

RH Cement Thinner

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Heptane (142-82-5)	
ACGIH OEL TWA [ppm]	400 ppm
ACGIH OEL STEL [ppm]	500 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; URT irr
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Heptane (n-Heptane)
OSHA PEL (TWA) [1]	2000 mg/m ³
OSHA PEL (TWA) [2]	500 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls	: Provide local exhaust or general room ventilation. Handle in accordance with good industrial hygiene and safety procedures. Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Environmental exposure controls	: Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment should be chosen according to the NIOSH standards and in discussion with the supplier of the protective equipment.

Hand protection:
Chemical resistant gloves (according to NIOSH standard). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Selection of protective gloves should be made based on the type of task performed
Eye protection:
Chemical goggles or safety glasses
Skin and body protection:
Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided
Respiratory protection:
Where excessive vapor, mist, or dust may result, use approved respiratory protection equipment. All respirators must conform to specifications for efficiency and performance indicated by OSHA Standard 29 CFR 1910.134 and NIOSH Standards

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Colorless
Odor	: strong aromatic gasoline-like
Odor threshold	: No data available
pH	: No data available
Melting point	: -91.1 °C (-132 °F)
Freezing point	: Not applicable
Boiling point	: > 35 °C (95.0 °F)

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Flash point	: -10 °C (14.0 °F)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: 40 mm Hg (20 °C; 68 °F)
Relative vapor density at 20 °C	: > 1 (heavier than air)
Relative density	: 0.75 (water=1)
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: Lower explosion limit: 1 vol % Upper explosion limit: 7.5 vol %
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content : 100 % (6.4 lbs/gal or 768 g/l)

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor. Can form explosive mixtures with air. Heating may cause a fire or explosion.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization: Will not occur. Reacts vigorously with strong oxidizers and acids.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Extremely high or low temperatures. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Toluene (108-88-3)	
LD50 oral rat	5580 mg/kg
LD50 dermal rabbit	8390 mg/kg

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Toluene (108-88-3)	
LC50 Inhalation - Rat	25.7 mg/l/4h
ATE US (oral)	2600 mg/kg body weight
ATE US (dermal)	12000 mg/kg body weight
ATE US (vapors)	25.7 mg/l/4h
ATE US (dust, mist)	25.7 mg/l/4h
Heptane (142-82-5)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	3000 mg/kg
LC50 Inhalation - Rat	103 g/m ³ (4 h)
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes eye irritation.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Toluene (108-88-3)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: May cause drowsiness or dizziness.
Heptane (142-82-5)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination. nausea, vomiting.
Symptoms/effects after skin contact	: Causes skin irritation. Redness. Itching. Swelling. Absorbed through the skin. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes eye irritation. Redness. Lacrimation. Itching. Blurred vision.
Symptoms/effects after ingestion	: May cause gastrointestinal irritation, nausea, vomiting and diarrhea. Abdominal pain.
Chronic symptoms	: Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure. May cause kidney and liver disease, and disorders of the central nervous system.
Other information	: No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Toluene (108-88-3)	
LC50 - Fish [1]	15.22 – 19.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 - Crustacea [1]	5.46 – 9.83 mg/l (Exposure time: 48 h - Species: Daphnia magna [static])
LC50 - Fish [2]	12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

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Toluene (108-88-3)	
EC50 - Crustacea [2]	11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
NOEC chronic crustacea	0.74 mg/l (Ceriodaphnia dubia)

Heptane (142-82-5)	
LC50 - Fish [1]	375 mg/l (Exposure time: 96 h - Species: Cichlid fish)

12.2. Persistence and degradability

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Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

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Bioaccumulative potential	No data available concerning bioaccumulation.

Toluene (108-88-3)	
Partition coefficient n-octanol/water (Log Pow)	2.65

Heptane (142-82-5)	
Partition coefficient n-octanol/water (Log Pow)	4.66

12.4. Mobility in soil

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Ecology - soil	Adsorbs into the soil.

12.5. Other adverse effects

Other adverse effects : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not pierce or burn, even after use.
Additional information : Flammable vapors may accumulate in the container.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No : UN1263
UN-No. (TDG) : UN1263
UN-No. (IMDG) : 1263
UN-No. (IATA) : 1263

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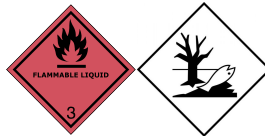
14.2. UN proper shipping name

Proper Shipping Name (DOT) : Paint related material
Proper Shipping Name (TDG) : PAINT RELATED MATERIAL
Proper Shipping Name (IMDG) : PAINT RELATED MATERIAL
Proper Shipping Name (IATA) : Paint related material

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 3
Hazard labels (DOT) : 3



TDG

Transport hazard class(es) (TDG) : 3
Hazard labels (TDG) : 3



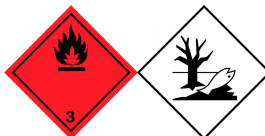
IMDG

Transport hazard class(es) (IMDG) : 3
Hazard labels (IMDG) : 3



IATA

Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3



14.4. Packing group

Packing group (DOT) : II
Packing group (TDG) : II
Packing group (IMDG) : II
Packing group (IATA) : II

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes



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Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No.(DOT)

: UN1263

DOT Special Provisions (49 CFR 172.102)

: 149 - When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in 173.150(b)(2) of this subchapter for inner packaging may be increased to 5 L (1.3 gallons).

