

Printing date 05/01/2015

Reviewed on 05/01/2015

1: Identification

- · 1.1 Product identifier
- · Trade name: RC-50
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture
- NDT Inspection penetrant "Type 1 Methods "B, C, & D" per AMS-2644/ ASTM E-1417
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Sherwin Incorporated 5530 Borwick Ave South Gate, CA 90280 Phone: (562) 861-6324 Fax: (562) 923-8370 https://www.sherwininc.com/
- · Information department: Product safety department
- 1.4 Emergency telephone number: Chemtrec +1-800-424-9300 in U.S.A.; outside U.S.A. 001-703-527-3887

2: Hazard(s) identification

- · 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008 Asp. Tox. 1 H304 May be fatal if swallowed and enters airways. Carcinogen: Category 2.
- · 2.2 Label elements
- · Labeling according to Regulation (EC) No 1272/2008
- The product is classified and labeled according to the CLP regulation.
- · Hazard pictograms



- · Signal word Danger
- Hazard-determining components of labeling: Distillates (petroleum), hydrotreated light Naphthalene; solvent naphtha (petroleum), heavy aromatic
- Hazard statements
- H304 May be fatal if swallowed and enters airways.
- H351: Suspected of causing cancer.
- Precautionary statements
- P273: Avoid release to the environment.
- P280: Wear protective gloves and clothing.
- P308 + P313: IF exposed or concerned: Get medical advice/ attention.
- P301+P310 if swallowed: Immediately call a doctor.
- P331 Do NOT induce vomiting
- P405 Store locked up.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.



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• HMIS-ratings (scale 0 - 4)

HEALTH1Health = 1FIRE1Fire = 1REACTIVITY0Reactivity = 0

• 2.3 Other hazards

- Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB**: Not applicable.

3: Composition/information on ingredients

· 3.2 Chemical characterization: Mixtures

• **Description:** Mixture of the substances listed below with nonhazardous additions.

| Dangerous compor | nents: | |
|--------------------------------------|--|--------|
| CAS: 64742-47-8 EINECS: 265-149-8 | Distillates (petroleum), hydrotreated light | 30-50% |
| | Highly refined, low viscosity base oil | 20-40% |
| 64742-94-5 | Solvent naphtha (petroleum), heavy aromatic | 1-10% |
| Hazardous Constitu | ent(s) Contained in Complex Substance(s) required for disclosure | |
| CAS: 90-12-0 | 1-methylnaphthalene | <1% |
| CAS: 91-57-6 | 2-methylnaphthalene | <2% |
| CAS: 91-20-3 | Naphthalene | <1% |

4: First-aid measures

· 4.1 Description of first aid measures

• After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

Take affected persons into fresh air and keep quiet.

• After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:

Do not induce vomiting; immediately call for medical help.

A person vomiting while lying on their back should be turned onto their side.



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· 4.2 Most important symptoms and effects, both acute and delayed

- No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

5: Fire-fighting measures

• 5.1 Extinguishing media

- · Suitable extinguishing agents:
- Water haze

Foam ABC powder

- · For safety reasons unsuitable extinguishing agents: Water spray
- · 5.2 Special hazards arising from the substance or mixture Carbon monoxide and carbon dioxide
- 5.3 Advice for firefighters
- Protective equipment:
- Wear self-contained respiratory protective device.

Wear fully protective suit.

6: Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
- 6.2 Environmental precautions: Contain spill and then collect with non-combustible absorbent material. Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

Collect liquid in an appropriate container or absorb with an inert material such as vermiculite, dry sand, or earth; DO NOT use combustible materials.

Place in a chemical waste container.

· 6.4 Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7: Handling and storage

- · 7.1 Precautions for safe handling Prevent formation of aerosols.
- · Information about protection against explosions and fires:
- Ensure all equipment is electrically grounded before transfer operations. Containers may be hazardous when empty since residue may be present.
- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.



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• 7.3 Specific end use(s) No further relevant information available.

8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

| - | STEL, Exxon, skin | TWA, ACGIH, skin | TWÂ, OSHA | TWA, Exxon |
|--|-------------------|------------------|---------------|----------------------------|
| 1-methylnaphthalene | 75 mg/m3 | 0.5 ppm | | |
| 2-methylnaphthalene | 75 mg/m3 | 0.5 ppm | | |
| Naphthalene | | 10 ppm | 50 mg/m3 | |
| Solvent naphtha (petroleum), | | 40 | 00 mg/m3 | 50 mg/m3 total hydrocarbon |
| heavy aromatic | | | | |
| Highly refined, low viscosity base oil | | GIH TLV and OSHA | PEL 5 mg/m3 a | as mist |

· Additional information: The lists that were valid during the creation were used as basis.

· 8.2 Exposure controls

Personal protective equipment:

• General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes.

• Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.



Ventilation System: A system of local or general exhaust is recommended to keep employee exposure below the airborne exposure limits. If exposure limit is exceeded use organic vapor respirator (type A), or self contained breathing apparatus.

