

Safety data sheet

Kollicoat* IR White

Revision date : 2008/06/03
Version: 2.1

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(30235578/MDS_GEN_US/EN)

1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

2. Composition/information on ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
96734-39-3	40.0 - 70.0 %	Polyvinylalcohol-polyethylene glycol graft copolymer
1332-58-7	10.0 - 30.0 %	Kaolin
13463-67-7	10.0 - 30.0 %	titanium dioxide
25086-89-9	5.0 - 10.0 %	Polyvinylpyrrolidone-vinyl acetate copolymer
151-21-3	1.0 - 5.0 %	Sodium lauryl sulfate

3. Hazard identification

Emergency overview

CAUTION: AVOID CREATING DUST.
May cause cancer by inhalation.
Wear a NIOSH-certified (or equivalent) particulate respirator.
Avoid inhalation of dusts.
Ensure adequate ventilation.
Wear safety glasses with side-shields.
Wear chemical resistant protective gloves.

Potential health effects

Primary routes of exposure

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer
Virtually nontoxic after a single ingestion.

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone
Virtually nontoxic after a single ingestion.

Information on: Sodium lauryl sulfate
Harmful in contact with skin and if swallowed.

Irritation:

Mechanical irritation effects from dust exposure are possible at ambient temperature.

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Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

Not irritating to the skin. Not irritating to the eyes. Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone

Not irritating to the skin. Not irritating to the eyes. Information on: Sodium lauryl sulfate

Irritating to skin. Risk of serious damage to eyes.

Sensitization:

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

Skin sensitizing effects were not observed in animal studies.

The product has not been tested. The statement has been derived from products of a similar structure and composition.

Test substance: Luviflex Swing

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone

Skin sensitizing effects were not observed in animal studies.

Information on: Sodium lauryl sulfate

Skin sensitizing effects were not observed in animal studies.

Medical conditions aggravated by overexposure:

See MSDS section 11 - Toxicological information.

4. First-aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

If on skin:

Wash thoroughly with soap and water.

If irritation develops, seek medical attention.

If in eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.

If swallowed:

Rinse mouth and then drink plenty of water.

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-fighting measures

Flammability: not highly flammable (Directive 92/69/EEC, A.10)

Self-ignition temperature: 214 °C (VDI 2263, sheet 1, 1.4.1) self-igniting

Suitable extinguishing media:

water, carbon dioxide, foam, dry powder

Protective equipment for fire-fighting:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

NFPA Hazard codes:

Health : 1 Fire: 1 Reactivity: 0 Special:

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6. Accidental release measures

Personal precautions:

Wear appropriate respiratory protection. Use personal protective clothing. Ensure adequate ventilation.

Environmental precautions:

This product is not regulated by RCRA. This product is not regulated by CERCLA ('Superfund'). Do not discharge into drains/surface waters/groundwater.

Cleanup:

Avoid raising dust.

For small amounts: Sweep/shovel up.

For large amounts: Sweep/shovel up.

7. Handling and storage

Handling

General advice:

Avoid dust formation. Ensure thorough ventilation of stores and work areas.

Protection against fire and explosion:

Avoid whirling up the material/product because of the danger of dust explosion. Avoid all sources of ignition: heat, sparks, open flame. Electrostatic discharge may cause ignition.

Storage

General advice:

Keep container tightly closed and dry; store in a cool place.

8. Exposure controls and personal protection

Components with workplace control parameters

Kaolin	OSHA	PEL 5 mg/m3 Respirable fraction ; PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 2 mg/m3 Respirable fraction ;
titanium dioxide	OSHA	PEL 15 mg/m3 Total dust ;
	ACGIH	TWA value 10 mg/m3 ;

Advice on system design:

Provide local exhaust ventilation to control dust.

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Wear a NIOSH-certified (or equivalent) particulate respirator.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Safety glasses with side-shields.

Body protection:

Body protection must be chosen based on level of activity and exposure.

