



Material Safety Data Sheet

Version No.: 001.05

Date of Revision: March 15, 2024

SAFETY DATA SHEET

SECTION 1

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: MPRL AROSOL 180

Product Description: Aromatic Hydrocarbon

Recommended Use: Solvent

COMPANY IDENTIFICATION

Supplier: Mehta Petro-Refineries Ltd.

Plot No. 1, Dewan & Sons Udyog,
Village Mahim, Taluka Palghar,
Dist Palghar 401404.

24 Hour Environmental / Health Emergency +91-2525-254155/254502

Telephone

Supplier General Contact +91-2525-254155/254502

SECTION 2

HAZARDS IDENTIFICATION

This material is hazardous according to regulatory guidelines (see (M)SDS Section 15).

CLASSIFICATION:

Flammable liquid: Category 4.

Carcinogen: Category 2. Specific target organ toxicant (central nervous system): Category 3. Aspiration toxicant: Category 1.

Acute aquatic toxicant: Category 2. Chronic aquatic toxicant: Category 2.

LABEL ELEMENTS:

Pictograms:



Signal Word: Danger



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Hazard Statements:

H227: Combustible liquid.

H304: May be fatal if swallowed and enters airways. H336: May cause drowsiness or dizziness. H351: Suspected of causing cancer.

H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from flames and hot surfaces. No smoking. P261: Avoid breathing mist / vapors. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P308 + P313: IF exposed or concerned: Get medical advice/attention. P312: Call a POISON CENTER or doctor/physician if you feel unwell. P331: Do NOT induce vomiting. P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish. P391: Collect spillage.

P403 + P233: Store in a well-ventilated place. Keep container tightly closed. P403 + P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.

P501: Dispose of contents and container in accordance with local regulations.

Contains: SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC

Other hazard information:

PHYSICAL / CHEMICAL HAZARDS

Material can accumulate static charges which may cause an ignition. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited. Combustible.

HEALTH HAZARDS

May be irritating to the eyes, nose, throat, and lungs. Repeated exposure may cause skin dryness or cracking. May cause central nervous system depression.

ENVIRONMENTAL HAZARDS

No additional hazards.

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3

COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a complex substance.

Hazardous Substance(s) or Complex Substance(s) required for disclosure



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Name	CAS#	Concentration *	GHS Hazard Codes
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	64742-94-5	100 %	H227, H304, H336, H351, H401, H411

Hazardous Constituent(s) Contained in Complex Substance(s) required for disclosure

Name	CAS#	Concentration *	GHS Hazard Codes
1,2,4-TRIMETHYLBENZENE	95-63-6	1 - < 5%	H226, H332, H335, H315, H319(2A), H401, H411
NAPHTHALENE	91-20-3	5 - < 15%	H302, H351, H400(M factor 1), H410(M factor 1)

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Concentration values may vary.

SECTION 4

FIRST AID MEASURES

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

Seek immediate medical attention. Do not induce vomiting.

NOTE TO PHYSICIAN

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

SECTION 5

FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

Inappropriate Extinguishing Media: Straight streams of water



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FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Incomplete combustion products, Oxides of carbon, Smoke, Fume

FLAMMABILITY PROPERTIES

Flash Point [Method]: Min 70°C (158°F) [ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: 0.8 UEL: 7.0

Autoignition Temperature: N/D

SECTION 6

ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required, due to toxicity or flammability of the material. See Section 5 for firefighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

For emergency responders: Respiratory protection: half-face or full-face respirator with filter(s) for organic vapor and, when applicable, H₂S, or Self-Contained Breathing Apparatus (SCBA) can be used depending on the size of spill and potential level of exposure. If the exposure cannot be completely characterized or an oxygen deficient atmosphere is possible or anticipated, SCBA is recommended. Work gloves that are resistant to aromatic hydrocarbons are recommended. Note: gloves made of polyvinyl acetate (PVA) are not water-resistant and are not suitable for emergency use. Chemical goggles are recommended if splashes or contact with eyes is possible. Small spills: normal antistatic work clothes are usually adequate. Large spills: full body suit of chemical resistant, antistatic material is recommended.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do so without risk. Do not touch or walk through spilled material. Large Spills: Water spray may reduce vapor, but may not prevent ignition in enclosed spaces. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Recover by pumping or with suitable absorbent.

