

Revision date: 2014/09/08 Page: 1/12
Version: 5.0 (145931/SDS GEN US/EN)

1. Identification

Product identifier used on the label

Keropur AP-205-20 ADDITIVE

Recommended use of the chemical and restriction on use

Recommended use*: Chemical

Suitable for use in industrial sector: Petroleum industry

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION 100 Park Avenue Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Synonyms: POLYISOBUTYLAMINE, POLYETHER AND HYDROCARBON

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Asp. Tox.	1	Aspiration hazard
Flam. Liq.	3	Flammable liquid
Skin Corr./Irrit.	2	Skin corrosion/irritation
Eye Dam./Irrit.	2B	Serious eye damage/eye irritation
Carc.	2	Carcinogenicity
STOT RE	2	Specific target organ toxicity — repeated
		exposure
Aquatic Acute	3	Hazardous to the aquatic environment - acute

^{*} The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Revision date : 2014/09/08 Page: 2/12
Version: 5.0 (145931/SDS_GEN_US/EN)

Aquatic Chronic 3

Hazardous to the aquatic environment - chronic

Label elements

Pictogram:



Signal Word: Danger

Hazard Statement:

H226 Flammable liquid and vapour.

H320 Causes eye irritation.
H315 Causes skin irritation.
H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H304 May be fatal if swallowed and enters airways.

H351 Suspected of causing cancer.

H373 May cause damage to organs (Auditory organ) through prolonged or

repeated exposure.

H402 Harmful to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

P271 Use only outdoors or in a well-ventilated area.

P201 Obtain special instructions before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

P273 Avoid release to the environment.
P260 Do not breathe dust/gas/mist/vapours.

P202 Do not handle until all safety precautions have been read and

understood.

P243 Take precautionary measures against static discharge.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P264 Wash with plenty of water and soap thoroughly after handling.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

Precautionary Statements (Response):

Revision date: 2014/09/08	Page: 3/12		
Version: 5.0	(145931/SDS_GEN_US/EN)		
P308 + P311	IF exposed or concerned: Call a POISON CENTER or doctor/physician.		
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.		
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.		
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.		
P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.		
P361	Remove/Take off immediately all contaminated clothing.		
P332 + P313	If skin irritation occurs: Get medical advice/attention.		
P331	Do NOT induce vomiting.		
P337 + P311	If eye irritation persists: Call a POISON CENTER or doctor/physician.		
P370 + P378	In case of fire: Use () for extinction.		
Precautionary Statemen	Precautionary Statements (Storage):		
P405	Store locked up.		

P403 + P235 Store in a well-ventilated place. Keep cool.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection

point.

Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Emergency overview

DANGER:

IRRITANT.

TOXIC.

FLAMMABLE.

Skin and/or eye irritant

Contains an IARC Group 2B carcinogen - possibly carcinogenic to humans.

Contains a suspected reproductive toxin.

Contains petroleum distillates and prolonged contact with mists may cause skin, eye and respiratory tract irritation. Continued overexposure may cause headache and dizziness. Ingestion may cause lung complications.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	Chemical name
Trade Secret	>= 25.0 - < 50.0 %	Methylated homopolymer
64771-72-8	>= 15.0 - < 25.0 %	Paraffins (petroleum), normal C5-20
64742-48-9	>= 3.0 - < 7.0 %	Naphtha (petroleum), hydrotreated heavy
1330-20-7	>= 15.0 - < 20.0 %	Xylene
100-41-4	>= 3.0 - < 5.0 %	ethylbenzene

A subset of the components listed above have been tested as a mixture.

Revision date : 2014/09/08 Page: 4/12 Version: 5.0 (145931/SDS_GEN_US/EN)

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS Number	Content (W/W)	<u>Chemical name</u>
Trade Secret	>= 25.0 - <= 50.0 %	Methylated homopolymer
64771-72-8	>= 15.0 - <= 25.0 %	Paraffins (petroleum), normal C5-20
64742-48-9	>= 3.0 - <= 7.0 %	Naphtha (petroleum), hydrotreated heavy
1330-20-7	>= 15.0 - <= 20.0 %	Xylene
100-41-4	>= 3.0 - <= 5.0 %	ethylbenzene

4. First-Aid Measures

Description of first aid measures

General advice:

Immediately remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin.

