

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11
Version: 1.1Page: 1/11
(30335538/CDU_GEN_US/EN)

1. Substance/preparation and company identification

CompanyBASF CORPORATION
100 Campus Drive
Florham Park, NJ 0793224 Hour Emergency Response InformationCHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS Number	Content (weight%)
kaolin	1332-58-7	5 - 15
OSHA PEL 5 mg/m3 R; PEL 15 mg/m3 T		
ACGIH TWA 2 mg/m3		
n-butyl acetate	123-86-4	5 - 15
OSHA PEL 150 ppm 710 mg/m3		
ACGIH STEL 200 ppm; TWA 150 ppm		
titanium dioxide	13463-67-7	5 - 15
OSHA PEL 15 mg/m3 T		
ACGIH TWA 10 mg/m3		
barium sulfate	7727-43-7	5 - 15
OSHA PEL 5 mg/m3 R; PEL 15 mg/m3 T		
ACGIH TWA 10 mg/m3		
talca	14807-96-6	1 - 10
ACGIH TWA 2 mg/m3		
xylene	1330-20-7	1 - 10
OSHA PEL 100 ppm 435 mg/m3		
ACGIH STEL 150 ppm; TWA 100 ppm		
ethyl 3-ethoxypropionate	763-69-9	1 - 10
PEL/TLV not established		
methyl acetate	79-20-9	1 - 10
OSHA PEL 200 ppm 610 mg/m3		
ACGIH STEL 250 ppm; TWA 200 ppm		
solvent naphtha, light aromatic	64742-95-6	1 - 10
PEL/TLV not established		
crystalline silica, quartz	14808-60-7	1 - 10
ACGIH TWA 0.025 mg/m3		
propylene glycol methyl ether	108-65-6	0 - 5
acetate		
PEL/TLV not established		
1,2,4-trimethylbenzene	95-63-6	0 - 5
ACGIH TWA 25 ppm		
triphosphoric acid, aluminum salt	13939-25-8	0 - 5
ACGIH TWA 2 mg/m3		

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Version: 1.1

Page: 2/11

(30335538/CDU_GEN_US/EN)

ethylbenzene	100-41-4	0 - 5
OSHA PEL 100 ppm 435 mg/m3		
ACGIH STEL 125 ppm; TWA 100 ppm		
amorphous precipitated silica	112926-00-8	0 - 5
PEL/TLV not established		
zinc oxide	1314-13-2	0 - 5
OSHA PEL 5 mg/m3 R; PEL 15 mg/m3 T		
ACGIH STEL 10 mg/m3; TWA 2 mg/m3		
acetone	67-64-1	0 - 5
OSHA PEL 1000 ppm 2400 mg/m3		
ACGIH STEL 750 ppm; TWA 500 ppm		
carbon black	1333-86-4	0 - 5
OSHA PEL 3.5 mg/m3		
ACGIH TWA 3.5 mg/m3		

R Respirable fraction

T Total dust

3. HAZARD IDENTIFICATION

HMIS III RATING

Health: 3 \square Flammability: 3 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.

EMERGENCY OVERVIEW

WARNING

FLAMMABLE LIQUID

HARMFUL IF INHALED

CAN CAUSE CENTRAL NERVOUS SYSTEM DAMAGE

CAN CAUSE LIVER DAMAGE

CAN CAUSE KIDNEY DAMAGE

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION

CONTAINS MATERIAL THAT MAY CAUSE ALLERGIC RESPIRATORY REACTION

MAY CAUSE ALLERGIC OR ASTHMATIC SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.

CONTAINS MATERIAL WHICH MAY CAUSE CANCER.

MAY CAUSE PULMONARY EDEMA

CONTAINS MATERIAL WHICH MAY CAUSE DAMAGE TO THE BLOOD-FORMING ORGANS

INGESTION MAY CAUSE GASTRIC DISTURBANCES

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 liquefied gases.

Solvents are absorbed through the skin.

Acute toxicity:

Inhalation may cause CNS depression, blurred vision, dizziness and

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Page: 3/11

Version: 1.1

(30335538/CDU_GEN_US/EN)

drowsiness.

