

SAFETY DATA SHEET

1. Identification

| | |
|---|---|
| Product identifier | R-56 |
| Other means of identification | None. |
| Recommended use | Ag Product - Adjuvant |
| Recommended restrictions | None known. |
| Manufacturer/Importer/Supplier/Distributor information | |
| Manufacturer | |
| Company name | Wilbur Ellis Company |
| Address | Wilbur Ellis Company - Agribusiness Division 8131 W. Grandbridge Blvd, Suite 200 Kennewick, WA 99336 United States |
| Telephone | Branded Products Information (800) 500-1698 |
| E-mail | SDS@WilburEllis.com |
| Emergency phone number | Chemtec - Domestic (800) 424-9300 Chemtec - International +1 703-741-5970 |

2. Hazard(s) identification

| | | |
|-----------------------------|-----------------------------------|------------|
| Physical hazards | Flammable liquids | Category 3 |
| Health hazards | Skin corrosion/irritation | Category 2 |
| | Serious eye damage/eye irritation | Category 1 |
| | Carcinogenicity | Category 2 |
| OSHA defined hazards | Not classified. | |

Label elements



| | |
|--|---|
| Signal word | Danger |
| Hazard statement | Flammable liquid and vapor. Causes skin irritation. Causes serious eye damage. Suspected of causing cancer. |
| Precautionary statement | |
| Prevention | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames, and hot surfaces. - No smoking. Keep container tightly closed. Use explosion-proof electrical, ventilating, lighting, and process equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection, and face protection. |
| Response | IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media as described in Section 5 for extinction. |
| Storage | Store in a well-ventilated place. Keep cool. Store locked up. |
| Disposal | Dispose of contents and container in accordance with government regulations. |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | None. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|---|--------------------------|-------------|-----------|
| Proprietary Surfactant Blend Component 1 | | Proprietary | 30 - < 40 |
| Proprietary Surfactant Blend Component 2 | | Proprietary | 20 - < 30 |
| Proprietary Surfactant Blend Component 3 | | Proprietary | 20 - < 30 |
| Solvent Naphtha (Petroleum), Heavy Aromatic | | 64742-94-5 | 5 - < 10 |
| Solvent Naphtha (Petroleum), Light Aromatic | | 64742-95-6 | 5 - < 10 |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 1 - < 3 |
| Other components below reportable levels | | | < 0.2 |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

| | |
|---|---|
| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. |
| Skin contact | Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation occurs: Get medical attention. Wash contaminated clothing before reuse. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately. |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| Most important symptoms/effects, acute and delayed | Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed. |
| General information | Take off all contaminated clothing immediately. IF exposed or concerned: Get medical attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse. |

5. Fire-fighting measures

| | |
|--|--|
| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire fighting equipment/instructions | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | Flammable liquid and vapor. |

6. Accidental release measures

| | |
|--|--|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
|--|--|

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

Environmental precautions

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|--------------------------------------|------|--------|
| 1,2,4-Trimethylbenzene (CAS 95-63-6) | TWA | 25 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|--------------------------------------|------|-----------|
| 1,2,4-Trimethylbenzene (CAS 95-63-6) | TWA | 125 mg/m3 |
| | | 25 ppm |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical respirator with organic vapor cartridge and full facepiece.

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection

Chemical respirator with organic vapor cartridge and full facepiece.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. 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.

9. Physical and chemical properties

| | |
|---|---------------------------|
| Appearance | Clear amber liquid |
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Amber |
| Odor | Bland |
| Odor threshold | Not available. |
| pH | 5 - 7 |
| pH concentration | 5 % |
| Melting point/freezing point | Not available. |
| Initial boiling point and boiling range | Decomposes |
| Flash point | 134.0 °F (56.7 °C) |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | |
| Flammability limit - lower (%) | Not available. |
| Flammability limit - upper (%) | Not available. |
| Explosive limit - lower (%) | Not available. |
| Explosive limit - upper (%) | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Relative density | Not available. |
| Solubility(ies) | |
| Solubility (water) | Emulsifiable |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | > 20.5 mm ² /s |
| Viscosity temperature | 104 °F (40 °C) |
| Other information | |
| Density | 8.26 lb/gal |
| Percent volatile | 10 - 14 % |
| Percent volatile temperature | 77 °F (25 °C) |

10. Stability and reactivity

| | |
|---|--|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | Hazardous polymerization does not occur. |
| Conditions to avoid | Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on likely routes of exposure

| | |
|---------------------|--|
| Inhalation | Prolonged inhalation may be harmful. |
| Skin contact | Causes skin irritation. |
| Eye contact | Causes serious eye damage. |
| Ingestion | Expected to be a low ingestion hazard. |