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General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Avoid inhalation of dust. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Form:	powder	
Odour:	faint specific odour	
Colour:	white	
pH value:	6.7 - 8.1	(as aqueous suspension)
Melting temperature:	> 170 °C	The substance / product decomposes.
Bulk density:	approx. 300 kg/m ³	(OECD Guideline 109)
<i>Information on: Sodium lauryl sulfate</i>		
Partitioning coefficient n-octanol/water (log Pow):	1.69	(calculated)

Solubility in water:		partly soluble

10. Stability and reactivity

Minimum ignition energy:

30 - 100 mJ, 1,013 hPa, 20 °C, Inductivity: 1 mH (VDI 2263, sheet 1, 2.5)

The product is capable of dust explosion.

Conditions to avoid:

Avoid dust formation.

Substances to avoid:

No substances known that should be avoided.

Hazardous reactions:

The product is chemically stable.

Dust explosion hazard.

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

Corrosion to metals:

Corrosive effects to metal are not anticipated.

11. Toxicological information

Oral:

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

LD50/rat: > 2,000 mg/kg (OECD Guideline 423)

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone

LD50/rat: > 10,000 mg/kg (BASF-Test)

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Information on: Sodium lauryl sulfate
LD50/rat: 1,427 mg/kg (OECD Guideline 401)
Literature data.

Dermal:

Information on: Sodium lauryl sulfate
LD50/rabbit: 580 mg/kg
Literature data.

Skin irritation:

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer
rabbit: non-irritant (OECD Guideline 404)

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone
rabbit: non-irritant (BASF-Test)

Information on: Sodium lauryl sulfate
rabbit: Irritant. (OECD Guideline 404)
Literature data.

Eye irritation :

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer
rabbit: non-irritant (OECD Guideline 405)

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone
rabbit: non-irritant (BASF-Test)

Information on: Sodium lauryl sulfate
rabbit: Risk of serious damage to eyes. (OECD Guideline 405)
Literature data.

Sensitization:

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer
Buehler test/guinea pig: Non-sensitizing. (OECD Guideline 406)
The statement for sensitization was derived from products of similar composition.

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone
Guinea pig maximization test/guinea pig: Non-sensitizing. (OECD Guideline 406)

Information on: Sodium lauryl sulfate
Guinea pig maximization test/guinea pig: Non-sensitizing.
Literature data.

Genetic toxicity:

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer
No mutagenic effect was found in various tests with microorganisms and mammalian cell culture.
The substance was not mutagenic in studies with mammals.

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone
No mutagenic effect was found in various tests with bacteria and mammalian cell culture.
The substance was not mutagenic in studies with mammals.

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Information on: Sodium lauryl sulfate

No mutagenic effect was found in various tests with bacteria and mammalian cell culture.

The substance was not mutagenic in a test with mammals.

Literature data.

Carcinogenicity:

Information on: titanium dioxide

IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).

In long-term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed.

Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation.

In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Dermal exposure is not expected to be carcinogenic.

Developmental toxicity/teratogenicity:

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Information on: Sodium lauryl sulfate

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Literature data.

12. Ecological information

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

Test method: ISO DIS 9439 (aerobic),

Method of analysis: DOC reduction

Degree of elimination: 50 - 60 % (28 d)

Test method: OECD Guideline 302 A, activated sludge, industrial

Degree of elimination: 50 - 60 % (83 d)

Test method: OECD Guideline 302 A, activated sludge, industrial

Degree of elimination: 40 - 50 % (127 d)

Test method: OECD Guideline 302 B (aerobic), activated sludge, domestic

Method of analysis: DOC reduction

Degree of elimination: 10 - 20 % (28 d)

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone

Test method: OECD Guideline 302 B (aerobic), activated sludge, adapted

Method of analysis: DOC reduction

Degree of elimination: approx. 20 - 30 % (15 d)

Information on: Sodium lauryl sulfate

Test method: OECD 301C; ISO 9408; 92/69/EEC, C.4-F (aerobic), Inoculum conforming to MITI

Method of analysis: BOD of the ThOD

Degree of elimination: 85 % (14 d)

Evaluation: Moderately/partially biodegradable.