Overexposure may cause nausea and vomiting.

Inhalation causes headache and nausea.

Vapors have a suffocating effect.

Intentional misuse by deliberately concentrating and inhaling this product may be harmful or fatal.

Information on: acetone

Acute exposures to relatively large amounts of acetone can result in local effects, such as irritation to eyes, nose, throat, and respiratory tract as well as systemic effects such as central nervous system (CNS) depression, which can range in severity from lightheadedness to loss of consciousness depending on the magnitude and length of the exposure.

Information on: n-butyl acetate

Inhalation of butyl acetate vapors may result in headache, dizziness, nausea, irritation of the respiratory tract, and CNS depression. Prolonged inhalation exposures have been known to produce upper respiratory tract irritation and acute transient signs of reduced activity at concentrations at 1500 ppm and above in rats, with no cumulative neurotoxic effects. Overexposure may cause irritation of the eyes, nose and throat.

Information on: barium sulfate

Ingestion of soluble barium salts produces muscle stimulation, followed by severe gastric disturbances, increased blood pressure, and central nervous system effects.

Information on: carbon black

Acute exposure to carbon black dusts may be irritating to the eyes, skin and respiratory tract.

Information on: ethyl 3-ethoxy propionate

Rats exposed to ethyl-3-ethoxy propionate by inhalation exhibited minor CNS effects.

Information on: ethyl benzene

Vapors are readily absorbed through the lungs. Inhalation of ethylbenzene vapors causes drowsiness, narcosis, headaches, cramps, and tightness of the chest. Severe overexposure can cause death due to respiratory center paralysis. If aspiration occurs, chemical pneumonitis or pulmonary edema may result. Ingestion may result in kidney or liver damage. Ethyl benzene is absorbed through the skin at a low rate.

Information on: kaolin

Inhalation of high acute concentrations of kaolin dust may produce physical irritation. Chronic inhalation of kaolin dust may produce respiratory symptoms and may also have a fibrogenic potential.

Information on: methyl acetate

Acute inhalation overexposures at high concentrations may produce irritation of the nose, throat, eyes and upper respiratory tract; CNS effects and narcosis. Several cases of disturbances of vision have also been reported due to overexposures of methyl acetate. Prolonged contact with liquid may produce dryness, cracking and irritation to the skin.

Information on: talc

Acute exposures to high concentrations of talc may produce cough, dyspnea, chest pain and weakness.

Information on: 1,2,4 trimethylbenzene

Inhalation of 1,2,4-trimethylbenzene may result in CNS effects

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Page: 4/11

Version: 1.1

(30335538/CDU_GEN_US/EN)

including CNS depression, nausea, anxiety and headache. Aspiration of the liquid into the lungs may result in pulmonary edema and chemical pneumonitis. Asthmatic bronchitis may be aggravated by 1,2,4-trimethylbenzene exposure.

Information on: xylene

Aspiration of xylene may result in chemical pneumonitis, pulmonary edema and hemorrhage. Ingestion and skin absorption may lead to CNS depression, symptoms may include nausea, dizziness and blurred vision.

Information on: zinc oxide

Inhalation of zinc dusts may result in respiratory irritation. Inhalation of zinc fumes may cause "metal fume fever". Symptoms of metal fume fever include metallic taste, dryness, and irritation of the throat, difficult breathing, weakness, fatigue and fever.

Irritation:

Skin contact may result in irritation, defatting and dermatitis. Vapors cause irritation to the respiratory tract and the eyes. Prolonged inhalation of product vapor can result in irritation of the mucous membranes.

Information on: ethyl benzene

Ethylbenzene is extremely irritating to the eyes, skin and upper respiratory tract. Eye contact may result in conjunctivitis and corneal injury.

Repeated dose toxicity:

Information on: acetone

High doses of acetone (500 and 2500 mg/kg/day) administered by oral gavage to rats for 90 consecutive days resulted in some clinical chemistry and blood changes as well as increased absolute/relative liver and kidney weights. Histopathological examination of both organs showed acetone did not affect the liver but appeared to accentuate the kidney changes which accompany aging. No effects were observed at 100 mg/kg/day. Chronic occupational exposures to acetone at levels ranging from 300 to 100 ppm have reportedly been associated with irritation and mild CNS effects but have not affected clinical chemistry parameters or worker mortality.

