

1. Identification

1.1. Product identifier

Product Identity

R-Agent DL
CA Reg. No.: 1212-50001-AA

Alternate Names

Chemical Description: D-Limonene surfactant.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

See Technical Data Sheet.

Application Method

See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name

Chemurgic Agricultural Chemicals, Inc.

Address

P.O. Box 2106
Turlock, CA 95381

Telephone

DAYS: (209) 634-2951 EVES: (209) 652-7260

E-mail

info@chemurgic.net

Emergency Phone Numbers

INFOTRAC: 1-800-535-5053
EPA National Response Center: (800)-424-8802

2. Hazard(s) identification

2.1. Classification of the substance or mixture

| HAZARD CLASS | CATEGORY | HAZARD STATEMENT |
|------------------------|----------|------------------|
| Skin Irritation | 2 | H-315 |
| Eye Irritation | 2A | H-319 |
| Skin Sensitization | 1 | H-317 |
| Flammable Liquid | 3 | H-226 |
| Acute Aquatic Toxicity | 1 | H-400 |
| Aspiration Toxicity | 2 | H-305 |

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



WARNING

Safety Data Sheet

R-Agent DL

SDS Revision Date:

02/24/2015

HAZARD STATEMENTS

H226 Flammable liquid and vapor.

H305 May be harmful if swallowed and enters airways.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H400 Very toxic to aquatic life.

[Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P240 Ground / bond container and receiving equipment.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P264 Wash thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P313 Get medical advice / attention.

P321 Specific treatment (see information on this label).

P331 Do NOT induce vomiting.

P333+313 If skin irritation or a rash occurs: Get medical advice / attention.

P362 Take off contaminated clothing and wash before reuse.

P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

P391 Collect spillage.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

Safety Data Sheet

R-Agent DL

SDS Revision Date:

02/24/2015

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

| Ingredient/Chemical Designations | Weight % | GHS Classification | Notes |
|---|----------|--|--------|
| Petroleum distillates, hydrotreated light CAS Number: 0064742-47-8 | 50 - 75 | Asp. Tox. 1;H304 | [1] |
| D-Limonene CAS Number: 00094266-47-4 | 25 - 50 | Flam. Liq. 3;H226 Skin Irrit. 2;H315 Skin Sens. 1;H317 Aquatic Acute 1;H400 Aquatic Chronic 1;H410 | [1] |
| Ethylene glycol monobutyl ether CAS Number: 0000111-76-2 | 1.0 - 10 | Acute Tox. 4;H332 Acute Tox. 4;H312 Acute Tox. 4;H302 Eye Irrit. 2;H319 Skin Irrit. 2;H315 | [1][2] |

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

| | |
|-------------------|--|
| General | In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. |
| Inhalation | Remove victim to fresh air. If not breathing, give artificial respiration, preferably by mouth to mouth. Get medical attention. |
| Eyes | Flush eyes with water then seek medical attention. Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice. |
| Skin | Remove contaminated clothing. Wash affected area with plenty of soap and water. If skin irritation or other symptoms develop, seek medical advice/attention. |
| Ingestion | Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person. |

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

Overview Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness. See section 2 for further details.

Safety Data Sheet

R-Agent DL

SDS Revision Date:

02/24/2015

5. Fire-fighting measures

5.1. Extinguishing media

CO2 or foam

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Burning may produce carbon monoxide and carbon dioxide contamination.

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Keep cool.

Ground / bond container and receiving equipment.

Use explosion-proof electrical / ventilating / light / equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters

Stay upwind of smoke. Wear positive pressure, self-contained breathing apparatus and goggles. Contain any liquid runoff.

ERG Guide No. 128

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Prevent product spillage from entering drinking water supplies or streams.

Collect liquid or absorb onto absorbent material and package for disposal according to local, state and federal regulations.

7. Handling and storage

7.1. Precautions for safe handling

Transfer product using chemical-resistant plastic or stainless steel tanks, pumps, valves, etc.

Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application.

Safety Data Sheet

R-Agent DL

SDS Revision Date:

02/24/2015

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Incompatible materials: Avoid contact with oxidizing agents.

Store in original container in a cool, well-ventilated, dry place at temperatures above 40°F. Do not contaminate water, food, feeds, seeds, fertilizers, insecticides or fungicides. Do not stack pallets more than two (2) high.

