

PRODUCT CODE: **KCM024** Effective Date: December-2023 Version: 3.0

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

Identification of the substance or preparation:

Flexible Additive: KCM024

Company/undertaking identification: OPT Chemicals Saudi Factory and Co.

Dammam 2nd Industrial City, 6th Street, 101 Intersection,

Postal code 34334, Kingdom of Saudi Arabia.

Emergency phone: +966 56 917 2181

2. HAZARDS IDENTIFICATION

Main environmental hazards: Unknown.

Main physical hazards:

Special precautions: Dust Physical hazard: Dust

Main health hazards: The molten material can product some special gas which will

irritate the respiratory system; Needing to fix the eliminator.

3. COMPOSITION/INFORMATION ON INGREDIENTS

SubstanceConc. [wt.%]CAS#Aromatic Polymer80-1009006-04-6

4. FIRST AID MEASURES

Eye contact: Immediately flush eyes with water for 15 minutes while

holding eyelids open. Seek medical attention.

Skin contact: Remove contaminated clothes and shoes. Wash thoroughly

with soap and water. Seek medical attention if irritation

occurs.

Inhalation: Remove to fresh air.

Swallowing: Drinking much water to throw up harmful substance and then

seek for the medical treatment immediately.

5. FIRE-FIGHTING MEASURES

Extinguishing media: carbon dioxide, foam, and power fire extinguisher.

Further Information: None known.

NFPA Rating: Health 2; Flammability 2; Reactivity 0; Other: None.

Combustion products: See Section 10.

6. ACCIDENTAL RELEASE MEASURES

After spillage/leakage: Scoop into containers. Avoid generating dust.

See Section 8 for protective equipment

information.

See Section 13 for disposal information.

7. HANDLING AND STORAGE

Special precautions: Operating in an insulation space which can ventilate regional;

carry it carefully; with some relevant emergency measures.

Packaging requirements: Bag with moisture barrier.

Ventilation: Provide ventilation to keep airborne.



Storage requirements: Conserving in a shade, dry, ventilate warehouse; airtight seal;

keep away from the air.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection: Using self-priming filter mask.

Eye protection: None normally needed except under high concentration.

Hand protection: Protective gloves.

Skin protection: Clean, body-covering clothing.

Exposure Limit Guidelines (mg/m³) Under the limitation of air concentration.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Grain
Color: Black
Odor: None

pH value:

Boiling point:

Not applicable

Pour point:

Not applicable

Flash point: 200°C

Flammability (explosion limits in air):

Lower: Not applicable Upper: Not applicable

Auto flammability (auto-ignition temperature):

Vapor pressure:

Relative density (specific gravity):

Bulk density (solids):

Solubility in water:

Not applicable
1.53-1.73

None
Soluble

Viscosity: Not applicable Relative vapor density (air=1): Not applicable % Volatile: Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions to avoid: high temperature

Materials to avoid: moist air
Hazardous Polymerization: Will not occur.
Dust explosion hazard (solids): Not applicable

Special hazards: None Hazardous decomposition products: None

11. TOXICOLOGICAL INFORMATION

Eye contact: Some solid and particles can cause the irritation when

contacts with the eyes.

Skin contact: May cause the dermatitis.

Inhalation: Irritant; may cause pain and coughing.

Ingestion: Harmful if swallowed; large amounts may cause illness.

Carcinogenicity: Not listed by IARC, USA NTP, or USA OSHA.

Mutagenicity: Not known to cause heritable genetic damage.

Teratogenicity: Not known to cause birth defects.

Target organs which may be affected: None known

Sensitization: Not known to cause allergic reaction.



12. ECOLOGICAL INFORMATION

Information on product as a whole:

Main environmental hazards:

Degradability:

Other:

None known

Not applicable

None known

13. DISPOSAL CONSIDERATIONS

Product: Dispose of by sanitary land filling or other acceptable method

in accordance with local regulations.

Container: Send empty bags to sanitary landfill. Render other types of

containers unusable by puncturing or crushing and sanitary

landfill unless prohibited by local regulations.

