1. Product and Company Identifaction

Product Name	Solvent Naphtha M
Part Number	RXSOL-19-1977-208
Product Use	Solvent
Synonyms	Solvent 110

Company Details:
RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

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2. Composition / Information on ingredients

Chemical Name	CAS number	EC number	Weight %	Registration number (REACH)
Hydrocarbons, C10, aromatics, >1% naphthalene	64742-94-5	919-284-0	100 %	01-2119463588-24-0003

Hazardous ingredients

Name of Substance	Identifier	Wt%	Classification acc. to GHS
Naphthalene	CAS No 91-20-3	1 -10	Acute Tox. 4 / H302 Carc.2 / H351 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410 Acute Tox. 4 / H302 Carc.2 / H351 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410

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

3. Hazards Identification

Classification according to Regulation (EC) No 1272/2008 (CLP)

Signal Word	Danger
Hazard class	Category
carcinogenicity	Cat. 2
Specific target organ toxicity - single exposure (narcotic effects, drowsi□ness)	Cat. 3
Aspiration hazard	Cat. 2
Hazardous to the aquatic environment - chronic hazard	Cat. 1
	The most important adverse physicochemical, human health and environmental effects May be fatal if swallowed and enters airways
Hazard statements	H304 May be fatal if swallowed and enters airways.
	H336 May be fatal if swallowed and enters airways.
	H351 May cause drowsiness or dizziness.
	H411 Suspected of causing cancer. Toxic to aquatic life with long lasting effects
	H226 Flammable liquid and vapor.
Precautionary statements - prevention	P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat/sparks/open flames/hot surfaces. -- No smoking. P233: Keep container tightly closed. P240: Ground / bond container and receiving equipment. P241: Use explosion-proof electrical, ventilating, and lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P261: Avoid breathing mist / vapours. 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. P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. 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. P332 + P313: If skin irritation occurs: Get medical advice/ attention. P370 + P378: In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish. P403 + P235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents and container
	P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
	P312 Call a POISON CENTER or doctor/physician if you feel unwell.
Precautionary statements - response	P331 Do NOT induce vomiting.
	P391 Collect spillage.
Precautionary statements - storage	P403+P233 Store in a well-ventilated place. Keep container tightly closed.
Flammable liquid	Category 3
Carcinogen:	Category 2. Specific target organ toxicant (central nervous system): Category 3. Specific target organ toxicant (respiratory irritant): Category 3. Aspiration toxicant: Catego
GHS Hazard Classifications:	Flammable liquid: Category 3. Carcinogen: Category 2. Specific target organ toxicant (central nervous system): Category 3. Specific target organ

	toxicant (respiratory irritant): Category 3. Aspiration toxicant: Category 1
Precautionary statements - disposal	P501 Dispose of contents/container to industrial combustion plant
Other hazard information:	Supplemental hazard information. EUH066 Repeated exposure may cause skin dryness or cracking.
Additional labelling requirements	EUH066 Repeated exposure may cause skin dryness or cracking

4. First Aid Measures

General notes	Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms per□sist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give any□thing by mouth.
Indication of any immediate medical attention and special treatment needed	None
Skin Contact	Wash with plenty of soap and water.
Eye Contact	Irrigate copiously with clean, fresh water, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In all cases of doubt, or when symptoms persist, seek medical advice.
Inhalation	If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air
Ingestion	Do NOT induce vomiting. Rinse mouth with water (only if the person is conscious)
Most important symptoms/effects both acute and delayed	Choking and suffocation risks. Narcotic effects. Deficits in perception and coordination, reaction time, or sleep□ines
Notes to Physician	Treat symptomatically
HMIS Hazard ID	Health: 1* Flammability: 2 Reactivity: 0

5. Fire-fighting Measures

General information	Extinguishing materials should be selected according to the surrounding area. The product itself is not combustible.
Appropriate Extinguishing Media	Use water fog, foam, dry chemical or carbon dioxide (CO2) toextinguish flames
Inappropriate Extinguishing Media:	Straight Streams of Wate
Flammability of the Product	Flammable.
Suitable extinguishing media	Carbon dioxide (CO2), BC-powder, foam, alcohol resistant foam, water mist
Unsuitable extinguishing media	water jet
Hazardous combustion products	Carbon monoxide (CO), Carbon dioxide (CO2)
Advice for firefighters	Wear breathing apparatus if exposed to vapours/dust/spray/gases. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance. Keep containers cool with water spray.
Special hazards arising from the substance or mixture	May produce toxic fumes of carbon monoxide if burning.
FIRE FIGHTING	
Fire Fighting Instructions:	Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposedsurfaces and to protect personne
Unusual Fire Hazards	Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.

