Material Safety Data Sheet

1. NAME OF SUBSTANCE/ PREPARATION AND COMPANY

1) Trade name

PRIMER

2) Company name of manufacture

STEK Co. Ltd.

#1801, G-High City B/D, 284, DIGITAL-RO, GURO-GU, SEOUL, KOREA

3) Company name of substitute

STEK Co. Ltd.

Phone: +82-2-6235-7835 Fax: +82-2-6235-0763

2. Hazards identification

A. Hazard·Risk Classification Skin sensitization: category 1

- Hazard·Risk Statement H317 May cause an allergic skin reaction

- Precautionary Statement

Prevention P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P272 Contaminated work clothing should not be allowed out of

the workplace

P280 Wear protective gloves/protective clothing/eye

protection/face protection

Response P302+P352 IF ON SKIN: Wash with soap and water

P321 Specific treatment

P333+P313 If skin irritation or a rash occurs: Get medical advice/attention

P363 Wash contaminated clothing before reuse

Storage Store at room temperature not to freeze because it is a water-base product.

Disposal P501 Dispose of contents and container in accordance with local regulations.

C. Other Hazard·Risk which are not included in the classification criteria (e.g. dust explosion hazard)

	WATER	EVA	ROSIN	EMULSION
Health	0	1	2	No data available
Fire	0	1	1	No data available
Reactivity	0	1	0	No data available

3. Composition/Information on ingredients

Chemical Name	Other name	CAS No.	Content(%)
ETHYLENEVINYL	EVA	24937-78-9	5-15
ACETATE COPOLYMER			
ROSIN; ESTER WITH	FORAL 85	8050-31-5	20-30
1,2,3-PROPANETRIOL			
EMULSION	COPOLYMER OF	70857-14-6	10-20
	STYRENE AND		
	1,3BUTADIENE		
WATER	DIHYDROGEN OXIDE	7732-18-5	40-50

4. First aid measures

A. Eye contact

Immediately flush eyes with plenty of water for at least 20 minutes.

Get medical attention if irritation develops or persists.

B. Skin contact

For skin contact, wash thoroughly with soap and water for at least 20 minutes.

Remove and isolate contaminated clothing and shoes.

Completely decontaminate clothing, shoes, and leather goods before reuse.

Get medical attention if irritation develops or persists.

C. Inhalation

Seek emergency medical attention.

Move to fresh air.

If not breathing, give artificial respiration.

If breathing is difficult, give oxygen.

D. Ingestion

Do not give an unconscious person anything by mouth.

Get medical attention if irritation develops or persists.

5. Fire-Fighting measures

A. Suitable (and unsuitable) extinguishing media

Small fires: Dry sand, dry chemical, alcohol foam, water spray, normal foam, CO2 (Suitable extinguishing media)

Large fires: water spray, nomal foam (Suitable extinguishing media) pulsed infusion (Unsuitable extinguishing media)

B. hazards arising from the chemical (e.g. nature of any hazardous combustion products)

Containers may explode when heated.

Some of these materials may burn, but most do not ignite readily.

Inhalation of the substance may be harmful.

C. Special protective equipment and precautions for fire-fighters

Cool containers with water spray until well after the fire is out.

Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

Stay away from the ends of tanks.

Avoid inhalation of material or combustion by-products.

Move containers from fire area if you can do it without risk.

Dike far ahead of liquid spill for later disposal.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/gas/mist/vapours/spray

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Stop leak if you can do it without risk.

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.

B. Environmental precautions and protective procedures

Soak up with inert absorbent material(e.g. sand, silica gel, acid binder, universal binder, sawdust).

C. Methods and materials for containment and cleaning up

Wash contaminated property(e.g. automobiles) quickly before the material dries.

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Use clean non-sparking tools to collect absorbed material.

Dike far ahead of liquid spill for later disposal.

7. Handling and storage

A. Precautions for safe handling

Store at room temperature. (Above 10°C)

After use, Should be sealed to prevent the surface film.

Wash thoroughly after handling.

All equipment used when handling the product must be grounded.

Keep cool. Protect from sunlight.

B. Conditions for safe storage (including any incompatibilities)

Store at room temperature. don't be frozen.

Store in closed containers.

Prevent inoculation with microorganisms. Minimize exposure to air.

