processing.

Conditions to avoid

Heat, flames and sparks

Incompatible materials

Hazardous Decomposition Products

None under normal use conditions

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

No data available

Eye contact

No data available

Skin Contact

No data available

Ingestion

No data available

Information on toxicological effects

Acute toxicity LD/LC50 values that relevant for classification.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen

Group 2B - Possibly Carcinogenic to Humans.

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Chronic toxicity

May cause adverse liver effects

Aspiration hazard

No data available

Numerical measures of toxicity

Unknown Acute Toxicity

93.17 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

94.42 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

94.42 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

94.42 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

93.17 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

12. ECOLOGICAL INFORMATION

Ecotoxicity The table below indicates component(s) of known hazards to the aquatic environment.

98.75% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No data available.

---- THA / EN -----

Bioaccumulation

No data available.

Mobility

No data available.

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused

Products

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

regulations

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal

14. TRANSPORT INFORMATION

IMDG

Proper shipping nameNot regulatedHazard ClassNot regulatedUN/ID noNot regulatedPacking GroupNot regulatedSpecial ProvisionsnoneMarine pollutantNot Applicable

Environmental hazard

Not Applicable Not Applicable

RID

UN/ID no
Proper shipping name
Hazard Class
Packing Group
Environmental hazard
Special Provisions
Not regulated
Not regulated
Not Applicable
none

<u>ADR</u>

UN/ID no
Proper shipping name
Hazard Class
Packing Group
Environmental hazard
Special Provisions
Not regulated
Not regulated
Not Applicable
none

IATA

UN/ID no
Proper shipping name
Hazard Class
Packing Group
Special Provisions

Not regulated
Not regulated
Not regulated
none

--- THA / EN -----

15. REGULATORY INFORMATION

National Regulations

Hazardous Substances Act

Not Applicable

Enhancement and Conservation of National Environmental Not Applicable Quality Act

Thailand - Hazardous Chemicals

Chemical Name	Thailand - Hazardous Chemicals	Thailand - Hazardous Chemicals which Employers must Provide Medical Examination for Employees
PHTHALOCYANINE BLUE 147-14-8		Present

We adopted 1.0% or more as a threshold value in case of no provision in a law.

16. OTHER INFORMATION

Authoring Date

20-Feb-2017

Revision Note Reference LOLI Database (ChemADVISOR,Inc.)

The reference on GHS classification results
Japan National Institute of Technology and Evaluation (NITE)
EU CLP(1272/2008)Annex VI Table 3.1

Other information

---- THA / EN -----

Color & Comfort

SAFETY DATA SHEET

Authoring Date 20-Feb-2017 Revision date 20-Feb-2017

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code

1AP01K0A03

Product name

FUSION-G MK MAGENTA-H P582V TH

Recommended Use

Printing ink

Manufacturer

Supplier / Importer **DIC Graphics Corporation**

Japan

DIC Graphics (Thailand) Co., Ltd

Tokyo Plant, 35-58, Sakashita 3-chome,

159/34 SERM-MIT TOWER 20th Floor, Soi Asoke, Sukhumvit 21 Road, Kwang North Klongtoey, Khet Wattana, Bangkok 10110.

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FAX:+81-3-3966-0284

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin corrosion/irritation	Category 3 - (H316)
Acute aquatic toxicity	Category 3 - (H402)

Label elements

Signal word

Warning

Hazard statements

H316 - Causes mild skin irritation

H402 - Harmful to aquatic life

Precautionary Statements - Prevention

Avoid release to the environment

Precautionary Statements - Response

· If skin irritation occurs: Get medical advice/attention

Precautionary Statements - Storage

· Store in a closed container

Precautionary Statements - Disposal

· Dispose of contents/container to an approved waste disposal plant

Other Information

Other hazards

-- THA / EN ---

Not Applicable

Hazards not otherwise classified (HNOC)

Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical identity

No information available

Pure substance/mixture

Mixture

Chemical Name	CAS No	EC No	weight-%
Synthetic resins	-		25-35
Vegetable oils	-		20-30
Mineral oil	-		15-25
Pigment	-		10-20
Additives	-		5-10
Cobalt compounds	-		<1

4. FIRST AID MEASURES

First aid measures

Inhalation

Remove to fresh air

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician

Ingestion

Clean mouth with water and drink afterwards plenty of water

Most important symptoms and effects, both acute and delayed

Symptoms

None known.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment

Unsuitable Extinguishing Media No data available

Specific extinguishing methods If impossible to extinguish, protect surroundings and allow fire to burn itself out

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit

----- THA / EN -----

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Ensure adequate ventilation, especially in confined areas

Environmental precautions

Collect spillage

Methods and material for containment and cleaning up

Methods for containment Methods for cleaning up

Prevent further leakage or spillage if safe to do so

Use personal protective equipment as required Take up mechanically, placing in

appropriate containers for disposal Clean contaminated surface thoroughly Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry Avoid creating

7. HANDLING AND STORAGE

Precautions for safe handling Advice on safe handling

Ensure adequate ventilation, especially

in confined areas

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Please see "Exposure Limits", if the table is indicated here.