Moderately/partially eliminated from water.

Moderately/partially eliminated from water.

Evaluation: Poorly eliminated from water.

Evaluation: Not readily biodegradable (by OECD criteria).

Poorly biodegradable.

The product has not been tested. The statement has been derived from products of a similar structure and composition.

Poorly eliminated from water.

Readily biodegradable (according to OECD criteria).

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Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

*Information on: Sodium lauryl sulfate
carp (24 h) Bioconcentration factor approx. 5
Significant accumulation in organisms is not to be expected.*

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

*Acute and prolonged toxicity to fish:
OECD Guideline 203 static
zebra fish/LC50 (96 h): > 100 mg/l
The details of the toxic effect relate to the nominal concentration.*

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone

*Acute and prolonged toxicity to fish:
OECD Guideline 203 static
zebra fish/LC50 (96 h): > 10,000 mg/l*

Information on: Sodium lauryl sulfate

*Acute and prolonged toxicity to fish:
static
LC50 (96 h): 1.39 - 1.53 mg/l
DIN 38412 Part 15 static
golden orfe/LC50 (48 h): 25 mg/l
Nominal concentration.*

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

*Acute toxicity to aquatic invertebrates:
OECD Guideline 202, part 1 static
Daphnia magna/EC50 (48 h): > 100 mg/l
The details of the toxic effect relate to the nominal concentration.*

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone

*Acute toxicity to aquatic invertebrates:
Directive 79/831/EEC static
Daphnia magna/EC50 (48 h): > 100 mg/l*

Information on: Sodium lauryl sulfate

*Acute toxicity to aquatic invertebrates:
DIN 38412 Part 11 static
Daphnia magna/EC50 (24 h): 87.5 mg/l
other aquatic worm/EC50 (24 h): 1.4 mg/l
Nominal concentration.*

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

*Toxicity to aquatic plants:
OECD Guideline 201 static
green algae/EC50 (72 h): > 100 mg/l
The details of the toxic effect relate to the nominal concentration.*

Information on: Acetic acid ethenyl ester, polymer with 1-ethenyl-2-pyrrolidinone

*Toxicity to aquatic plants:
OECD Guideline 201 static
green algae/EC50 (72 h): > 100 mg/l*

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Information on: Sodium lauryl sulfate

Toxicity to aquatic plants:

DIN 38412 Part 9 static

green algae/EC50 (96 h): 30 - 100 mg/l

Information on: Polyvinylalcohol-polyethylene glycol graft copolymer

Information on: titanium dioxide

Information on: Sodium lauryl sulfate

Toxicity to microorganisms:

static

bacterium/Toxic limit concentration (16 h): 290 mg/l

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations.

Incinerate or dispose of in a licensed facility.

Container disposal:

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory information

Federal Regulations

Registration status:

TSCA 12B

released / exempt

OSHA hazard category:

ACGIH TLV established

IARC 1, 2A or 2B carcinogen, Chronic target organ effects reported,

CERCLA RQ

5000 LBS

CAS Number

107-21-1; 108-05-4;
67-56-1; 64-19-7;

Chemical name

ethyleneglycol; vinyl acetate; Methanol; Acetic acid; Formic
Acid

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1000 LBS	64-18-6	
100 LBS	75-07-0; 1336-21-6	acetaldehyde; Ammonium hydroxide
	123-91-1; 79-20-9;	1,4-dioxane; methyl acetate; 2-Propanol
	67-63-0	
1 LBS	7761-88-8; 302-01-2	silver nitrate; hydrazine

SARA hazard categories (EPCRA 311/312): Acute, Chronic

State regulations

State RTK

<u>CAS Number</u>	<u>Chemical name</u>	<u>State RTK</u>
1332-58-7	Kaolin	MA, PA
13463-67-7	titanium dioxide	MA, NJ, PA

CA Prop. 65:

THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

16. Other information

HMIS III rating

Health: 1 $\frac{1}{2}$ Flammability: 1 Physical hazard: 0

HMIS uses a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates high hazard.

Local contact information

prod_reg@basf.com

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