Wash affected areas 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. 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 required.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

Hazards: No applicable information available.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treat according to symptoms (decontamination, vital functions), no

known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: alcohol-resistant foam, dry powder

Revision date: 2014/09/08 Page: 5/12 Version: 5.0 (145931/SDS_GEN_US/EN)

Unsuitable extinguishing media for safety reasons:

water

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:

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

Further information:

Approach with extreme caution. Contain contaminated water/firefighting water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use breathing apparatus if exposed to vapours/dust/aerosol. Do not get in eyes, on skin, or on clothing. Take appropriate protective measures.

Environmental precautions

Notify proper authorities. Do not discharge into drains/surface waters/groundwater. Substance/product is RCRA hazardous due to its properties.

Methods and material for containment and cleaning up

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

7. Handling and Storage

Precautions for safe handling

Keep away from sources of ignition - No smoking. Handle and open container with care. Keep container tightly sealed.

Protection against fire and explosion:

Vapours may form ignitable mixture with air. Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme heat. Empty containers may contain flammable residue. Substance/product is flammable.

Conditions for safe storage, including any incompatibilities

No applicable information available.

Further information on storage conditions: Keep container tightly closed. Avoid all sources of ignition: heat, sparks, open flame.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

ethylbenzene OSHA PEL PEL 100 ppm 435 mg/m3;

ACGIH TLV TWA value 100 ppm; STEL value 125 ppm;

TWA value 20 ppm;

Revision date: 2014/09/08 Page: 6/12 Version: 5.0 (145931/SDS_GEN_US/EN)

Xylene OSHA PEL PEL 100 ppm 435 mg/m3;

ACGIH TLV TWA value 100 ppm; STEL value 150 ppm;

Advice on system design:

No applicable information available.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. For emergency or non-routine, high exposure situations, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:

Chemical resistant protective gloves, Rubber gloves, Plastic gloves

Eye protection:

Tightly fitting safety goggles (chemical goggles) and face shield.

General safety and hygiene measures:

Avoid prolonged and/or repeated contact with the skin. Avoid inhalation of vapour. Do not get in eyes, on skin, or on clothing. Avoid all routes of exposure including ingestion, skin absorption and inhalation. Keep away from food, drink and animal feeding stuffs. Take off immediately all contaminated clothing. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form: liquid

Odour: mild, amine-like

Odour threshold: No applicable information available.

Colour: clear to slightly amber

pH value: 9.5 - 10.7 (1 %(m))

Freezing point: -42 - -30 °C

Boiling point: 148 - 198 °C (1,013 hPa)

Sublimation point:

No applicable information available.

Flash point: approx. 38 °C (closed cup)

Flammability: Flammable.

Lower explosion limit: For liquids not relevant for classification

and labelling. The lower explosion point may be 5 - 15 °C below the flash point.

Upper explosion limit: For liquids not relevant for classification

and labelling.

Autoignition: not determined

Information on: Xylene Autoignition:

Autoignition: approx. 488 °C Literature data.

Vapour pressure: < 5 mmHg (20 °C) Density: 0.8676 g/cm3 (15 °C) Relative density: 0.84 - 0.88 (15 °C)

Vapour density: No applicable information available.

Partitioning coefficient notation Study scientifically not justified. Study scientifically not justified.

Self-ignition not self-igniting

temperature:

Revision date : 2014/09/08 Page: 7/12 Version: 5.0 (145931/SDS_GEN_US/EN)

Thermal decomposition: No decomposition if correctly stored and handled.

Viscosity, dynamic: not determined

Viscosity, kinematic: No applicable information available.

Solubility in water: insoluble

Solubility (quantitative):

No applicable information available.

Solubility (qualitative): No applicable information available.

Evaporation rate: Value can be approximated from Henry's

Law Constant or vapor pressure.

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

10. Stability and Reactivity

Reactivity

No applicable information available.

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties: not fire-propagating

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

The product is chemically stable.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static discharge.