Engineering Controls

Ensure adequate ventilation, especially in confined areas

Personal protective equipment (PPE)

Hand Protection

Gloves made of plastic or rubber

Eye/face protection

Wear safety glasses with side shields (or goggles)

General Hygiene Considerations





9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance

Color

Solid paste

red

Odor Odor Threshold Characteristic odor No data available

-- THA / EN ---

Property pH Melting point/freezing point Boiling point/boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limits in Air Upper flammability limits Lower flammability limit Vapor Pressure Vapor density Specific gravity Solubility(ies) Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity	Values No data available No data available No data available 140 °C / 284 °F No data available	Remarks • Method
Other Information Molecular weight Explosive properties Oxidizing properties Softening point VOC Content (%) Density Bulk density	No data available	

10. STABILITY AND REACTIVITY

Reactivity

No information available

Stability

Stable under normal conditions

Possibility of Hazardous Reactions

None under normal processing

Hazardous polymerization

None under normal processing.

Conditions to avoid

Heat, flames and sparks

Incompatible materials

Hazardous Decomposition Products

None under normal use conditions

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

No data available

Disclaimer 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 as the second of the 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 as the second of the safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.

1AP01K0A03 - FUSION-G MK MAGENTA-H P582V TH

Eye contact Skin Contact No data available

Ingestion

No data available No data available

Information on toxicological effects

Acute toxicity LD/LC50 values that relevant for classification.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen

Group 2B - Possibly Carcinogenic to Humans.

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration hazard

No data available

Numerical measures of toxicity

Unknown Acute Toxicity

93.606 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

94.858 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

94.858 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

94.858 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

93.606 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

12. ECOLOGICAL INFORMATION

<u>Ecotoxicity</u> The table below indicates component(s) of known hazards to the aquatic environment.

98.748% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No data available.

Bioaccumulation

----- THA / EN -----

No data available.

Mobility

No data available.

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused

Products

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

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal

14. TRANSPORT INFORMATION

Proper shipping name Not regulated **Hazard Class** Not regulated UN/ID no Not regulated **Packing Group** Not regulated none

Special Provisions

Marine pollutant **Environmental hazard** Not Applicable Not Applicable

RID

UN/ID no Not regulated Not regulated Proper shipping name **Hazard Class** Not regulated **Packing Group** Not regulated **Environmental hazard** Not Applicable

Special Provisions

none

ADR

UN/ID no Not regulated Proper shipping name Not regulated **Hazard Class** Not regulated **Packing Group** Not regulated Environmental hazard Not Applicable

Special Provisions

IATA

UN/ID no Not regulated Proper shipping name Not regulated **Hazard Class** Not regulated **Packing Group** Not regulated **Special Provisions** none

15. REGULATORY INFORMATION

-- THA / FN ---

National Regulations

Hazardous Substances Act

Not Applicable

Enhancement and Conservation of National Environmental Not Applicable

Quality Act

Thailand - Hazardous Chemicals

Not Applicable

We adopted 1.0% or more as a threshold value in case of no provision in a law.

16. OTHER INFORMATION

Authoring Date

20-Feb-2017

Revision Note Reference LOLI Database (ChemADVISOR,Inc.)

The reference on GHS classification results Japan National Institute of Technology and Evaluation (NITE) EU CLP(1272/2008)Annex VI Table 3.1

Other information

Color & Comfort

SAFETY DATA SHEET

Authoring Date 17-Feb-2017 Revision date 22-Feb-2017

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Code

1AP01Y0A03

Product name

FUSION-G MK YELLOW-H P582V TH

Recommended Use

Printing ink

Manufacturer

Supplier / Importer

DIC Graphics Corporation

DIC Graphics (Thailand) Co., Ltd

Tokyo Plant,

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Skin corrosion/irritation	Category 3 - (H316)
Acute aquatic toxicity	Category 3 - (H402)

Label elements

Signal word

Warning

Hazard statements

H316 - Causes mild skin irritation

H402 - Harmful to aquatic life

Precautionary Statements - Prevention

Avoid release to the environment

Precautionary Statements - Response

• If skin irritation occurs: Get medical advice/attention

Precautionary Statements - Storage

· Store in a closed container

Precautionary Statements - Disposal

· Dispose of contents/container to an approved waste disposal plant

Other Information

Other hazards

Not Applicable

Hazards not otherwise classified (HNOC)

