

SECTION 1: Product and company identification

Product name : RP-7
Use of the substance/mixture : Cleaner
Product code : 0119
Company : Total Solutions
P.O. Box 240014
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Contact: Technical Department
Emergency number : Chemtrec: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification
Skin Sens. 1 H317

2.2. Label elements

GHS US labelling
Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : May cause an allergic skin reaction.
Precautionary statements (GHS US) : Avoid breathing spray, mist.
Contaminated work clothing must not be allowed out of the workplace.
Wear eye protection, protective clothing, protective gloves.
If on skin: Wash with plenty of water.
Specific treatment (see First aid measures on this label).
If skin irritation or rash occurs: Get medical advice/attention.
Wash contaminated clothing before reuse.
Dispose of contents/container to comply with local/regional/national/international regulations..

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | GHS-US classification |
|------------|---------------------|-------|--|
| d-Limonene | (CAS-No.) 5989-27-5 | 1 - 3 | Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 |
| Morpholine | (CAS-No.) 110-91-8 | 1 - 3 | Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 |

All hazardous chemicals, as determined by 29 CFR 1910.1200 have been listed. A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If you feel unwell, seek medical advice.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

RP-7

Safety Data Sheet

| | |
|---------------------------------------|--|
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. |
| First-aid measures after ingestion | : Call a poison center or a doctor if you feel unwell. |

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

| | |
|-------------------------------------|---|
| Symptoms/effects after inhalation | : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : May cause an allergic skin reaction. |
| Symptoms/effects after eye contact | : None under normal conditions. |
| Symptoms/effects after ingestion | : None under normal conditions. |

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|--|
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a heavy water stream. |

5.2. Special hazards arising from the substance or mixture

| | |
|------------------|---|
| Fire hazard | : No fire hazard. |
| Explosion hazard | : No direct explosion hazard. |
| Reactivity | : Upon combustion: CO and CO2 are formed. |

5.3. Advice for firefighters

| | |
|--------------------------------|---|
| Firefighting instructions | : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
|------------------|---|
| General measures | : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage. |
|------------------|---|

6.1.1. For non-emergency personnel

| | |
|----------------------|--|
| Protective equipment | : Wear recommended personal protective equipment. |
| Emergency procedures | : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. |

6.1.2. For emergency responders

| | |
|----------------------|---|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Evacuate unnecessary personnel. Stop leak if safe to do so. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| | |
|-------------------------|---|
| For containment | : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. |
| Other information | : Dispose of materials or solid residues at an authorized site. |

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

| | |
|-----------------------------------|--|
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Precautions for safe handling | : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear personal protective equipment. |

Hygiene measures : Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.
Storage conditions : Keep cool. Protect from sunlight.
Packaging materials : Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

d-Limonene (5989-27-5)

Not applicable

Morpholine (110-91-8)

| | | |
|-------|----------------|--|
| ACGIH | ACGIH OEL TWA | 20 ppm |
| ACGIH | Remark (ACGIH) | TLV® Basis: Eye dam; URT irr. Notations: Skin; A4 (Not classifiable as a Human Carcinogen) |
| OSHA | OSHA PEL TWA | 70 mg/m³ |
| OSHA | OSHA PEL TWA | 20 ppm |

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Personal protective equipment : Safety glasses. Protective clothing. Gloves. Use appropriate personal protective equipment when risk assessment indicates this is necessary.



Hand protection : Protective gloves.
Eye protection : Safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : light, Tan, Opaque, Liquid
Odour : mild
Odour threshold : No data available
pH : 8.5 – 9.5
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available
Flash point : > 200 °F Closed Cup
Relative evaporation rate (butylacetate=1) : No data available
Flammability : No data available
Explosive limits : No data available
Explosive properties : No data available
Oxidising properties : No data available
Vapour pressure : No data available
Relative density : No data available
Relative vapour density at 20°C : No data available
Density : 1.02 g/ml
Solubility : Soluble in water.
Partition coefficient n-octanol/water (Log Pow) : No data available
Partition coefficient n-octanol/water (Log Kow) : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : 1500 – 4000 cSt
Viscosity, dynamic : No data available
VOC content : < 5 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO₂ are formed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