See section 2 for further details. - [Storage]:

8. Exposure controls and personal protection

8.1. Exposure controls

| | |
|-----------------------------|---|
| Respiratory | This product is not likely to present an airborne exposure concern under normal conditions. If use generates an aerosol mist or respiratory irritation, use NIOSH approved dust/mist respirator (such as 3M #8710). |
| Eyes | Chemical dust/splash goggles or full-face shield to prevent eye contact. As a general rule, do not wear contact lenses when handling. |
| Skin | Wear overalls to keep skin contact to a minimum. Avoid skin contact. Use chemically resistant gloves. |
| Engineering Controls | Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn. |
| Other Work Practices | Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse. |

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

| | |
|---|--|
| Appearance | Amber Liquid |
| Odor | Citrus |
| Odor threshold | Not Measured |
| pH | 4.0 - 4.5 |
| Melting point / freezing point | Not Measured |
| Initial boiling point and boiling range | Not Measured |
| Flash Point | 133 F (ASTM D56) |
| Evaporation rate (Ether = 1) | Not Measured |
| Flammability (solid, gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured |
| Vapor pressure (Pa) | Not Measured |
| Vapor Density | Not Measured |

Safety Data Sheet

R-Agent DL

SDS Revision Date:

02/24/2015

| | |
|--|---------------------|
| Specific Gravity | 0.827 g/ml |
| Solubility in Water | Emulsifies |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | Not Measured |
| Decomposition temperature | Not Measured |
| Viscosity (cSt) | 5.0 cP |
| Density | 6.89 - 6.91 lbs/gal |

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Alkaline materials, strong acids and oxidizing materials.

10.5. Incompatible materials

Avoid contact with oxidizing agents.

10.6. Hazardous decomposition products

Burning may produce carbon monoxide and carbon dioxide contamination.

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Safety Data Sheet

R-Agent DL

SDS Revision Date:

02/24/2015

| Classification | Category | Hazard Description |
|-------------------------------|----------|---|
| Acute toxicity (oral) | 5 | Not Applicable |
| Acute toxicity (dermal) | 5 | Not Applicable |
| Acute toxicity (inhalation) | 5 | Not Applicable |
| Skin corrosion/irritation | 2 | Causes skin irritation. |
| Serious eye damage/irritation | 2A | Causes serious eye irritation. |
| Respiratory sensitization | --- | Not Applicable |
| Skin sensitization | 1 | May cause an allergic skin reaction. |
| Germ cell mutagenicity | --- | Not Applicable |
| Carcinogenicity | --- | Not Applicable |
| Reproductive toxicity | --- | Not Applicable |
| STOT-single exposure | --- | Not Applicable |
| STOT-repeated exposure | --- | Not Applicable |
| Aspiration hazard | 1 | May be fatal if swallowed and enters airways. |

12. Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, mg/l | 48 hr EC50 crustacea, mg/l | ErC50 algae, mg/l |
|--|----------------------------|-------------------------------------|-------------------|
| Petroleum distillates, hydrotreated light - (64742-47-8) | 45.00, Pimephales promelas | 4,720.00, Dendronereides heteropoda | Not Available |
| D-Limonene - (5989-27-5) | 0.702, Pimephales promelas | 0.577, Daphnia magna | Not Available |
| Ethylene glycol monobutyl ether - (111-76-2) | 220.00, Fish (Piscis) | 1,000.00, Daphnia magna | Not Available |

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

Safety Data Sheet

R-Agent DL

SDS Revision Date:

02/24/2015

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

D.O.T. Proper Shipping Description: Ground transport (motor freight or rail):
Not applicable for non-bulk packaging [See 49 CFR 173.150(f)(2)].
Air/Water transport:
Flammable Liquid, N.O.S. (Petroleum Distillates), 3, UN1993, PG III.

Other Shipping Description: Adhesives, Adjuvants, Spreaders or Stickers, Liquid.
NMFC Item 4612, LTL Class 60

15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification B3 D2B E

US EPA Tier II Hazards **Fire:** Yes
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

Ethylene glycol monobutyl ether

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Safety Data Sheet

R-Agent DL

SDS Revision Date:

02/24/2015

New Jersey RTK Substances (>1%):

Ethylene glycol monobutyl ether

Pennsylvania RTK Substances (>1%):

Ethylene glycol monobutyl ether

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

While the information contained herein is based on data considered accurate and was compiled to comply with the Federal Hazard Communication Standard and the California Hazardous Substances Information and Training Act, it is provided for guidance only. Chemurgic Agricultural Chemicals, Inc. does not guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations; in so doing, user assumes all risk in use of the material. The information contained herein is not to be taken as a warranty or representation for which Chemurgic Agricultural Chemicals, Inc. assumes legal responsibility.

End of Document