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current



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direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dyke far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7

HANDLING AND STORAGE

HANDLING

Avoid all personal contact. Potentially toxic/irritating fumes/vapor may be evolved from heated or agitated material. Use only with adequate ventilation. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). When the material is handled in bulk, an electrical spark could ignite any flammable vapors from liquids or residues that may be present (e.g., during switch-loading operations). Use proper bonding and/or earthing procedures. However, bonding and earthing may not eliminate the hazard from static accumulation. Consult local applicable standards for guidance. Additional references include American Petroleum Institute 2003 (Protection Against Ignitions Arising out of Static, Lightning and Stray Currents) or National Fire Protection Agency 77 (Recommended Practice on Static Electricity) or CENELEC CLC/TR 50404 (Electrostatics - Code of practice for the avoidance of hazards due to static electricity).

Loading/Unloading Temperature: [Ambient]

Transport Temperature: [Ambient]

Transport Pressure: [Ambient]

Static Accumulator: This material is a static accumulator. A liquid is typically considered a nonconductive, static accumulator if its conductivity is below 100 pS/m (100×10^{-12} Siemens per meter) and is considered a semiconductive, static accumulator if its conductivity is below 10,000 pS/m. Whether a liquid is nonconductive or semiconductive, the precautions are the same. A number of factors, for example liquid temperature, presence of contaminants, anti-static additives and filtration can greatly influence the conductivity of a liquid.

STORAGE

The type of container used to store the material may affect static accumulation and dissipation. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Storage containers should be earthed and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

Storage Temperature: [Ambient]

Storage Pressure: [Ambient]

Suitable Containers/Packing: Drums; Tank Trucks; Barges; Railcars

Suitable Materials and Coatings (Chemical Compatibility): Carbon Steel; Stainless Steel; Polyester; Teflon; Polyvinyl Alcohol (PVA)

Unsuitable Materials and Coatings: Butyl Rubber; Polystyrene; Polyacrylonitrile; Polypropylene; Polyethylene; Ethylene-propylene-diene monomer (EPDM); Natural Rubber

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION



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EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit/Standard			Note
1,2,4-TRIMETHYLBENZENE		TWA	25 ppm		
NAPHTHALENE		TWA	10 ppm		Skin
SOLVENT NAPHTHA (PETROLEUM), HEAVY AROMATIC	Vapour.	RCP -TWA	100 mg/m3	17 ppm	Total Hydrocarbons

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion-proof ventilation equipment.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Half-face filter respirator Type A filter material

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

Chemical resistant gloves are recommended. Nitrile

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:



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Chemical/oil resistant clothing is recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

GENERAL INFORMATION

Physical State: Liquid
Form: Clear
Colour: Colourless
Odour: Aromatic
Odour Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 30 °C): 0.920 - 0.940
Density (at 30 °C): 0.920 - 0.940 [ASTM D1298]
Flammability (Solid, Gas): N/A
Flash Point [Method]: Min 70°C (158°F) [ASTM D-92]
Flammable Limits (Approximate volume % in air): LEL: 0.8 UEL: 7.0
Autoignition Temperature: >450°C (842°F)
Boiling Point / Range: 190°C (356°F) - 280°C (716°F)
Decomposition Temperature: N/D
Vapour Density (Air = 1): > 1 at 101 kPa
Vapour Pressure: N/D
Evaporation Rate (n-butyl acetate = 1): 0.05
pH: N/A
Log Pow (n-Octanol/Water Partition Coefficient): N/D
Solubility in Water: Negligible
Viscosity: 1.0 - 3.0 cSt at 40°C
Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: N/D
Molecular Weight: N/D
Hygroscopic: No
Coefficient of Thermal Expansion: 0.00088 per Deg C



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SECTION 10 STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Open flames and high energy ignition sources.

MATERIALS TO AVOID: Strong oxidisers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

<u>Route of Exposure</u>	<u>Conclusion / Remarks</u>
Inhalation	
Toxicity (Rat): LC50 > 4688 mg/m3	Based on test data for the material.
Irritation: No end point data for material.	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
Ingestion	
Toxicity (Rat): LD50 > 5000 mg/kg	Minimally Toxic. Based on test data for the material.
Skin	
Toxicity (Rabbit): LD50 > 2000 mg/kg	Minimally Toxic. Based on test data for the material.
Irritation: Data available.	May dry the skin leading to discomfort and dermatitis. Based on test data for the material.
Eye	
Irritation: Data available.	May cause mild, short-lasting discomfort to eyes. Based on test data for the material.

