SAFETY DATA SHEET

Eastman(TM) meta-Diisopropylbenzene

SECTION 1. IDENTIFICATION

Product name : Eastman(TM) meta-Diisopropylbenzene
Product code : 05270-00, S0527001, S0527002, S052700M, S052700S, E0527001

Manufacturer or supplier's details
Company name of supplier : Eastman Chemical Company
Address : 200 South Wilcox Drive
           Kingsport TN 37660-5280
Telephone : (423) 229-2000
Emergency telephone : CHEMTREC: +1-800-424-9300, +1-703-527-3887 CCN7321

Recommended use of the chemical and restrictions on use
Recommended use : Chemical intermediate
Restrictions on use : None known.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200
Flammable liquids : Category 4

GHS label elements
Signal Word : Warning
Hazard Statements : H227 Combustible liquid.
Precautionary Statements : Prevention:
P210 Keep away from heat/sparks/open flames/hot surfaces.
No smoking.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.
SAFETY DATA SHEET

Eastman(TM) meta-Diisopropylbenzene

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Pure substance
Substance name : 05270-00
CAS-No. : 99-62-7

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>m-diisopropylbenzene</td>
<td>99-62-7</td>
<td>&gt; 96</td>
</tr>
<tr>
<td>o-diisopropylbenzene</td>
<td>577-55-9</td>
<td>&lt; 3</td>
</tr>
<tr>
<td>p-diisopropylbenzene</td>
<td>100-18-5</td>
<td>&lt; 2</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

If inhaled : Move to fresh air.
Treat symptomatically.
If symptoms persist, call a physician.

In case of skin contact : Wash off with soap and water.
Remove contaminated clothing and shoes.
Get medical attention if symptoms occur.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed : Seek medical advice.

Most important symptoms and effects, both acute and delayed : None known.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide (CO2)
Dry chemical
Water spray

Unsuitable extinguishing media : Water spray jet

Specific hazards during fire fighting : Water may be ineffective.
The product will float on water and can be reignited on surface water.
Hazardous combustion products: No hazardous combustion products are known

Further information: Use water spray to cool unopened containers.

Special protective equipment for fire-fighters: Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Wear appropriate personal protective equipment. Local authorities should be advised if significant spillages cannot be contained.

Environmental precautions: Avoid release to the environment.

Methods and materials for containment and cleaning up: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). After cleaning, flush away traces with water. Eliminate all ignition sources if safe to do so.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion: None known.

Advice on safe handling: Avoid inhalation of vapor or mist. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Wash thoroughly after handling. Keep away from fire (No Smoking). Keep away from fire, sparks and heated surfaces. Do not use sparking tools.

Conditions for safe storage: Keep container closed when not in use.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters: Contains no substances with occupational exposure limit values.

Engineering measures: Good general ventilation (typically 10 air changes per hour) should be sufficient to control airborne levels.

Personal protective equipment

Respiratory protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Hand protection

Remarks : Wear suitable gloves.

Eye protection : Safety glasses

Protective measures : Remove respiratory and skin/eye protection only after vapors have been cleared from the area. Ensure that eye flushing systems and safety showers are located close to the working place. Use personal protective equipment as required.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

Color : colorless

Odor : hydrocarbon-like

Odor Threshold : not determined

pH : not determined

Melting point/freezing point : -90.83 °F / -68.24 °C (101.3 kPa)

Boiling point/boiling range : 397 °F / 203 °C (101.3 kPa)

Flash point : 158 °F / 70 °C

Method: Seta closed cup

Evaporation rate : not determined

Upper explosion limit / Upper flammability limit : not determined

Lower explosion limit / Lower flammability limit : not determined

Vapor pressure : 0.00997 kPa (68 °F / 20 °C)

Relative vapor density : 5.6
Relative density: 0.857 (68 °F / 20 °C)

Solubility(ies)
- Water solubility: negligible

Partition coefficient: n-octanol/water
- Pow: 250,000
- log Pow: 5.40

Autoignition temperature: 775 °F / 413 °C (98 kPa)

Decomposition temperature: Thermal stability not tested. Low stability hazard expected at normal operating temperatures.

Viscosity
- Viscosity, dynamic: 1.403 mPa.s (77 °F / 25 °C)
- Viscosity, kinematic: 1.637 mm2/s (77 °F / 25 °C)

Explosive properties: No data available

Oxidizing properties: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity: Stable

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Stable

Conditions to avoid: Heat, flames and sparks.