14. TRANSPORT INFORMATION

UN Number: None

IMO Description: Not regulated

Class:

Package Group:

Label: EMS: MFAG:

IATA Description: Not regulated

Class: Sub Risk:

Package Group:

Label:

ADR Description: Not regulated

ADR class/item: ADR Danger ID: ADR Label:

15. REGULATORY INFORMATION

Symbols:

Risks: -

Safety advice: Avoiding fire

Notification/restrictions status:

EUROPEAN UNION (EU): All components of this material are on the EINECS inventory,

or the components are exempt from inventory reporting.

NORWAY: Not determined.

USA: All components of this material are on the USA TSCA

inventory, or the components are exempt from inventory

reporting.

16. OTHER INFORMATION

REGULATORY INFORMATION

This information and these recommendations are offered in good faith and believed to be correct as of the date hereof. Information and recommendations are supplied upon the condition that the recipients will make their own decision as to safety and suitability for their purposes. No representations or warranties, either expressed or implied, of merchant ability, fitness for a particular purpose, or of any other nature, are made with respect to the product or the information and recommendations. We make no representation as to completeness or accuracy. In no event we shall be responsible for damages of any nature whatsoever resulting from the use or reliance upon the information and recommendations.



PRODUCT CODE: **KCM025H** Effective Date: December-2023 Version: 3.0

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

Identification of the substance or preparation:

Expanding Agent: KCM025H

Company/undertaking identification: OPT Chemicals Saudi Factory and Co.

Dammam 2nd Industrial City, 6th Street, 101 Intersection,

Postal code 34334, Kingdom of Saudi Arabia.

Emergency phone: +966 56 917 2181

2. HAZARDS IDENTIFICATION

Main environmental hazards: Unknown

Main physical hazards:

Special precautions: None Physical hazard: Dust

Main health hazards: Causes severe eye irritation. Causes irritation if swallowed.

Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Conc. [wt.%] CAS#

Metal Oxides 70-100

4. FIRST AID MEASURES

Eye contact: Immediately flush eyes with water for 15 minutes while

holding eyelids open. Seek medical attention.

Skin contact: Remove contaminated clothes and shoes. Wash thoroughly

with soap and water. Seek medical attention if irritation

occurs.

Inhalation: Remove to fresh air.

Swallowing: If several grams are swallowed, immediate medical is

required. If delayed, consider inducing vomiting with ipecac or

other means. After vomiting give milk or water.

Note: None

5. FIRE-FIGHTING MEASURES

Extinguishing media: None needed Further Information: None known

NFPA Rating: Health 1; Flammability 0; Reactivity 0; Other: None

Combustion products: See Section 10.

6. ACCIDENTAL RELEASE MEASURES

After spillage/leakage: Scoop into containers. Flush residual with plenty of water.

See Section 8 for protective equipment information.

See Section 13 for disposal information.

7. HANDLING AND STORAGE

Special precautions: Keep material dry.

Packaging requirements: Bag with moisture barrier.

Ventilation: Provide ventilation to keep airborne concentrations below

exposure limits.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



Respiratory protection:

Eye protection:

None normally needed.

Chemical splash goggles.

Hand protection: Impervious gloves made of rubber. Skin protection: Clean, body-covering clothing.

Exposure Limit Guidelines (mg/m³)

No components have established exposure limits.

Dust particles: $total = 10 \text{ mg/m}^3$, respirable fraction = 5 mg/m^3 .

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Powder
Color: Pale gray
Odor: None

pH value: Not determined

Boiling point: 3450°C
Pour point: 2900°C

Flash point: Not combustible

Flammability (explosion limits in air):

Lower: Not applicable
Upper: Not applicable
Auto flammability (auto-ignition temperature): Not applicable
Vapor pressure: Not applicable
Relative density (specific gravity): 3.45-3.65
Bulk density (solids): 1600 kg/m³.

Solubility in water: Slightly soluble (20°C)

Viscosity: Not applicable Relative vapor density (air=1): Not applicable % Volatile: Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable Conditions to avoid: Unknown

Materials to avoid: Aqueous solutions are mildly corrosive to metals. Releases

heat when mixed with water.