OTHER HEALTH EFFECTS FROM SHORT AND LONG TERM EXPOSURE

Anticipated health effects from sub-chronic, chronic, respiratory or skin sensitization, mutagenicity, reproductive toxicity, carcinogenicity, target organ toxicity (single exposure or repeated exposure), aspiration toxicity and other effects based on human experience and/or experimental data.

For the product itself:

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anaesthetic and may have other central nervous system effects. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.



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Contains:

NAPHTHALENE: Exposure to high concentrations of naphthalene may cause destruction of red blood cells, anemia, and cataracts. Naphthalene caused cancer in laboratory animal studies, but the relevance of these findings to humans is uncertain.

IARC Classification:

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
NAPHTHALENE	91-20-3	3

--REGULATORY LISTS SEARCHED--

1 = IARC 1

2 = IARC 2A

3 = IARC 2B

SECTION 12**ECOLOGICAL INFORMATION**

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

MOBILITY

Material -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY**Biodegradation:**

Material -- Expected to be inherently biodegradable

Hydrolysis:

Material -- Transformation due to hydrolysis not expected to be significant.

Photolysis:

Material -- Transformation due to photolysis not expected to be significant.

Atmospheric Oxidation:

Material -- Expected to degrade rapidly in air

OTHER ECOLOGICAL INFORMATION

VOC: Yes

SECTION 13**DISPOSAL CONSIDERATIONS**



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Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14

TRANSPORT INFORMATION

LAND

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl (C3-C6) Benzenes)

Hazard Class: 9

Hazchem Code: 3Z

UN Number: 3082

Packing Group: III

Label(s) / Mark(s): 9, EHS

SEA (IMDG)

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard Class & Division: 9

EMS Number: F-A, S-F

UN Number: 3082

Packing Group: III

Marine Pollutant: Yes

Label(s): 9

Transport Document Name: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (naphthalene), 9, PG III, MARINE POLLUTANT

AIR (IATA)

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl (C3-C6) Benzenes)

Hazard Class & Division: 9

UN Number: 3082

Packing Group: III

Label(s) / Mark(s): 9, EHS

Transport Document Name: UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkyl (C3-C6) Benzenes), 9, PG III



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SECTION 15

REGULATORY INFORMATION

This material is considered hazardous according to the classification criteria of the Hazard Classification and Communication System for Hazardous Materials BE 2555.

REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Hazardous Substance Act BE2535: Regulated

Listed or exempt from listing/notification on the following chemical inventories: AICS, DSL, ENCS, IECSC, KECI, PICCS, TCSI, TSCA

SECTION 16

OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):

H226: Flammable liquid and vapour; Flammable Liquid, Cat 3
H227: Combustible liquid; Flammable Liquid, Cat 4
H302: Harmful if swallowed; Acute Tox Oral, Cat 4
H304: May be fatal if swallowed and enters airways; Aspiration, Cat 1
H315: Causes skin irritation; Skin Corr/Irritation, Cat 2
H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A
H332: Harmful if inhaled; Acute Tox Inh, Cat 4
H335: May cause respiratory irritation; Target Organ Single, Resp Irr
H336: May cause drowsiness or dizziness; Target Organ Single, Narcotic
H351: Suspected of causing cancer; GHS Carcinogenicity, Cat 2
H400: Very toxic to aquatic life; Acute Env Tox, Cat 1
H401: Toxic to aquatic life; Acute Env Tox, Cat 2
H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1
H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Hazard Identification: Physical/Chemical Hazard information was modified.
Section 01: Company Contact Methods information was modified.
Section 01: Product Identification Product Name information was modified.
Section 05: Fire Fighting Measures - Fire Fighting Instruction information was modified.
Section 06: Protective Measures information was modified.
Section 07: Handling and Storage - Handling information was modified.
Section 07: Handling and Storage - Storage Phrases information was modified.
Section 07: Materials/Coatings - Unsuitable information was modified.
Section 07: Suitable Containers information was modified.
Section 09: Coefficient of Thermal Expansion information was modified.
Section 09: VAPOUR PRESSURE information was modified.



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The information and recommendations contained herein are, to the best of Mehta Petro Refineries Ltd. knowledge and belief, accurate and reliable as of the date issued. You can contact Mehta Petro Refineries Ltd. to ensure that this document is the most current available from Mehta Petro Refineries Ltd. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to ensure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re- publication or retransmission of this document, in whole or in part, is not permitted.