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 : Not classified

| d-Limonene (5989-27-5) | |
|-------------------------------|--|
| LD50 oral rat | > 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rabbit | > 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Read-across, Dermal, 7 day(s)) |

| Morpholine (110-91-8) | |
|------------------------------|---|
| LD50 oral rat | 1900 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rabbit | 500 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s)) |
| ATE CLP (oral) | 1420 mg/kg bodyweight |
| ATE CLP (dermal) | 500 mg/kg bodyweight |
| ATE CLP (gases) | 4500 ppmv/4h |
| ATE CLP (vapours) | 11 mg/l/4h |
| ATE CLP (dust,mist) | 1.5 mg/l/4h |

Skin corrosion/irritation : Not classified
pH: 8.5 – 9.5

Serious eye damage/irritation : Not classified
pH: 8.5 – 9.5

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

| d-Limonene (5989-27-5) | |
|-------------------------------|----------------------|
| IARC group | 3 - Not classifiable |

| Morpholine (110-91-8) | |
|------------------------------|----------------------|
| IARC group | 3 - Not classifiable |

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

| | |
|-------------------------------------|---|
| Symptoms/effects after inhalation | : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : May cause an allergic skin reaction. |
| Symptoms/effects after eye contact | : None under normal conditions. |
| Symptoms/effects after ingestion | : None under normal conditions. |
| Likely routes of exposure | : Skin and eyes contact |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

| | |
|------------------------|---|
| d-Limonene (5989-27-5) | |
| LC50 - Fish [1] | 720 µg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value) |
| EC50 - Crustacea [1] | 0.307 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Semi-static system, Fresh water, Experimental value, GLP) |
| LC50 - Fish [2] | 702 µg/l Test organisms (species): Pimephales promelas |
| EC50 - Crustacea [2] | 0.51 mg/l Test organisms (species): Daphnia magna |

| | |
|-----------------------|---|
| Morpholine (110-91-8) | |
| LC50 - Fish [1] | 380 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Lethal) |
| EC50 - Crustacea [1] | 44.5 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Fresh water, Experimental value, Locomotor effect) |

12.2. Persistence and degradability

| | |
|-------------------------------|------------------------------------|
| d-Limonene (5989-27-5) | |
| Persistence and degradability | Readily biodegradable in water. |
| ThOD | 3.29 g O ₂ /g substance |

| | |
|---------------------------------|--|
| Morpholine (110-91-8) | |
| Persistence and degradability | Biodegradable in the soil. Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 0.02 g O ₂ /g substance |
| ThOD | 2.6 g O ₂ /g substance |

12.3. Bioaccumulative potential

| | |
|---|---|
| d-Limonene (5989-27-5) | |
| BCF - Fish [1] | 864.8 l/kg (BCFBAF v3.01, Pisces, QSAR, Fresh weight) |
| Partition coefficient n-octanol/water (Log Pow) | 4.38 (Experimental value, Equivalent or similar to OECD 117, 37 °C) |
| Bioaccumulative potential | Potential for bioaccumulation (4 ≤ Log Kow ≤ 5). |

| | |
|---|---|
| Morpholine (110-91-8) | |
| BCF - Fish [1] | < 2.8 (Equivalent or similar to OECD 305, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value) |
| Partition coefficient n-octanol/water (Log Pow) | -2.55 – -0.84 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C) |
| Bioaccumulative potential | Low potential for bioaccumulation (BCF < 500). |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|--|---|
| Regional waste regulation | : Disposal must be done according to official regulations. |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| Sewage disposal recommendations | : Disposal must be done according to official regulations. |
| Product/Packaging disposal recommendations | : Disposal must be done according to official regulations. |
| Additional information | : Do not re-use empty containers. |

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT : Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Contains chemical(s) subject to TSCA 12b export notification if product is shipped outside the U.S

| | |
|-----------------------|-----------|
| Methylisothiazolinone | 2682-20-4 |
| Cyclotetrasiloxane | 556-67-2 |

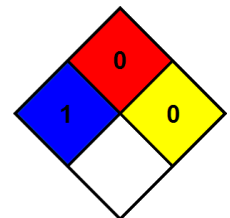
This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.
NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Prepared by: Technical Department

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