· Not Applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical identity

No information available

Pure substance/mixture

Mixture

Chemical Name	CAS No	EC No	weight-%
Vegetable oils	-		25-35
Synthetic resins	-		25-35
Mineral oil	-		20-30
Pigment	-		5-15
Additives	-		5-10
Cobalt compounds	-		<1

4. FIRST AID MEASURES

First aid measures

Inhalation

Remove to fresh air

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician

Ingestion

Clean mouth with water and drink afterwards plenty of water

Most important symptoms and effects, both acute and delayed

Symptoms

None known.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Treat symptomatically

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment

Unsuitable Extinguishing Media No data available

Specific extinguishing methods If impossible to extinguish, protect surroundings and allow fire to burn itself out

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition

Protective equipment and precautions for firefighters

Wear self-contained breathing apparatus and protective suit

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Ensure adequate ventilation, especially in confined areas

Environmental precautions

Collect spillage

Methods and material for containment and cleaning up

Methods for containment Methods for cleaning up

Prevent further leakage or spillage if safe to do so

Use personal protective equipment as required Take up mechanically, placing in

appropriate containers for disposal Clean contaminated surface thoroughly Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry Avoid creating

dust

7. HANDLING AND STORAGE

Precautions for safe handling Advice on safe handling

Ensure adequate ventilation, especially

in confined areas

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Please see "Exposure Limits", if the table is indicated here.

Engineering Controls

Ensure adequate ventilation, especially in confined areas

Personal protective equipment (PPE)

Hand Protection

Gloves made of plastic or rubber

Eye/face protection

Wear safety glasses with side shields (or goggles)

General Hygiene Considerations





9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state

Solid

Appearance Color

paste

yellow

Odor

Odor Threshold

Characteristic odor

No data available

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Property	<u>Values</u>	Remarks • Method
рН	No data available	
Melting point/freezing point	No data available	
Boiling point/boiling range	No data available	
Flash point	140 °C / 284 °F	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limits in Air		
Upper flammability limits	No data available	
Lower flammability limit	No data available	
Vapor Pressure	No data available	
Vapor density	No data available	
Specific gravity	No data available	
Solubility(ies)		
Partition coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Other Information		
Malana Inc.	No. 1-1	
Molecular weight	No data available	
Explosive properties	No data available	
Oxidizing properties	No data available	
Softening point	No data available	
VOC Content (%)	No data available	
Density	No data available	
Bulk density	No data available	

10. STABILITY AND REACTIVITY

Reactivity

No information available

Stability

Stable under normal conditions

Possibility of Hazardous Reactions

None under normal processing

Hazardous polymerization

None under normal processing.

Conditions to avoid

Heat, flames and sparks

Incompatible materials

Hazardous Decomposition Products

None under normal use conditions

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

No data available

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Eye contact

No data available

Skin Contact

No data available

Ingestion

No data available

Information on toxicological effects

Acute toxicity No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration hazard

No data available

Numerical measures of toxicity

Unknown Acute Toxicity

92.838 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

93.901 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

93.901 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

93.901 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

92.838 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

12. ECOLOGICAL INFORMATION

Ecotoxicity No data available

98.937% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No data available.

Bioaccumulation

No data available.

Mobility

No data available.

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Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Waste from Residues/Unused

Products

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

regulations

Contaminated packaging

Improper disposal or reuse of this container may be dangerous and illegal

14. TRANSPORT INFORMATION

Not regulated Proper shipping name **Hazard Class** Not regulated UN/ID no Not regulated **Packing Group** Not regulated **Special Provisions** none Marine pollutant

Not Applicable Environmental hazard Not Applicable

RID

UN/ID no Not regulated Proper shipping name Not regulated **Hazard Class** Not regulated **Packing Group** Not regulated **Environmental hazard** Not Applicable none

Special Provisions

ADR

UN/ID no Not regulated Proper shipping name Not regulated **Hazard Class** Not regulated **Packing Group** Not regulated **Environmental hazard** Not Applicable **Special Provisions** none

IATA

UN/ID no Not regulated Proper shipping name Not regulated **Hazard Class** Not regulated **Packing Group** Not regulated Special Provisions none

15. REGULATORY INFORMATION

National Regulations

Hazardous Substances Act

Not Applicable

Disclaimer 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.

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Enhancement and Conservation of National Environmental Not Applicable Quality Act

Thailand - Hazardous Chemicals

Not Applicable

We adopted 1.0% or more as a threshold value in case of no provision in a law.

16. OTHER INFORMATION

Authoring Date

17-Feb-2017

Revision Note Reference LOLI Database (ChemADVISOR,Inc.)

The reference on GHS classification results
Japan National Institute of Technology and Evaluation (NITE)
EU CLP(1272/2008)Annex VI Table 3.1

Other information

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