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1. Substance/preparation and company identification

Company BASF CORPORATION 100 Campus Drive Florham Park, NJ 07932 24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300 BASF HOTLINE: 1-800-832-HELP

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS Number	Content (weight%)
methyl amyl ketone OSHA PEL 100 ppm 465 mg/m3 ACGIH TWA 50 ppm	110-43-0	20 - 30
acetone OSHA PEL 1000 ppm 2400 mg/m3 ACGIH STEL 750 ppm; TWA 500 ppm	67-64-1	10 - 20
methyl acetate OSHA PEL 200 ppm 610 mg/m3 ACGIH STEL 250 ppm; TWA 200 ppm	79-20-9	1 - 10
ethyl 3-ethoxypropionate PEL/TLV not established	763-69-9	1 - 10
methyl isoamyl ketone OSHA PEL 100 ppm 475 mg/m3 ACGIH TWA 50 ppm	110-12-3	0 – 5
xylene OSHA PEL 100 ppm 435 mg/m3 ACGIH STEL 150 ppm; TWA 100 ppm	1330-20-7	0 – 5
methyl isobutyl ketone OSHA PEL 100 ppm 410 mg/m3 ACGIH STEL 75 ppm; TWA 50 ppm	108-10-1	0 – 5
ethylbenzene OSHA PEL 100 ppm 435 mg/m3 ACGIH STEL 125 ppm; TWA 100 ppm	100-41-4	0 – 5

3. HAZARD IDENTIFICATION

HMIS III RATING

Health: 2m 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

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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 A MATERIAL WHICH HAS BEEN IDENTIFIED AS A SUSPECT CANCER HAZARD.

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 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: 2-heptanone

Inhalation of 2-heptanone (methyl amyl ketone) may lead to upper respiratory tract irritation and central nervous system effects like headache, nausea and dizziness.

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: 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.

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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: methyl isoamyl ketone

Methyl isoamyl ketone is a CNS depressant at high airborne concentrations. Overexposure may result in lightheadedness, dizziness, headache, weakness and incoordination.

Information on: methyl isobutyl ketone

Acute inhalation overexposures to methyl isobutyl ketone causes lightheadedness, dizziness, headache, nausea, weakness, incoordination, and vomiting. The vapors are highly irritating to the eyes, nose and throat and overexposures to extremely high concentrations may result in narcosis and possibly death. Direct contact has been reported to cause eczema.

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.

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: 2-heptanone

Repeated inhalation exposures to 2-heptanone (methyl amyl ketone) have been known to produce neurological effects in experimental animals at 1000 ppm. Repeated oral exposures in rats have been known to produce liver and kidney effects at 500 mg/kg/day.

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: ethyl 3-ethoxy propionate

In teratology studies, pregnant rats exposed by inhalation exhibited slight fetotoxicity at the maternally toxic

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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: methyl isoamyl ketone

Inhalation of 1000 and 2000 ppm methyl isoamyl ketone for 96 days caused liver and kidney injury in rats.

Information on: methyl isobutyl ketone

Animal studies indicate that chronic overexposure to methyl isobutyl ketone could result in liver and kidney effects. Behavioral effects with impaired memory have been reported in experimental animals exposed to concentrations of 50 ppm for 7 days. MIBK has been found to be fetotoxic, but not embryotoxic in rats and mice at maternally toxic doses of 3000 ppm only. No such effects were found at lower concentrations.

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:

Wash affected areas with water for at least 15 minutes. If irritation develops, seek medical attention.

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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: 28 °F (2.2- °C) (calculated)

Lower explosion limit: 1.1 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:

Vapors and/or decomposition products are irritants and/or toxic. If product is heated above decomposition temperatures, acrid smoke and fumes will be released.

Protective equipment for firefighting:

Firefighters should be equipped with 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.

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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.

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 incompatability:

General: Segregate from incompatible substances.

Segregate from oxidizing agents.

Segregate from strong bases.

Segregate from strong acids.

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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.

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 ${\it shift.}$

9. PHYSICAL AND CHEMICAL PROPERTIES

Form: liquid

Odour: solvent-like

Colour: clear

Boiling range: 131 - 354 °F / 55.0 - 178.9 °C

Vapour pressure: n.d.a.

Weight per gallon: 7.85 lb/gal CALC Vapour density: heavier than air

10. STABILITY AND REACTIVITY

Conditions to avoid:

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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 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.

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: Resin Solution

Hazard class:

ID-number: UN 1866 Packing group: II

Sea transport

IMDG

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Proper shipping name: Resin Solution

Hazard class:

ID-number: UN 1866 Packing group: ΙI

Air transport IATA/ICAO

Proper shipping name: Resin Solution

Hazard class:

UN 1866 ID-number: Packing group: ΙI

15. REGULATORY INFORMATION

FEDERAL REGULATIONS

TSCA, US released / listed

SARA 313:

CAS number

1330-20-7

Weight% Chemical name
1.6 xylene
1.2 methyl isobutyl ketone
0.4 ethylbenzene 108-10-1

100-41-4

STATE REGULATIONS

State RTK:

CAS Number Chemical name 489909-5264-P-NLR acrylic resin 110-43-0 methyl amyl ketone

acetone 67-64-1 Acrylic Resin 489909-5277-P-NLR acrylic resin 489909-5224-P-NLR 79-20-9 methyl acetate

763-69-9 ethyl 3-ethoxypropionate 110-12-3 methyl isoamyl ketone

1330-20-7 xylene

108-10-1 methyl isobutyl ketone

100-41-4 ethylbenzene

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

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