	Hazardous material. Firefighters should consider protective equipment indicated in Section 8
Hazardous Combustion Product	Smoke, Fume, Oxides of carbon, Incomplete combustion products
FLAMMABILITY PROPERTIES	
Flash Point [Method]:	46°C (115°F) [ASTM D-56]
Flammable Limits (Approximate volume % in air):	LEL: 0.9 UEL: 6.2
Autoignition Temperature:	485°C (905°F)
Extinguishing media which must not be used for safety reasons:	High power water jet.
Special protective equipment for fire-fighters:	In case of fire. Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).
Additional information:	Contaminated fire-fighting water must be collected separately.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures For non-emergency personnel	Remove persons to safety. Avoid inhaling sprayed product. Wearing of suitable protective equipment (includ□ing personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contam□ination of skin, eyes and personal clothing. Take off immediately all contaminated clothing and wash it before reuse
For emergency responders	Wear breathing apparatus if exposed to vapours/dust/spray/gases
Methods and material for containment and cleaning up Advices on how to contain a spill	Covering of drains.
Advices on how to clean up a spill	Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust, kieselgur (diatomite), sand, uni□versal binder).
Appropriate containment techniques	Use of adsorbent materials. - covering of drains
Other information relating to spills and releases	Place in appropriate containers for disposal. Ventilate affected area
Reference to other sections	Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.
Notification Procedure	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.
Protective Measure	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 fire fighting 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.
Spillage	Absorb with an inert material and put the spilled material in an appropriate waste disposal.Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.
Personal Protection	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
Enviromental Precaution	Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

Methods and materials for containment and cleaning	Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment

7. Handling and Storage

Measures to prevent fire as well as aerosol and dust generation	Use only in well-ventilated areas. Use local and general ventilation.
	Conditions for safe storage, including any incompatibilities
Incompatible substances or mixtures	Managing of associated risks
	Observe hints for combined storage.
Advice on general occupational hygiene	Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protect□ive equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feed□ing
Packaging compatibilities	Only packagings which are approved (e.g. acc. to ADR) may be used. Suitable materials and coatings for container/equipment: Carbon Steel, Stainless Steel, Polyester, Polytetra□fluoroethylene (PTFE), Polyvinyl Alcohol (PVA) Unsuitable Materials and Coatings for container/equipment: Butyl Rubber, Natural Rubber, Ethylene-propyl□ene-diene monomer (EPDM), Polystyrene, Polyethylene, Polyacrylonetrile
Handling	Avoid breathing mists or vapors. Avoid all personal contact. Potentially toxic/irritating fumes/vapors may be evolved from heated or agitated material. Use only with adequate ventilation. Do not enter storage areas or confined spaces unless adequately ventilated. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds 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
Storage	The container choice, for example storage vessel, may effect 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 grounded 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:	Railcars; Tank Trucks; Barges; Drums; Tankers
Suitable Materials and Coatings (Chemical Compatibility	Carbon Steel; Stainless Steel; Copper Bronze; Inorganic; Inorganic Zinc Coatings; Epoxy Phenolic; Polyamide Epoxy; Amine Epoxy; Viton
Unsuitable Materials and Coatings	Vinyl Coatings; Butyl Rubber; Natural Rubber; Ethylene proplyene-diene monomer (EPDM); Polyethylene; Polystyrene; PVC; Polyacrylonitrile; Polypropylene
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.
Specific end use(s)	See attached exposure scenarios

8. Exposure controls and personal protection

Exposure Limit Values

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

Country	Chemical Name	CAS.No	Identifier	TWA [ppm	TWA [mg/m^3	STEL [ppm]	STEL [mg/m^3]	Source
DE	Hydrocarbons, C10,Aromatics,>1% Naphthalene	64742-94-5	AGW		50		50	TRGS 900
DE	Naphthalene	91-20-3	AGW	0.4	2	1.6	8	TRGS 900
EU	Naphthalene	91-20-3	IOELV	10	50			91/322/EEC
IE	Naphthalene	91-20-3	OELV	10	50	15	75	S.I. No. 619 of 2001

Relevant DNELs/DMELs/PNECs and other threshold levels

Human health values

Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
DNEL	12.5 mg/kg	Human, dermal	worker (industry)	chronic - systemic effects
DNEL	151 mg/m^3	Human, inhalatory	worker (industry)	chronic - systemic effects
DNEL	7.5 mg/kg	Human, oral	consumer (private households)	chronic - systemic effects
DNEL	7.5 mg/kg	Human, inhalatory	consumer (private households)	chronic - systemic effects
DNEL	32 mg/m^3	Human, dermal	consumer (private households)	chronic - systemic effects

Name of substance	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Naphthalene	DNEL	25 mg/m^3	Human, inhalatory	worker (industry	chronic - local effects
Naphthalene	DNEL	3.57 mg/kg	Human, inhalatory	worker (industry	chronic - systemic effcte
Naphthalene	DNEL	25 mg/m^3	Human, inhalatory	worker (industry	chronic - systemic effcte

Name of substance	Endpoint	Threshold level	Environmental compartment	Organism	Exposure time
Naphthalene	PNEC	2.9 mg/l	sewage treatment plant (STP)	microorganisms	short-term (single instanc

Exposure controls

Appropriate engineering controls

Technical measures and the appliance of appropriate working methods take priority over the use of personal protective equipment. Safety and necessary control measures vary according to exposure conditions. Appropriate measures are: Open windows, door, to allow sufficient ventilation. If this is not possible employ a fan to increase air exchange .

