



SAFETY DATA SHEET

SOLVENT D40

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

Product name: SOLVENT D40
Recommended use: Chemical for industry.
Manufacturer/Supplier: **MODERN CHEMICAL Co.Ltd.**
82/80 Soi Eakamai 22 (Nuan-noi) Sukhumvit Road 63,
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Telephone No: 0-2715-0897-9, 0-2392-3410-3
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2. HAZARDS IDENTIFICATION

Label elements

Pictogram



Signal word

Danger

Hazard statement(s):

- 1.) Flammable liquid and vapour.
- 2.) May be fatal if swallowed and enters airways.
- 3.) Causes mild skin irritation.
- 4.) May cause drowsiness or dizziness.

Precautionary statement(s):

- 1.) Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- 2.) Keep container tightly closed.
- 3.) Ground / bond container and receiving equipment.
- 4.) Use explosion-proof electrical ventilating, and lighting equipment.
- 5.) Use only non-sparking tools.



- 6.) Take precautionary measures against static discharge.
- 7.) Avoid breathing mist / vapours.
- 8.) Use only outdoors or in a well-ventilated area.
- 9.) Wear protective gloves and eye / face protection.
- 10.) IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- 11.) IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- 12.) IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- 13.) Call a POISON CENTER or doctor/physician if you feel unwell.
- 14.) Do NOT induce vomiting.
- 15.) If skin irritation occurs: Get medical advice/attention.
- 16.) In case of fire: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish.
- 17.) Store in a well-ventilated place. Keep container tightly closed.
- 18.) Store in a well-ventilated place. Keep cool.
- 19.) Store locked up.
- 20.) Dispose of contents and container in accordance with local regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonym: N/A

Ingredients	% (w/w)	CAS NO.
NAPHTHA (PRTROLEUM), HYDROTREATED HEAVY	100	64742-48-9

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

NONANE	1- < 5 %	111-84-2
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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.** If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:

Use water fog, foam, dry chemical or carbon dioxide to extinguish flames.

Unsuitable Extinguishing Media:

Straight streams of water.

Specific hazards arising from Chemicals:

Incomplete combustion products, Oxides of carbon, Smoke, Fume.

Special protective equipment for fire-fighters :

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:

Avoid contact with spilled material. Keep unnecessary and unprotected personnel away. Keep upwind, evacuate downwind. Warn personnel of toxicity and flammability of the substance. Evacuate personnel to safe areas. See Section 5 for fire fighting information. See Section 3 for the Hazard Identification. 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.

Environmental precautions:

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

Methods and Material for Containment and Clean Up:

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas.

A vapour-suppressing foam may be used to reduce vapour. Use clean non-sparking



tools to collect absorbed material. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Large Spills: Water spray may reduce vapour, but may not prevent ignition in enclosed spaces.

Water Spill: Stop leak if you can do so without risk. Eliminate sources of ignition. Warn other shipping.

7. HANDING AND STORAGE

Precautions for Safe Handling & Product Transfer:

Avoid contact with skin. Potentially toxic/irritating fumes/vapour 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). Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation.

Conditions for Safe Storage & Unsuitable Materials:

The type of container used to store the material 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 earthed and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.

Suitable Materials and Coatings (chemical Compatibility): Teflon, Polypropylene, Polyethylene,Stainless Steel, Carbon Steel

Unsuitable Materials and Coatings: Butyl Rubber, Natural Rubber, Ethylene-propylene- diene monomer (EPDM), Polystyrene

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

Name	TWA(ppm)
NAPHTHA (PRTROLEUM), HYDROTREATED HEAVY	197
NONANE	200

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



Individual Protection Measures

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: For prolonged contact with the substance or contact frequently. Wear protective gloves. And if there is a chance of contact with the substance in the arm. Wear gloves that cover the arms of use 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: For prolonged contact with the substance or contact frequently. Chemical and oil resistant apron protective clothing.

Hygiene measure: 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.



9. PHYSICAL AND CHEMICAL PROPERTIES

Form, Color and Odor : liquid, colourless, Petroleum	Evaporation rate : 0.11 (n-butyl acetate = 1)
Melting Point : N/A	Specific gravity : 0.770 kg/dm ³ at 15°C
pH : N/A	Solubility in water : Negligible
Boiling : 147-199 °C	Viscosity : 1.03 cSt at 40 °C
Vapour pressure : 0.21 kPa at 20 °C	Vapour density : >1 at 101 kPa
Lower explosion limits : 0.6 %Vol	Upper explosive limit : 7.0 %Vol
Auto-ignition temperature : >200 °C	Flash point : >=40 °C
Odour threshold : N/A	Flammability (solid, gas) : N/A
Decomposition temperature : N/A	Solubility in other solvents : N/A
n-octanol/water partition coefficient (log P_{ow}) : N/A	

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage conditions.
Reactions:	No data available
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur.
Conditions to avoid:	Heat, sparks, open flames and other ignition source.
Materials to be avoided:	Strong oxidizers
Hazardous Decomposition Products:	Material does not decompose at ambient temperatures.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	LD50 (Oral, rat): > 15000 mg/kg LC50 (Inhalation, rat): >4951 mg/m ³ LD50 (Skin, rabbit): >5000 mg/kg
Sensitization:	Vapour 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.



Chronic toxicity: 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.

Further toxicological information: No data available

12. ECOLOGICAL INFORMATION

Toxicity

Toxicity to fish: Not expected to be harmful to aquatic organisms.

Toxicity to daphnia and other aquatic invertebrates: No data available

Toxicity to algae: No data available

Toxicity to bacteria: No data available

Biodegradability Remarks: Expected to be readily biodegradable.

Bioaccumulative Potential: No data available

Mobility: Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

Affected in any other way: No data available

13. DISPOSAL CONSIDERATIONS

Material Disposal: 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.

Container Disposal: 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 pressurize, 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.



14. TRANSPORT INFORMATION

LAND

UN Number: 3295

Hazard Class: 3

Packing group: III

Hazchem Code: 3Y

Lable(s)/Mark(s): 3

Proper Shipping Name: HYDROCARBON, LIQUID, N.O.S.

SEA(IMDG)

UN Number: 3295

Hazard Class & Division: 3

EMS Number: F-E, S-D

Packing group: III

Marine Pollutant: No

Lable(s): 3

Proper Shipping Name: HYDROCARBON, LIQUID, N.O.S.

Transport Document Name: UN3295 HYDROCARBON, LIQUID, N.O.S. , 3, PG II, (40°C c.c.)

AIR(IATA)

UN Number: 3295

Hazard Class & Division: 3

Packing group: III

Lable(s)/Mark(s): 3

Proper Shipping Name: HYDROCARBON, LIQUID, N.O.S.

Transport Document Name: UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, PG II

15. REGURATORY INFORMATION

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



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REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Hazardous Substance Act BE2535: Not Regulated

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

16. OTHER INFORMATION

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