Do not eat, drink or smoke when using this product.

8. Exposure controls & personal protection

A. Control parameters (e.g. occupational exposure limit values, biological limit values)

Occupational exposure limit values

Ethylene-vinyl acetate copolymer No data available
Water Not Applicable
Rosin No data available
Emulsion No data available

ACGIH limit values

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

Biological limit values

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

B. Appropriate engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

C. Personal protective equipment

- Respiratory protection Wear suitable respiratory protective equipment.

- Eye protection Wear chemical safety goggles.

- Body protection Wear protective clothing.

- Hygienic notice

9. Physical and chemical properties

A. Appearance

Physical state Viscous liquid

Color White

B. Odour Synthetic resin odour C. Odour threshold No data available

D. pH 6~8

E. Melting point/freezing point Not Applicable F. Initial boiling point and boiling range Above 100 ℃ G. Flashing point Not Applicable H. Evaporation rate No data available No data available I. Flammability(solid, gas) J. Upper/lower flammability or explosive limits Not Applicable K. Vapor pressure No data available L. Solubility Dispersible in water

M. Vapor density Above 1.0

N. Relative density Above 1.0

O Partition coefficient:n-octanol/water

P. Auto-ignition temperature

Q. Decomposition temperature

No data available

No data available

R. Viscosity 6,000~7,000 cps (25 ℃)

S. Formula mass No data available

10. Stability and reactivity

A.Chemical stability and possibility of hazardous reactions

Stable under normal conditions

Containers may explode when heated.

Inhalation of the substance may be harmful

Non-flammable, the substance itself is not burned but decomposes on heating and may cause corrosive / toxic fumes

B. Conditions to avoid

Avoid the fire, spark, flame, UV, X-RAY and other ignition sources

C. Incompatible materials

Irritant, toxic gas

Flammable materials

Water reactive materials

D. Hazardous decomposition products

Fire may produce irritating, corrosive and/or toxic gases.

11. Toxicological information

A. Information on the likely routes of No data available

B. Health hazards information

Acute toxic

Oral

Ethylene-vinyl acetate copolymer No data available

Water LD50 90000 mg/kg Rat (LD50 > 90 ml/kg (Rat))

Rosin LD50 > 2000 mg/kg Rat

Emulsion No data available

Dermal

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

Inhalation

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

Skin Corrosion/Irritation

Ethylene-vinyl acetate copolymer No data available Water Not Applicable

Rosin Skin irritation with rabbit results in moderate irritation.(GLP:

yes)

Emulsion No data available

Serious eye damage/eye irritation

Ethylene-vinyl acetate copolymer No data available Water Not Applicable

Rosin Skin irritation with rabbit results in moderate irritation.(GLP:

yes)

Emulsion No data available

Respiratory sensitization

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

Skin sensitization

Ethylene-vinyl acetate copolymer No data available Water Not Applicable

Rosin Negative test results using guinea pig(GLP: yes)

Emulsion No data available

Carcinogenicity

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

IARC

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

OSHA

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

ACGIH

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

NTP

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

EU CLP

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

Germ cell mutagenicity

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

Reproductive toxicity

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

Specific target organ toxicity (single exposure)

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

Specific target organ toxicity (repeated exposure)

Ethylene-vinyl acetate copolymer No data available Water Not Applicable Rosin No data available Emulsion No data available

Aspiration hazard

Ethylene-vinyl acetate copolymer No data available

Water Not Applicable
Rosin No data available
Emulsion No data available

12. Ecological information

A. Aquatic and terrestrial ecotoxicity

- Fish

Ethylene-vinyl acetate copolymer No data available Water No data available Rosin LC50 > 400 mg/ ℓ 96 hr Emulsion No data available

- Shellfish

Ethylene-vinyl acetate copolymer No data available Water No data available Rosin EC50 259 mg/ ℓ 48 hr Emulsion No data available

- Birds

Ethylene-vinyl acetate copolymer No data available Water No data available Rosin $EC50 > 1000 \text{ mg/}\ell$ 72 hr Emulsion No data available

B. Persistence and degradability

- Persistence

Ethylene-vinyl acetate copolymer Not Applicable
Water log Kow -1.38
Rosin log Kow< 1.5
Emulsion No data available

- Resolvability

Ethylene-vinyl acetate copolymer No data available Water No data available Rosin No data available Emulsion No data available

C. Bioaccumulative potential

- Concentration

Ethylene-vinyl acetate copolymer 112 ug/L 2.1 hour(s) BCF (Residue) Duckweed (Lemna minor)

60 ug/L.