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection.

Note	Limits/Standards shown for guidance only. Follow applicable regulations.
Engineering Control	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 uses
Respiratory Protection	For activities in enclosed areas at elevated temperatures of the substance, local extraction or explosion protec□ted ventilation equipment is recommended. In case this is not sufficient for the intended use, then apply a suit□able respiratory protection according to EN 1
Hand Protection:	Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Short-term contact with the skin: Disposable gloves Long-term contact with the skin: Gloves with long cuffs Check leak-tightness/impermeability prior to use
Eye\face Protection:	Use safety goggle with side protection.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Exposure Limits	TWA: 100 (ppm) [Canada] TWA: 435 (mg/m3) [Canada] TWA: 434 STEL: 651 (mg/m3) from ACGIH (TLV) [United States] TWA: 100 STEL: 150 (ppm) from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.
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 Protection	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.

Gloves Suit

9. Physical and chemical properties

Physical State	Liquid
Form	Clear
Colour	Colourless
Odour	pungent
Odor Threshold	N/D
Relative Density (at 15 °C)	0.874
Boiling Point	160?□?230 °C (ASTM D 86)
Flash Point	>62 °C (ASTM D 93)
Density (at 15 ºC):	0.8?□?1 g /cm^3 at 15 °C
Evaporation Rate	0.7
pH:	Not determine
Flammability (Solid, Gas):	N/A
Explosive limits	Lower explosion limit (LEL) - 0.6 vol%
	Upper explosion limit (UEL) - 7 vol%
Vapour pressure	0.269 kPa (2.02 mm Hg) at 20 °C 0.811 kPa (6.1 mm Hg) at 38°C
Log Pow (n-Octanol/Water Partition Coefficient):	N/D
Vapour Density	3.7
Secific Gravity	0.878
Decomposition Temperature	N/D
Solubility in Water:	Negligible
Autoignition Temperature	485°C (905°F)
Solubility in Water	Not Determine
Kintic viscosit	0.8?□?2 mm^2/s at 20 °C
Vapor Pressure:	0.06 kPa at 20 °C
Molecular Weight	121
Oxidizing Properties:	None
Freezing Point:	14°C (7°F)
Melting Point:	N/D
Hygroscopic:	No

10. Stability and reactivity

Recativity	This material is not reactive under normal ambient conditions
Chemical Stability	The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure (see below "Conditions to avoid").
Possibility of hazardous reactions	No known hazardous reactions.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Hints to prevent fire or explosion	Use explosion-proof electrical/ventilating/lighting/equipment. Take precautionary measures against static discharge.
Incompatible materials	oxidisers
Hazardous Decomposition Products	No known hazardous decomposition products
Hazardous Polymerization	Hazardous polymerization does not occur. Hazardous Reactions None under normal processing

11. Toxicological information

Classification	Classification according to GHS (1272/2008/EC, CLP)
Acute toxicity	Shall not be classified as acutely toxic.

Exposure route	Endpoint	Value	Species
oral	LD50	6,318 mg/kg	rat
dermal	LD50	>2,000 mg/kg	rabbit
inhalation: vapour	LD50	>4,688 mg/l /4h	rat

Skin corrosion/irritation	Shall not be classified as corrosive/irritant to skin
Serious eye damage/eye irritation	Shall not be classified as seriously damaging to the eye or eye irritant
Respiratory or skin sensitisation	Shall not be classified as a respiratory or skin sensitiser
Summary of evaluation of the CMR properties	Suspected of causing cancer. Shall not be classified as germ cell mutagenic. Shall not be classified as a reproductive toxicant.
Specific target organ toxicity (STOT)	Specific target organ toxicity - single exposure May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	Shall not be classified as a specific target organ toxicant (repeated exposure)
Aspiration hazard	May be fatal if swallowed and enters airways.

1.Inhalation

Hazard ClassAcute Toxicity: (Rat) 4 hour(s) LC50 > 6193 mg/m3 (Max attainable vapor conc.)	Minimally Toxic. Based on test data for the material. Test(s)equivalent or similarto OECD Guideline 403
Irritation: No end point data for material	May be irritating to the respiratory tract. The effects are reversible. Based on assessment of the components.

2.Ingestion

Acute Toxicity (Rat): LD50 3492 mg/kg	Minimally Toxic. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 401
Skin Corrosion/Irritation: Data available	Mildly irritating to skin with prolonged exposure. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 404

4.Eye

Serious Eye Damage/Irritation: Data availabl	May cause mild, short-lasting discomfort to eyes. Based on test data for the material. Test(s) equivalent or similar to OECD Guideline 405
Repeated Exposure: Data available	Not expected to cause organ damage from prolonged or repeated exposure. Based on test data for structurally similar materials. Test(s) equivalent or similar to OECD Guideline 408 452