367 - For the purposes of documentation and package marking: a. The proper shipping name "Paint related material" may be used for consignments of packages containing "Paint" and "Paint related material" in the same package; b. The proper shipping name "Paint related material, corrosive, flammable" may be used for consignments of packages containing "Paint, corrosive, flammable" and "Paint related material, corrosive, flammable" in the same package; c. The proper shipping name "Paint related material, flammable, corrosive" may be used for consignments of packages containing "Paint, flammable, corrosive" and "Paint related material, flammable, corrosive" in the same package; and d. The proper shipping name "Printing ink related material" may be used for consignments of packages containing "Printing ink" and "Printing ink related material" in the same package.

B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.

B131 - When transported by highway, rail, or cargo vessel, waste Paint and Paint related material (UN1263; PG II and PG III), when in plastic or metal inner packagings of not more than 26.5 L (7 gallons), are excepted from the marking requirements in §172.301(a) and (c) and the labeling requirements in §172.400(a), when further packed in the following specification and non-specification bulk outer packagings and under the following conditions:

a. Primary receptacles must conform to the general packaging requirements of subpart B of part 173 of this subchapter and may not leak. If they do leak, they must be overpacked in packagings conforming to the specification requirements of part 178 of this subchapter or in salvage packagings conforming to the requirements in §173.12 of this subchapter.

b. Primary receptacles must be further packed in non-specification bulk outer packagings such as cubic yard boxes, plastic rigid-wall bulk containers, dump trailers, and roll-off containers. Bulk outer packagings must be liquid tight through design or by the use of lining materials.

c. Primary receptacles may also be further packed in specification bulk outer packagings. Authorized specification bulk outer packagings are UN11G fiberboard intermediate bulk containers (IBC) and UN13H4 woven plastic, coated and with liner flexible intermediate bulk containers (FIBCs) meeting the Packing Group II performance level and lined with a plastic liner of at least 6 mil thickness.

d. All inner packagings placed inside bulk outer packagings must be blocked and braced to prevent movement during transportation that could cause the container to open or fall over. Specification IBCs and FIBCs are to be secured to a pallet.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F).

TP28 - A portable tank having a minimum test pressure of 2.65 bar (265 kPa) may be used provided the calculated test pressure is 2.65 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx)

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DOT Packaging Non Bulk (49 CFR 173.xxx)	: 173
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

TDG

UN-No. (TDG)	: UN1263
TDG Special Provisions	: 59 - Substances that are listed by name in Schedule 1 must not be transported under this shipping name. Substances transported under this shipping name may contain not more than 20% nitrocellulose if the nitrocellulose contains not more than 12.6% nitrogen (by dry mass), 142 - The following shipping names may be used to meet the requirements of Part 3 (Documentation) and Part 4 (Dangerous Goods Safety Marks) when these dangerous goods are offered for transport in the same means of containment: (a) "PAINT RELATED MATERIAL" may be used for a means of containment containing both paint and paint related material; (b) "PAINT RELATED MATERIAL, CORROSIVE, FLAMMABLE" may be used for a means of containment containing both paint, corrosive, flammable, and paint related material, corrosive, flammable; (c) "PAINT RELATED MATERIAL, FLAMMABLE, CORROSIVE" may be used for a means of containment containing both paint, flammable, corrosive, and paint related material, flammable, corrosive; and (d) "PRINTING INK RELATED MATERIAL" may be used for a means of containment containing both printing ink and printing ink related material.
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E2
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 5 L
Emergency Response Guide (ERG) Number	: 128

IMDG

Special provision (IMDG)	: 163, 367
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E2
Packing instructions (IMDG)	: P001
Packing provisions (IMDG)	: PP1
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1, TP8, TP28
EmS-No. (Fire)	: F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage)	: S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER
Stowage category (IMDG)	: B
Properties and observations (IMDG)	: Miscibility with water depends upon the composition.

IATA

PCA Excepted quantities (IATA)	: E2
PCA Limited quantities (IATA)	: Y341
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 353
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provision (IATA)	: A3, A72, A192

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ERG code (IATA) : 3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Toluene	CAS-No. 108-88-3	≥ 40 – < 60%
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Toluene (108-88-3)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	1000 lb
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15.2. International regulations

CANADA

Toluene (108-88-3)

Listed on the Canadian DSL (Domestic Substances List)

Heptane (142-82-5)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Toluene (108-88-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Heptane (142-82-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

WARNING:

This product can expose you to Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources : Supplier's safety documents.
Training advice : Training staff on good practice.
Other information : SDS prepared by. H2 Compliance.