Information on: n-butyl acetate

In a teratogenicity study, pregnant rabbits were exposed to n-butyl acetate vapors at 0 or 1500 ppm from day 1 to day 19 of gestation; pregnant rats were exposed at the same concentrations from day 1 to day 16 of gestation. Body weight changes were observed in the rats but not the rabbits. Reproductive performance was not affected. Rabbit fetus size was not affected by exposure, but fetal size in all exposed groups of rats was reduced, suggesting embryotoxicity.

Information on: carbon black

Prolonged inhalation exposures may produce cough, phlegm, tiredness, chest pain and headache. Dermal, inhalation or mucosal exposures may cause irritation. Chronic exposures to carbon black have been known to produce pneumoconiosis (chronic inflammatory and fibrotic lung disease) in workers. IARC has classified carbon black in Group 2B (sufficient evidence of carcinogenicity in animals).

Information on: ethyl 3-ethoxy propionate

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Page: 5/11

Version: 1.1

(30335538/CDU_GEN_US/EN)

In teratology studies, pregnant rats exposed by inhalation exhibited slight fetotoxicity at the maternally toxic concentration of 1000 ppm.

Information on: ethyl benzene

Animal studies indicate that chronic overexposure to ethylbenzene may cause liver and kidney injury. Increased liver and kidney weight were found in rats exposed to 400 ppm for 186 days. Animal studies indicate that the vapors may be embryotoxic. Prolonged skin contact will cause edema and blistering. In NTP 2-year inhalation studies, clear evidence of carcinogenicity of ethylbenzene in male rats was noted based on increased incidences of kidney neoplasms. Incidences of testicular adenoma were also increased. In female rats, male mice and female mice there was some evidence of carcinogenicity, based on kidney adenoma, lung neoplasms and liver neoplasms, respectively. The International Agency for Research on Cancer (IARC) has classified ethylbenzene in Category 2B, sufficient evidence of carcinogenicity in animals.

Information on: methyl acetate

Chronic overexposure to methyl acetate at 6600 ppm was reported to cause lung irritation, weight loss, blood changes and death.

Information on: amorphous silica

In recent studies, fumed and precipitated synthetic amorphous silicas were fibrogenic to the lungs of monkeys, with the fumed form being the most active type.

Information on: crystalline silica, quartz

Overexposure to crystalline silica results in silicosis, a lung disease characterized by coughing, difficult breathing, wheezing, scarring of the lungs, and repeated, non-specific chest illnesses. The International Agency for Research on Cancer (IARC) has classified crystalline silica in Group 1 (those agents with evidence of carcinogenicity to humans) and National Toxicology Program (NTP) has included it in its Annual Report on Carcinogens.

Information on: talc

Prolonged or repeated exposure to talc can result in a form of pulmonary fibrosis (talc pneumoconiosis), possibly due to asbestos content. In a National Toxicology Program (NTP) inhalation study, talc exhibited some evidence of carcinogenicity in male rats, clear evidence in female rats and no evidence in mice. It is thought that the effects, which were reported at the high dose, were due to overburdening of the lungs.

Information on: titanium dioxide

In a National Cancer Institute (NCI) feeding study, titanium dioxide was not carcinogenic to rats or mice at maximum tolerated doses. In another study, TiO₂ caused fibrosis and lung cancer in rats exposed to 250 mg/m³ by inhalation. However, no effects were seen at lower airborne concentrations.

Information on: 1,2,4 trimethylbenzene

In a subchronic toxicity study, male rats were gavaged with either 0.5 or 2.0 g/kg 1,2,4-trimethylbenzene once daily, for 5 days/week for four weeks. Mortality occurred in 1 rat from the low dose group; all rats died in the high dose group during the study.

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Version: 1.1

Page: 6/11

(30335538/CDU_GEN_US/EN)

Information on: xylene

The chronic effects of overexposure to xylene include possible liver and kidney damage. A mixture of o, m, and p-xylenes was teratogenic and embryo toxic to mice by the oral route; however, these effects were accompanied by maternal toxicity. Rats exposed to 1000 mg/m³ by inhalation exhibited no teratogenic effects; however, minor skeletal abnormalities occurred.