Hazardous Polymerization: Will not occur.

Dust explosion hazard (solids): Not applicable

Special hazards:

Hazardous decomposition products:

None

11. TOXICOLOGICAL INFORMATION

Eye contact: Severe irritant. Causes pain and redness. Prolonged or

repeated contact may cause mild burn.

Skin contact: Irritant; may cause pain, redness, dermatitis. Inhalation: Irritant; may cause pain and coughing.

Ingestion: Irritant; may cause pain or discomfort to mouth, throat and

stomach. Harmful if swallowed; large amounts may cause

illness.

Carcinogenicity: Not listed by IARC, USA NTP, or USA OSHA.

Mutagenicity: Not known to cause heritable genetic damage.

Teratogenicity: Not known to cause birth defects.

Target organs which may be affected: None known.



Sensitization: Not known to cause allergic reaction.

12. ECOLOGICAL INFORMATION

Information on product as a whole:

Main environmental hazards:

Degradability:

Other:

None known

Not applicable

None known

13. DISPOSAL CONSIDERATIONS

Product: Dispose of by sanitary landfilling or other acceptable method

in accordance with local regulations.

Container: Send empty bags to sanitary landfill. Render other types of

containers unusable by puncturing or crushing and sanitary

landfill unless prohibited by local regulations.

14. TRANSPORT INFORMATION

UN Number: None

IMO Description: Not regulated

Class:

Package Group

Label: EMS: MFAG:

IATA Description: Not regulated

Class: Sub Risk:

Package Group:

Label:

ADR Description: Not regulated

ADR class/item: ADR Danger ID: ADR Label:

15. REGULATORY INFORMATION

Symbols:

Irritant

Risks: R36 Irritating to eyes.

Safety advice: S22 Do not breath dust. S24 Avoid contact with skin.

Notification/restrictions status:

EUROPEAN UNION (EU): All components of this material are on the EINECS inventory, or

the components are exempt from inventory reporting.

NORWAY: Not determined.

USA: All components of this material are on the USA TSCA

inventory, or the components are exempt from inventory

reporting.

16. OTHER INFORMATION

REGULATORY INFORMATION

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no event we shall be responsible for damages of any nature whatsoever resulting from the use or reliance upon the information and recommendations.

*** END of SDS***



PRODUCT CODE: KCM025HC Effective Date: December-2023 Version: 3.0

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

Identification of the substance or preparation:

Expanding Agent: KCM025HC

Company/undertaking identification: OPT Chemicals Saudi Factory and Co.

Dammam 2nd Industrial City, 6th Street, 101 Intersection,

Postal code 34334, Kingdom of Saudi Arabia.

Emergency phone: +966 56 917 2181

2. HAZARDS IDENTIFICATION

Main environmental hazards: Unknown

Main physical hazards:

Special precautions: None Physical hazard: Dust

Main health hazards: Causes severe eye irritation. Causes irritation if swallowed.

Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Conc. [wt.%] CAS#

Metal Oxides 70-100 -

4. FIRST AID MEASURES

Eye contact: Immediately flush eyes with water for 15 minutes while

holding eyelids open. Seek medical attention.

Skin contact: Remove contaminated clothes and shoes. Wash thoroughly

with soap and water. Seek medical attention if irritation

occurs.

Inhalation: Remove to fresh air.

Swallowing: If several grams are swallowed, immediate medical is

required. If delayed, consider inducing vomiting with ipecac or

other means. After vomiting give milk or water.

5. FIRE-FIGHTING MEASURES

Extinguishing media: None needed Further Information: None known

NFPA Rating: Health 1; Flammability 0; Reactivity 0; Other: None

Combustion products: See Section 10.

6. ACCIDENTAL RELEASE MEASURES

After spillage/leakage: Scoop into containers. Flush residual with plenty of water.

See Section 8 for protective equipment information.

See Section 13 for disposal information.

7. HANDLING AND STORAGE

Special precautions: Keep material dry.