Symptoms related to the physical, chemical and toxicological characteristics Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

| Components | Species | Test Results |
|--|------------|---|
| 1,2,4-Trimethylbenzene (CAS 95-63-6) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rat | 3440 mg/kg, 24 Hours |
| <i>Inhalation</i> | | |
| LC50 | Mouse, Rat | 2000 - 9833 mg/m3, 12 Hours |
| | Rat | 10200 mg/m3, 4 Hours |
| <i>Oral</i> | | |
| LD50 | Rat | 6000 mg/kg 4 - 3440 mg/kg |
| Proprietary Surfactant Blend Component 3 (CAS Proprietary) | | |
| Acute | | |
| <i>Oral</i> | | |
| LD50 | Rat | 300 - 2000 mg/kg |
| Solvent Naphtha (Petroleum), Heavy Aromatic (CAS 64742-94-5) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | - | > 2000 mg/kg |
| | Rabbit | > 4000 mg/kg, 24 Hours |
| | Rat | > 2000 mg/kg, 24 Hours |
| <i>Inhalation</i> | | |
| LC50 | - | > 7.5 mg/l, 6 Hours |
| | Rat | > 6.03 mg/l, 4 Hours > 5.68 mg/l, 4 Hours > 2.7 mg/m3, 4 Hours |
| <i>Oral</i> | | |
| LD100 | Rat | 5000 mg/kg |
| LD50 | Rat | 5800 mg/kg |
| Solvent Naphtha (Petroleum), Light Aromatic (CAS 64742-95-6) | | |
| Acute | | |
| <i>Dermal</i> | | |
| LD50 | Rabbit | > 3750 mg/kg, 24 Hours > 3000 mg/kg, 24 Hours |
| <i>Inhalation</i> | | |
| LC50 | Rat | > 5240 mg/m3, 4 Hours > 5170 mg/m3, 4 Hours > 5.1 mg/l, 4 Hours |

| Components | Species | Test Results |
|--------------|---------|--------------|
| | | > 5.07 mg/l |
| Oral LD50 | Rat | > 5570 mg/kg |

* Estimates for product may be based on additional component data not shown.

| | |
|---|--|
| Skin corrosion/irritation | Causes skin irritation. |
| Serious eye damage/eye irritation | Causes serious eye damage. |
| Respiratory or skin sensitization | |
| Respiratory sensitization | Not available. |
| Skin sensitization | This product is not expected to cause skin sensitization. |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Carcinogenicity | Suspected of causing cancer. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | |
| | Not listed. |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. |
| Specific target organ toxicity - single exposure | Not classified. |
| Specific target organ toxicity - repeated exposure | Not classified. |
| Aspiration hazard | Not available. |
| Chronic effects | Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. |

12. Ecological information

| | |
|--------------------------------------|--|
| Ecotoxicity | The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment. |
| Persistence and degradability | No data is available on the degradability of this product. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |
| Other adverse effects | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

13. Disposal considerations

| | |
|--|--|
| Disposal instructions | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents and container in accordance with government regulations. |
| Local disposal regulations | Dispose in accordance with all applicable regulations. |
| Hazardous waste code | The waste code should be assigned in discussion between the user, the producer and the waste disposal company. |
| Waste from residues / unused products | Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). |
| Contaminated packaging | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. |

14. Transport information

| | |
|-----------------------------------|--|
| DOT | Not regulated as dangerous goods. |
| DOT BULK | |
| BULK | |
| UN number | NA1993 |
| UN proper shipping name | Combustible Liquid, N.O.S. (Aromatic Petroleum Distillate) |
| Transport hazard class(es) | |
| Class | Combustible Liquid |

Packing group III
Special precautions for user Not regulated when transported by road in a non-bulk package. Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number UN1993
UN proper shipping name Flammable liquid, n.o.s. (Aromatic Petroleum Distillate)
Transport hazard class(es)
Class 3
Subsidiary risk -
Packing group III
Environmental hazards No.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Other information

Passenger and cargo aircraft Forbidden.

Cargo aircraft only Forbidden.

IMDG

UN number UN1993
UN proper shipping name Flammable Liquid, N.O.S. (Aromatic Petroleum Distillate), MARINE POLLUTANT
Transport hazard class(es)
Class 3
Subsidiary risk -
Label(s) 3
Packing group III
Environmental hazards
Marine pollutant Yes
EmS Not available.
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

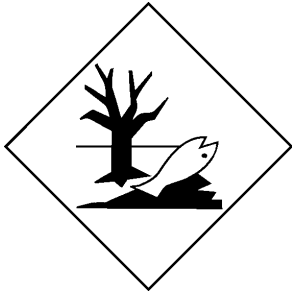
DOT Bulk packaging type



IATA; IMDG



Marine pollutant



General information

IMDG Regulated Marine Pollutant.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|------------------------|------------|----------|
| 1,2,4-Trimethylbenzene | 95-63-6 | 1 - < 3 |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

1,2,4-Trimethylbenzene (CAS 95-63-6)

US. New Jersey Worker and Community Right-to-Know Act

1,2,4-Trimethylbenzene (CAS 95-63-6)

US. Pennsylvania Worker and Community Right-to-Know Law

1,2,4-Trimethylbenzene (CAS 95-63-6)

Solvent Naphtha (Petroleum), Heavy Aromatic (CAS 64742-94-5)

US. Rhode Island RTK

1,2,4-Trimethylbenzene (CAS 95-63-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

| | |
|-------------------------------|-------------------------|
| Oxirane (CAS 75-21-8) | Listed: July 1, 1987 |
| Propylene Oxide (CAS 75-56-9) | Listed: October 1, 1988 |

US - California Proposition 65 - CRT: Listed date/Developmental toxin

| | |
|-----------------------|------------------------|
| Oxirane (CAS 75-21-8) | Listed: August 7, 2009 |
|-----------------------|------------------------|

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

| | |
|-----------------------|---------------------------|
| Oxirane (CAS 75-21-8) | Listed: February 27, 1987 |
|-----------------------|---------------------------|

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

| | |
|-----------------------|------------------------|
| Oxirane (CAS 75-21-8) | Listed: August 7, 2009 |
|-----------------------|------------------------|

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 10-27-2014

Version # 01

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