4. FIRST-AID MEASURES

General advice:

Remove contaminated clothing.

Contact the local poison control center or call BASF Emergency Response at 1-800-832-HELP (4357).

If inhaled:

Keep patient calm, remove to fresh air.

If breathing difficulties develop, aid in breathing and seek immediate medical attention.

If on skin:

Immediately wash thoroughly with soap and water. Seek medical attention.

If in eyes:

Flush with copious amounts of water for at least 15 minutes.

Hold eyelids open to facilitate rinsing.

Seek medical attention.

If swallowed:

Rinse mouth and then drink plenty of water.

Do not induce vomiting due to aspiration hazard.

Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Immediate medical attention is required.

Ingestion may cause irritation of the gastrointestinal tract.

Aspiration may result in chemical pneumonitis, which may be fatal.

5. FIRE FIGHTING MEASURES

Flash point: 72 °F (22.2 °C) +/- 3 °F Setaflash Closed Cup (measured)

Lower explosion limit: 1.0 VOL%

Upper explosion limit: 16.0 VOL%

Suitable extinguishing media:

Dry extinguishing media

Carbon dioxide

Foam

Unsuitable extinguishing media for safety reasons:

Water spray

Hazards during firefighting:

Flammable gases/vapors.

Vapors and/or decomposition products are irritants and/or toxic.

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Page: 7/11

Version: 1.1

(30335538/CDU_GEN_US/EN)

If product is heated above decomposition temperatures, acrid smoke and fumes will be released.

Protective equipment for firefighting:

Wear self-contained breathing apparatus and turn-out gear.

Further information:

Vapors are heavier than air and may accumulate in low areas and travel a considerable distance up to the source of ignition. Flash fire may occur.

Remove product from areas of fire or otherwise cool sealed containers with water in order to avoid pressure build-up due to heat.

Do not flood burning material with water due to potential spreading of fire.

Contain contaminated water/firefighting water.

Run-off water from fire may cause pollution.

Notify proper authorities.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Extinguish sources of ignition nearby and downwind.

Wear suitable personal protective clothing and equipment.

Ensure adequate ventilation.

Avoid prolonged inhalation.

Avoid contact with skin and eyes.

Use antistatic tools.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater.

A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities.

Acutely toxic for aquatic organisms.

Cleanup:

Dike spillage.

Place into appropriately labeled waste containers.

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. HANDLING AND STORAGE

HANDLING

General advice:

Ensure adequate ventilation.

Do not puncture, drop or slide containers.

Use static lines when mixing and transferring material.

Handle and open container with care.

Avoid contact with the skin, eyes and clothing.

WARNING: Empty containers may still contain hazardous residue.

Do not apply to hot surfaces.

Proper ventilation and respiratory protection is required when sanding, flame cutting, welding or brazing coated surfaces.

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Version: 1.1

Page: 8/11

(30335538/CDU_GEN_US/EN)

Protection against fire and explosion:

Use antistatic tools.

Exhaust fans should be explosion proof.

Provide adequate ventilation to remove solvent vapors from lower levels or work areas and to prevent solvent contact with ignition sources.

Sealed containers should be protected against heat as this results in pressure build-up.

Risk of explosion if heated under confinement.

Avoid all sources of ignition: heat, sparks, or open flame.

STORAGE

General advice:

Keep container tightly closed.

Protect from direct sunlight.

Protect from temperatures above 49C/ 120F.

Consult local fire marshal for storage requirements.

Storage incompatibility:

General: Segregate from incompatible substances.

Segregate from oxidizing agents.

Segregate from strong bases.

Segregate from strong acids.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

See section 2.

ADVICE ON SYSTEM DESIGN

Provide local exhaust ventilation to maintain recommended P.E.L.

General mechanical ventilation should comply with OSHA 1910.94.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection:

Wear respiratory protection if ventilation is inadequate.

Wear NIOSH-certified (or equivalent) organic vapor respirator.

Particulate filters should be added during spray operations.

Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

Hand protection:

Use appropriate chemically resistant gloves as determined by an evaluation of glove performance characteristics and the hazards and potential hazards identified, including but not limited to butyl, natural and synthetic rubber, nitrile, or neoprene.

Eye protection:

Tightly fitting safety goggles (chemical goggles).

Wear face shield if splashing hazard exists.

Body protection:

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

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Version: 1.1

Page: 9/11

(30335538/CDU_GEN_US/EN)

General safety and hygiene measures:

Work place should be equipped with a shower and eye wash.

Contact lenses should not be worn.

Remove contaminated clothing.

Contaminated equipment or clothing should be cleaned after each use or disposed of.

Hands and/or face should be washed before breaks and at the end of the shift.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: liquid

Odour: aromatic

Colour: dark grey

Boiling range: 131 - 338 °F / 55.0 - 170.0 °C

Vapour pressure: 44.23 mmHg (20 °C)

Weight per gallon: 11.95 lb/gal CALC

Vapour density: heavier than air

Solids content: approx. 63 % / 40.3951 VOL%

% volatiles: approx. 37.2 % / 59.6 VOL%

10. STABILITY AND REACTIVITY

Conditions to avoid:

Avoid all sources of ignition: heat, sparks or open flames.

Avoid electrostatic discharge.

Substances to avoid:

Strong bases

Strong oxidizing agents

Strong acids

Hazardous reactions:

This product is chemically stable.

Decomposition products:

Carbon monoxide

Carbon dioxide

11. TOXICOLOGICAL INFORMATION

No data available.

12. ECOLOGICAL INFORMATION

No data available.

13. DISPOSAL CONSIDERATIONS

Waste disposal of substances:

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

The use and processing of this product, or addition of other

Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Page: 10/11

Version: 1.1

(30335538/CDU_GEN_US/EN)

constituents, may cause it to be considered a hazardous waste. It is the waste generators responsibility to determine if a particular waste is hazardous under RCRA. Do not discharge into drains/surface waters/groundwater. Incinerate or dispose of in a RCRA licensed facility. Do not incinerate closed containers.

Contaminated packaging:
WARNING: Empty containers may still contain hazardous residue. Dispose of in accordance with national, state and local regulations.

14. TRANSPORT INFORMATION

Land transport
USDOT

Proper shipping name: Paint
Hazard class: 3
ID-number: UN 1263
Packing group: II

Sea transport
IMDG

Proper shipping name: Paint
Hazard class: 3
ID-number: UN 1263
Packing group: II

Air transport
IATA/ICAO

Proper shipping name: Paint
Hazard class: 3
ID-number: UN 1263
Packing group: II

15. REGULATORY INFORMATION

FEDERAL REGULATIONS

TSCA, US released / listed

SARA 313:

CAS number	Weight%	Chemical name
1330-20-7	5.1	xylene
95-63-6	1.9	1,2,4-trimethylbenzene
100-41-4	1.2	ethylbenzene
1314-13-2	1.1	zinc oxide

STATE REGULATIONS

State RTK:

CAS Number	Chemical name
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Safety data sheet

285-13 DTM Urethane Primer

Revision date : 2007/04/11

Page: 11/11

Version: 1.1

(30335538/CDU_GEN_US/EN)

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7727-43-7	barium sulfate
14807-96-6	talc
1330-20-7	xylene
763-69-9	ethyl 3-ethoxypropionate
79-20-9	methyl acetate
64742-95-6	solvent naphtha, light aromatic
14808-60-7	crystalline silica, quartz
108-65-6	propylene glycol methyl ether acetate
95-63-6	1,2,4-trimethylbenzene
13939-25-8	triphosphoric acid, aluminum salt
100-41-4	ethylbenzene
112926-00-8	amorphous precipitated silica
1314-13-2	zinc oxide
67-64-1	acetone
1333-86-4	carbon black

California Proposition 65 information:

WARNING: This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

16. OTHER INFORMATION

Recommended use: FOR INDUSTRIAL USE ONLY.

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION FURNISHED BY BASF HEREUNDER ARE GIVEN GRATIS AND BASF ASSUMES NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED. ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.