Packaging requirements: Bag with moisture barrier.

Ventilation: Provide ventilation to keep airborne concentrations below

exposure limits.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION



Respiratory protection:

Eye protection:

None normally needed.

Chemical splash goggles.

Hand protection: Impervious gloves made of rubber. Skin protection: Clean, body-covering clothing.

Exposure Limit Guidelines (mg/m³) No components have established exposure limits.

Dust particles: total = 10 mg/m³, respirable fraction = 5 mg/m³.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Powder
Color: Pale gray
Odor: None

pH value: Not determined

Boiling point: 3450°C
Pour point: 2900°C

Flash point: Not combustible

Flammability (explosion limits in air):

Lower: Not applicable
Upper: Not applicable
Auto flammability (auto-ignition temperature): Not applicable
Vapor pressure: Not applicable
Relative density (specific gravity): 3.47-3.67
Bulk density (solids): 1600 kg/m³.

Solubility in water: Slightly soluble (20°C)

Viscosity: Not applicable
Relative vapor density (air=1): Not applicable
% Volatile: Not applicable

10. STABILITY AND REACTIVITY

Stability: Stable
Conditions to avoid: Unknown

Materials to avoid: Aqueous solutions are mildly corrosive to metals. Releases

heat when mixed with water.

Hazardous Polymerization: Will not occur.

Dust explosion hazard (solids): Not applicable

Special hazards: None Hazardous decomposition products: None

11. TOXICOLOGICAL INFORMATION

Eye contact: Severe irritant. Causes pain and redness. Prolonged or

repeated contact may cause mild burn.

Skin contact: Irritant; may cause pain, redness, dermatitis. Inhalation: Irritant; may cause pain and coughing.

Ingestion: Irritant; may cause pain or discomfort to mouth, throat and

stomach. Harmful if swallowed; large amounts may cause

illness.

Carcinogenicity: Not listed by IARC, USA NTP, or USA OSHA.

Mutagenicity: Not known to cause heritable genetic damage.

Teratogenicity: Not known to cause birth defects.

Target organs which may be affected: None known.

Sensitization: Not known to cause allergic reaction.



12. ECOLOGICAL INFORMATION

Information on product as a whole:

Main environmental hazards:

Degradability:

Other:

None known

Not applicable

None known

13. DISPOSAL CONSIDERATIONS

Product: Dispose of by sanitary landfilling or other acceptable method

in accordance with local regulations.

Container: Send empty bags to sanitary landfill. Render other types of

containers unusable by puncturing or crushing and sanitary

landfill unless prohibited by local regulations.

14. TRANSPORT INFORMATION

UN Number: None

IMO Description: Not regulated

Class:

Package Group

Label: EMS: MFAG:

IATA Description: Not regulated

Class: Sub Risk:

Package Group:

Label:

ADR Description: Not regulated

ADR class/item: ADR Danger ID: ADR Label:

15. REGULATORY INFORMATION

Symbols:

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Irritant

Risks: R36 Irritating to eyes.

Safety advice: S22 Do not breath dust. S24 Avoid contact with skin.

Notification/restrictions status:

EUROPEAN UNION (EU): All components of this material are on the EINECS inventory, or

the components are exempt from inventory reporting.

NORWAY: Not determined.

USA: All components of this material are on the USA TSCA

inventory, or the components are exempt from inventory

reporting.

16. OTHER INFORMATION

REGULATORY INFORMATION

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PRODUCT CODE: **KCM044A** Effective Date: December-2023 Version: 3.0

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

Identification of the substance or preparation:

DuraCem Additive: KCM044A

Company/undertaking identification: OPT Chemicals Saudi Factory and Co.

Dammam 2nd Industrial City, 6th Street, 101 Intersection,

Postal code 34334, Kingdom of Saudi Arabia.

Emergency phone: +966 56 917 2181

2. HAZARDS IDENTIFICATION

Main environmental hazards: None

Main physical hazards:

Special precautions:

Physical hazard:

None

Dust

Main health hazards: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

SubstanceConc. [wt.%]CAS#Aromatic Rubber Particles80- 1009003-55-8

4. FIRST AID MEASURES

Eye contact:

Skin contact:

Inhalation:

Rinse with water.