• Protection of hands:



The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:



Safety glasses

Tightly sealed goggles • **Body protection:** Use suitable protective clothing.



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| 9.1 Information on basic physical a General Information | and chemical properties | |
|---|---|--|
| Appearance: | | |
| Form: | Liquid | |
| Color: | water-white | |
| Odor: | Hydrocarbons | |
| Odour threshold: | Not determined. | |
| pH-value: | Not determined. | |
| Change in condition | | |
| Melting point/Melting range: | Not determined | |
| Boiling point/Boiling range: | Initial 231°C (448°F) | |
| Flash point, PMCC: | > 93.3°C (200°F) | |
| Ignition temperature: | Not determined | |
| Decomposition temperature: | Not determined. | |
| Auto igniting: | Product is not self igniting. | |
| Danger of explosion: | Product does not present an explosion hazard. | |
| Explosion limits: | | |
| Lower: | Not determined | |
| Upper: | Not determined | |
| Vapor pressure: | <0.1 mm Hg @ 20°c, 68°F calculation. | |
| Density at 20 °C (68 °F): | 0.99 g/cm³ (8.3 lbs/gal) (ASTM D-1298) | |
| Relative density | Not applicable | |
| Vapor density | Not determined. | |
| Evaporation rate | Not determined. | |
| Solubility in / Miscibility with | | |
| Water: | Negligible | |
| Partition coefficient (n-octanol/wat | er): Not determined. | |
| Viscosity: | | |
| Dynamic: | Not determined. | |
| Kinematic at 40 °C (104 °F): | 5.1 cSts (ASTM D-445) | |

10: Stability and reactivity

- · 10.1 Reactivity
- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.



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· 10.4 Conditions to avoid No further relevant information available.

- 10.5 Incompatible materials:
- Avoid contact acids, strong bases and strong oxidizing agents

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

11: Toxicological information

- 11.1 Information on toxicological effects
- · Acute toxicity: Information on hazardous ingredients minimally toxic
- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eve: No irritant effect.
- · Sensitization: No sensitizing effects known.
- Additional toxicological information:
- The product shows the following dangers according to internally approved calculation methods for preparations: Irritant,

Carcinogenic categories

· IARC (International Agency for Research on Cancer) Carcinogenic to humans Group 1 Group 2A Probably carcinogenic to humans Possibly carcinogenic to humans - Naphthalene Group 2B Not classifiable as to its carcinogenicity to humans Group 3 Group 4 Probably not carcinogenic to humans · NTP (National Toxicology Program)

Naphthalene suspected.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity:
- Solvent naphtha (petroleum), heavy aromatic expected to be toxic
- · 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark:
- No data available
- · Additional ecological information:
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.



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12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· vPvB: Not applicable.

· 12.6 Other adverse effects No further relevant information available.

13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Waste/ unused products

Collect all waste in suitable and labeled containers and dispose according to local legislation.

· Uncleaned packagings:

· Recommendation:

Waste / used products

Waste products and empty packages dispose of in accordance with local regulations.

Empty containers may contain residue and vapors.

· Recommended cleansing agent: Water, if necessary with cleansing agents.

14: Transport information

| · 14.1 UN-Number · DOT | |
|---|-----------------|
| · ADR, IMDG, IATA | Not regulated |
| · 14.2 UN proper shipping name · DOT | |
| ADR, IMDG, IATA | Not regulated |
| 14.3 Transport hazard class(es) | |
| | Not regulated |
| · 14.4 Packing group · DOT | |
| · ADR, IMDG, IATA | Not regulated |
| · 14.5 Environmental hazards: | |
| • Marine pollutant: | Not applicable |
| · 14.6 Special precautions for user | Not applicable. |



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|---|--|
| 14.7 Transport in bulk according to Annex | II of |
| MARPOL73/78 and the IBC Code | Not applicable. |
| Transport/Additional information: | Not dangerous according to the above specifications. |
| DOT | |
| Quantity limitations | |
| On passenger aircraft/rail: No limit | |
| On cargo aircraft only: No limit | |
| • | |
| · Remarks: | |
| · UN "Model Regulation": | |

| | | • • | | 4 • |
|----------|------|------|-------|-----|
| 15: Regu | 0.00 | v mb | ormai | non |
| IJ. KUZU | | | | |
| | | | | |

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture · Sara Section 355 (extremely hazardous substances):

| None of the ingredient is listed. |
|---|
| Section 313 (Specific toxic chemical listings): |
| None of the ingredients is listed. |
| Section 311/312 |
| Immediate (acute) health hazard |

• TSCA (Toxic Substances Control Act):

All ingredients are listed. Proposition 65

· Chemicals known to cause cancer:

28553-12-0 Di-isononylphthalate

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Cancerogenity categories

• EPA (Environmental Protection Agency)

None of the ingredients is listed.



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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Contact: Sherwin Incorporated
- · Date of preparation / last revision 05/01/2015 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1 Asp. Tox. 1: Aspiration hazard, Hazard Category 1
- * Data compared to the previous version altered.

USA