Incompatible materials: Strong oxidizing agents

Hazardous decomposition products: Carbon dioxide (CO2), Carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Product:
Acute oral toxicity: LD50 Oral (Rat): > 5,000 mg/kg

Components:

p-diisopropylbenzene:
Acute oral toxicity: LD50 Oral (Rat): > 3,200 mg/kg
Assessment: The substance or mixture has no acute oral toxicity
Remarks: Not classified

Acute inhalation toxicity: LC50 (Rat): > 5.6 mg/l
Exposure time: 4 h
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: (highest concentration tested)
Read-across from a similar material

Acute dermal toxicity: LD50 Dermal (Guinea pig): > 17,120 mg/kg

Skin corrosion/irritation
Not classified based on available information.

Components:
p-diisopropylbenzene:
Species: Guinea pig
Exposure time: 24 h
Result: Skin irritation

Serious eye damage/eye irritation
Not classified based on available information.

Product:
Species: Rabbit
Result: slight
Exposure time: 24 h

Components:
p-diisopropylbenzene:
Species: Rabbit
Result: very slight

Respiratory or skin sensitization

Skin sensitization
Not classified based on available information.

Respiratory sensitization
Not classified based on available information.

Product:
Test Type: Skin Sensitization
Species: Guinea pig
Result: none
Eastman(TM) meta-Diisopropylbenzene

Components:

p-diisopropylbenzene:
Test Type : Skin Sensitization
Species   : Guinea pig
Result    : none

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.
IARC       No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA       No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.
NTP        No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Information on likely routes of exposure

Product:
Inhalation : Remarks: None known.
Skin contact: Remarks: None known.
Eye contact : Remarks: None known.
Ingestion  : Remarks: None known.

Further information

Product:
Remarks  : None known.
SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

p-diisopropylbenzene:

Toxicity to fish:
- LC50 (Pimephales promelas (fathead minnow)): > 0.91 mg/l
  Exposure time: 96 h
  Remarks: Read-across from a similar material

- LC50 (Oryzias latipes (Orange-red killifish)): 0.707 mg/l
  Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:
- EC50 (Daphnia magna (Water flea)): 0.392 mg/l
  Exposure time: 48 h
  Remarks: Read-across from a similar material

Toxicity to algae/aquatic plants:
- ErC50 (Selenastrum capricornutum (green algae)): 2.7 mg/l
  Exposure time: 72 h
  Remarks: Read-across from a similar material

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
- NOEC (Daphnia magna (Water flea)): 0.063 mg/l
  Exposure time: 21 d
  Remarks: Read-across from a similar material

Persistence and degradability

Product:
Biodegradability:
- Remarks: Not biodegradable.
  The product is insoluble and floats on water.
  Read-across from a similar material

Chemical Oxygen Demand (COD):
- 250 mg/g

Components:

p-diisopropylbenzene:

Biodegradability:
- Result: Not readily biodegradable.
  Biodegradation: 0 %
  Exposure time: 21 d

Chemical Oxygen Demand (COD):
- 780 mg/g

Bioaccumulative potential

Components:

p-diisopropylbenzene:

Bioaccumulation:
- Bioconcentration factor (BCF): 503
Mobility in soil
No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : Dispose of in accordance with local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation

49 CFR
UN/ID/NA number : NA 1993
Proper shipping name : Combustible liquid, n.o.s.
                      (m-diisopropylbenzene)
Class : CBL
Packing group : III
Labels : None
ERG Code : 128
Marine pollutant : no
Remarks : combustible liquid, Packing group III for quantities of 450 liters (119 gallons) or more; not regulated for smaller quantities

Special precautions for user
The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component TPQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA 311/312 Hazards</td>
<td></td>
<td>Fire Hazard</td>
</tr>
</tbody>
</table>
SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

The ingredients of this product are reported in the following inventories:

- **TCSI**: On the inventory, or in compliance with the inventory
- **TSCA**: All substances listed as active on the TSCA inventory
- **AICS**: On the inventory, or in compliance with the inventory
- **DSL**: All components of this product are on the Canadian DSL
- **ENCS**: On the inventory, or in compliance with the inventory
- **ISHL**: On the inventory, or in compliance with the inventory
- **KECI**: On the inventory, or in compliance with the inventory
- **IECSC**: On the inventory, or in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.
SAFETY DATA SHEET

Eastman(TM) meta-Diisopropylbenzene

Version 2.3
Revision Date: 09/12/2019
SDS Number: 150000000036
Date of last issue: 05/15/2017
SDSUS / Z8 / 0001
Date of first issue: 09/06/2016

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:

HMIS® IV:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "***" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELo - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50% of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SAR - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG -
United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 09/12/2019

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8