Remove to fresh air.

Swallowing: Rinse mouth with water, seek medical attention if irritating.

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Small fire: Using DRY chemical powder.

Large fire: Using water spray, fog or foam, do not use water jet. Wear

proper PPE to avoid breathing vapors.

Further information:

None known
Flash point:

>100°C

Flammability limits in Air – Low limit (%): Not applicable Flammability limits in Air – high limit (%): Not applicable

NFPA Rating: Health 2; Flammability 2; Reactivity 0; Other: None.

6. ACCIDENTAL RELEASE MEASURES

After spillage/leakage: Collect splashing and leaking materials with containers. Use

sand or other inert materials to absorb leaking and splashing objects. In a safe condition, take measures to isolate the leaking and plashing containers to prevent leakage from

continuing.

Waste disposal: See Section 13 for disposal information.

7. HANDLING AND STORAGE

Special precautions: No special precautions required.

Packaging requirements: Packing bags should be handled in accordance with national

environmental regulations. The recycle bin should be allowed



to know the raw material of bags when they are handed to recycle bin. If there are some residues in bags, the safe and environmental logo on the bag should be retained completely.

Ventilation: No special requirements.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection:

None normally needed.

Eye protection:

None normally needed.

Hand protection: Rubber gloves.

Skin protection: Clean, body-covering clothing.

Exposure limit guidelines (mg/m³): No components have established exposure limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: Grain Color: White Odor: Mild

pH value:

Boiling point:

Not available

Pour point:

Not available

Not available

Not available

Flash point:

>100°C

Flammability (explosion limits in air): The product is not flammable or explosive.

Lower: Not applicable
Upper: Not applicable
Auto-flammability (auto-ignition temperature): Not applicable
Vapor pressure: Not determined
Relative density (specific gravity): 1.06-1.26
Solubility in water: Insoluble 2000

Solubility in water:

Viscosity:

Not available

Relative vapor density (air=1):

Not determined

Volatile%: N/A

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and handling.

Conditions to avoid:

Materials to avoid:

Hazardous polymerization:

Dust explosion hazard (solids):

Not determined.

Acids, aluminum.

Will not occur.

Not applicable

Special hazards:

Hazardous decomposition products:

None

11. TOXICOLOGICAL INFORMATION

Routes of Entry: Eye contact, ingestion.

Acute toxicity data

Toxicity to Animals: EC50(5d) = 698 mg/l, Abra Alba.

Special remarks on toxicity to Animals: Not available.

Acute Effects

Eye contact: No effect expected.
Skin contact: No effect expected.
Sensitization: No effect expected.

Ingestion: No significant effects are expected.



Inhalation: No effects expected.

Remarks: Not available

This product is not considered to be a human or animal Carcinogenicity/Mutagenicity:

carcinogen.

Teratogenicity/Reproductive Toxicity: This product is not known to cause teratogenicity or

reproductive toxicity.

12. ECOLOGICAL INFORMATION

Information on product as a whole:

None known Main environmental hazards: Not determined Degradability: Other: None known

13. DISPOSAL CONSIDERATIONS

Waste information: Waste must be disposed of in accordance with federal, state

and local environmental control regulations.

14. TRANSPORT INFORMATION

UN Number: None

IMO Description: Not regulated

Class:

Package Group:

Label: EMS: MFAG:

IATA Description: Not regulated

Class: Sub Risk:

Package Group:

Label:

ADR Description: Not regulated

ADR class/item: ADR Danger ID: TREM Card: ADR Label:

15. REGULATORY INFORMATION

European Labeling in Accordance with EC Directives

Hazard symbols:

Risk phrases: This product is not classified according to the EU regulations. Safety phrases:

No specific safety phrase has been found applicable for this

product.

US Regulations

TSCA: All ingredients are on the TSCA inventory.

16. OTHER INFORMATION

DISCLAIMER:

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