Incompatible materials

strong acids, strong bases, strong oxidizing agents

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

No decomposition if correctly stored and handled.

11. Toxicological information

Primary routes of exposure

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

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion.

Revision date : 2014/09/08 Page: 8/12 Version: 5.0 (145931/SDS_GEN_US/EN)

<u>Oral</u>

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

Inhalation

Type of value: ATE Value: > 20.0000 mg/l Determined for vapor

Type of value: ATE Value: > 5.0000 mg/l Determined for mist

Dermal

Type of value: ATE Value: > 5,000 mg/kg

Assessment other acute effects

No applicable information available.

Irritation / corrosion

Assessment of irritating effects: Irritating to eyes and skin.

Skin

Species: rabbit Result: Irritant.

Sensitization

Assessment of sensitization: No applicable information available.

Aspiration Hazard

May also damage the lung at swallowing (aspiration hazard).

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: The substance may cause damage to the peripheral nervous system after repeated ingestion of high doses.

Genetic toxicity

Assessment of mutagenicity: No applicable information available.

Carcinogenicity

Assessment of carcinogenicity: Contains a compound classified as IARC Group 2B (possibly carcinogenic to humans).

Information on: ethylbenzene

Assessment of carcinogenicity: Indication of possible carcinogenic effect in animal tests. The effect is caused by an animal specific mechanism that has no human counter part. A clear indication of an increased risk of cancer in humans has so far not been shown. IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).

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

Revision date : 2014/09/08 Page: 9/12 Version: 5.0 (145931/SDS_GEN_US/EN)

Reproductive toxicity

Assessment of reproduction toxicity: No applicable information available.

Other Information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Further important symptoms and effects are so far not known.

Medical conditions aggravated by overexposure

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product. See MSDS section 11 - Toxicological information.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Toxicity to fish

LC50 (96 h) 10 - 100 mg/l, Brachydanio rerio

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

bacterium/EC10 (0.5 h): 1,400 mg/l

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

The product is not very soluble in water and can thus be removed from water mechanically in suitable effluent treatment plants.

Bioaccumulative potential

Bioaccumulation potential

No data available.

Mobility in soil

Assessment transport between environmental compartments

No data available.

Additional information

Other ecotoxicological advice:

Revision date: 2014/09/08 Page: 10/12 Version: 5.0 (145931/SDS_GEN_US/EN)

The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

13. Disposal considerations

Waste disposal of substance:

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

Container disposal:

Empty containers with less than 1 inch of residue may be landfilled at a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers. If containers are not empty, they must be disposed of in a RCRA-licensed facility.

WARNING: Empty containers may still contain hazardous residue.

RCRA: D001

14. Transport Information

Land transport

USDOT

Hazard class: 3 Packing group: III

ID number: UN 1307

Hazard label: 3

Proper shipping name: XYLENES SOLUTION

Sea transport

IMDG

Hazard class: 3 Packing group: III

ID number: UN 1307

Hazard label: 3
Marine pollutant: NO

Proper shipping name: XYLENES SOLUTION

Air transport

IATA/ICAO

Hazard class: 3
Packing group: III
ID number: UN 1307

Hazard label: 3

Proper shipping name: XYLENES SOLUTION

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories): Acute; Chronic; Fire

Revision date : 2014/09/08 Page: 11/12 Version: 5.0 (145931/SDS_GEN_US/EN)

EPCRA 313:

CAS Number Chemical name

1330-20-7 Xylene 100-41-4 ethylbenzene

CERCLA RQ
1000 LBSCAS Number
100-41-4Chemical name
ethylbenzene100 LBS1330-20-7XyleneReportable Quantity for release:45 kg

State regulations

State RTKCAS NumberChemical nameMA, NJ, PA1330-20-7XyleneMA, NJ, PA100-41-4ethylbenzene

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

NFPA Hazard codes:

Health: 2 Fire: 2 Reactivity: 0 Special:

HMIS III rating

Health: 2^m Flammability: 2 Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2014/09/08

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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Revision date : 2014/09/08 Page: 12/12 Version: 5.0 (145931/SDS_GEN_US/EN)

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