Water No data available
Rosin No data available
Emulsion No data available

- Bio resolvability

Ethylene-vinyl acetate copolymer No data available Water No data available Rosin No data available Emulsion No data available

D. Mobility in soil

Ethylene-vinyl acetate copolymer No data available Water No data available Rosin No data available Emulsion No data available

E. Other adverse effects

Ethylene-vinyl acetate copolymer No data available Water No data available Rosin No data available Emulsion No data available

13. Disposal considerations

A. Disposal method Dispose of contents and container in accordance with local regulations.

B. Disposal precaution Dispose of contents container according to the regulations.

14. Transport information

A. Land transport(USDOT) Not classified as a dangerous good under transport regulations

- B. Sea transport(IMDG) Not classified as a dangerous good under transport regulations
- C. Air transport(IATA/ICAO) Not classified as a dangerous good under transport regulations
- D. TRANSPORT Notice Store at room temperature not to freeze because it is a water-based product.

15. Regulatory information

A. Industrial Safety and Health Act No data available

B. Chemical Control Act No data available

C. Dangerous Material Safety Control Act Not Applicable(Not regulated as a hazardous material)

D. Wastes Management Act Designated Wastes

E. Other requirements in domestic and other countries

- Domestic regulation

Persistent Organic Pollutant Control Act

Ethylene-vinyl acetate copolymer Not Applicable
Water Not Applicable
Rosin Not Applicable
Emulsion Not Applicable

- Other countries

USA(OSHA)

Ethylene-vinyl acetate copolymer Not Applicable
Water Not Applicable
Rosin Not Applicable
Emulsion Not Applicable

USA(CERCLA)

Ethylene-vinyl acetate copolymer Not Applicable
Water Not Applicable
Rosin Not Applicable
Emulsion Not Applicable

USA(EPCRA 302)

Ethylene-vinyl acetate copolymer Not Applicable
Water Not Applicable
Rosin Not Applicable
Emulsion Not Applicable

USA(EPCRA 304)

Ethylene-vinyl acetate copolymer Not Applicable
Water Not Applicable
Rosin Not Applicable
Emulsion Not Applicable

USA(EPCRA 313)

Ethylene-vinyl acetate copolymer Not Applicable Water Not Applicable

Rosin Not Applicable Emulsion Not Applicable

USA (Rotterdam Convention material)

Ethylene-vinyl acetate copolymer Not Applicable
Water Not Applicable
Rosin Not Applicable
Emulsion Not Applicable

USA (Stockholm Convention material)

Ethylene-vinyl acetate copolymer Not Applicable
Water Not Applicable
Rosin Not Applicable
Emulsion Not Applicable

USA (Substance Montreal Protocol)

Ethylene-vinyl acetate copolymer Not Applicable Water Not Applicable Rosin Not Applicable Emulsion Not Applicable

EU (Classification)

Ethylene-vinyl acetate copolymer Not Applicable
Water Not Applicable
Rosin Not Applicable
Emulsion Not Applicable

EU (Risk Phrases)

Ethylene-vinyl acetate copolymer Not Applicable Water Not Applicable Rosin Not Applicable **Emulsion** Not Applicable Ethylene-vinyl acetate copolymer Not Applicable Water Not Applicable Rosin Not Applicable **Emulsion** Not Applicable

EU (Safety Phrases)

Ethylene-vinyl acetate copolymer Not Applicable

Water Not Applicable
Rosin Not Applicable
Emulsion Not Applicable

16. Other information

A. Information source and references

Source of data: Korea Occupational Safety and Health Agency (KOSHA)>

Ethylene-vinyl acetate copolymer

Water

NLM

Rosin

IUCLID(Skin corrosive/irritant)

IUCLID(Serious eye damage/eye irritation)

IUCLID(Skin sensitization)

IUCLID(Germ Cell Mutagenicity)

IUCLID(Fish)

IUCLID(Shellfish)

IUCLID(Birds)

IUCLID(Persistence)