

SAFETY DATA SHEET

Issuing Date 31-Oct-2019

Revision Date 31-Oct-2019

Revision Number 12

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Code(s) R-S
Product Name 110 Rolmark Solvent

Component

Other means of identification

Document Part Codes: RMS-G,RMS-Q,5A133

Other Information

This Safety Data Sheet complies with the requirements of the OSHA Hazard Communication Standard 2012 Final Rule. This product is intended for use by properly trained and qualified professionals after having familiarized themselves with this SDS and understand all hazards to themselves and the environment through a comprehensive training program according to the Hazard Communication Standard 29 CFR 1910.1200, and the Occupational Safety and Health adoption of the Global Harmonization Standard (GHS). Use of this product may present additional hazards, and no guarantee is implied that the hazards and necessary precautions listed in this document are the only ones present. Customers using this product are responsible for determining proper personal protection equipment according to the specific conditions, PPE listed are a minimum standard. This product is not intended for general public use.

Recommended use of the chemical and restrictions on use

Recommended Use Coatings.
Uses advised against Restricted to professional users

Details of the supplier of the safety data sheet

Manufacturer Address
Marsh Shipping Supply Co., LLC
926 McDonough Lake Road - Unit E
Collinsville, IL 62234
USA

Emergency telephone number

24 Hour Emergency Phone Number Infotrac: 1-800-535-5053
International: call collect 352-323-3500

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Serious eye damage/eye irritation	Category 2A
Flammable liquids	Category 3

Label elements

Warning

Hazard statements

Causes serious eye irritation
Flammable liquid and vapor

**Appearance** Solvent**Physical state** liquid**Odor** Alcohol**Precautionary Statements**

Wash face, hands and any exposed skin thoroughly after handling
 Keep away from heat/sparks/open flames/hot surfaces. - No smoking
 Keep container tightly closed
 Ground/bond container and receiving equipment
 Use explosion-proof electrical/ ventilating / lighting/ non-sparking/ equipment
 Use only non-sparking tools
 Take precautionary measures against static discharge
 Wear protective gloves/eye protection/face protection

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower
 In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

May be harmful if swallowed

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical Name	CAS No.	Weight-%
4-hydroxy-4-methylpentan-2-one	123-42-2	100

4. FIRST AID MEASURES

Description of first aid measures**General advice**

Show this safety data sheet to the doctor in attendance. Call 911 or emergency medical service. Immediately call a POISON CENTER or doctor/physician. Use first aid treatment according to the nature of the injury.

Inhalation

Remove to fresh air. Administer oxygen if breathing is difficult. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a

physician. Unconscious persons should be moved to an uncontaminated area and, as necessary, given artificial resuscitation and supplemental oxygen.

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes. Get medical attention if symptoms occur.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Remove material from skin immediately. Wash off immediately with soap and plenty of water for at least 15 minutes. Do not use solvents or thinners to dissolve the material. Take off contaminated clothing and wash before reuse. Get medical attention immediately if symptoms occur. Allergic symptoms may be delayed.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms	Burning sensation. Symptoms may include headache, dizziness, thirst, cramping, coughing, and nausea. These symptoms may be delayed. Repeated or prolonged exposure may cause kidney, liver, neurological, central nervous system, eye and skin disorders. See Section 11 for additional Toxicological Information. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing. Vapors may cause drowsiness and dizziness.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. May cause sensitization in susceptible persons.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Dry chemical. Carbon dioxide (CO ₂). Water spray. Alcohol resistant foam. Dry chemical, CO ₂ , alcohol-resistant foam or water spray. Use water spray or fog; do not use straight streams. Dry sand. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	CAUTION: Use of water spray when fighting fire may be inefficient.
Specific hazards arising from the chemical	Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. May be ignited by heat, sparks or flames. Vapors may form explosive mixture with air. Vapors may travel to source of ignition and flash back. In the event of fire and/or explosion do not breathe fumes. Containers may explode when heated. Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.). Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire may produce irritating, corrosive and/or toxic gases.
Hazardous combustion products	Carbon monoxide. Carbon dioxide (CO ₂). Hydrocarbons. Nitrogen oxides (NO _x).
Explosion data	
Sensitivity to Mechanical Impact	None.

Sensitivity to Static Discharge Yes.

Special protective equipment for fire-fighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use only non-sparking tools.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Full encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Wear protective gloves/protective clothing and eye/face protection.

Other Information Ventilate the area. Refer to protective measures listed in Sections 7 and 8. Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information. Dispose of this material and its container to hazardous or special waste collection point. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Dike to collect large liquid spills.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Place in appropriate chemical waste container. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Use clean non-sparking tools to collect absorbed material. Use personal protective equipment as required.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Wash thoroughly after handling. Do not breathe

dust/fume/gas/mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Ground and bond all lines and equipment associated with product system. All equipment should be non-sparking and explosion proof. Remove all sources of ignition. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep/store only in original container. Keep away from open flames, hot surfaces and sources of ignition. Keep out of the reach of children. Store locked up.

Packaging materials

use only with original package - do not repackage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
4-hydroxy-4-methylpentan-2-one 123-42-2	TWA: 50 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 240 mg/m ³	IDLH: 1800 ppm TWA: 50 ppm TWA: 240 mg/m ³

Other Information

This product may also contain pigments that are otherwise non hazardous according to the US GHS: REFER TO ACGIH TLV NUISANCE PARTICULATE GUIDANCE OF 10mg/m³, 3 mg/m³ respirable fraction; OSHA PEL 15mg/m³ total dust, 5mg/m³ respirable fraction.

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Hand Protection

Wear suitable gloves. Impervious gloves. Wear nitrile or natural rubber gloves to protect hands from contact. Butyl gloves are best for prolonged contact.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots. Impervious clothing such as Tyvek(R) coveralls for light protection or Saranex(R) 23-P for moderate protection.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. Adequate ventilation should be used as the first measure to ensure airborne thresholds listed in section 8 of this SDS are not exceeded. If respirators are used, they should be used in accordance with the Hazard Communication Standard.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is

recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid
Appearance	Solvent
Odor	Alcohol
Color	clear
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	na	
Melting point / freezing point	No data available	None known
Boiling point / boiling range	150 °C / 302 °F	None known
Flash point	58 °C / 136 °F	
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	Lower flammability limit: No data available
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available	
Oxidizing properties	No information available	
<u>Other Information</u>		
Softening point	No information available	
Molecular weight	No information available	
Specific gravity	.93	
Non-Volatile (%)	0 %	
VOC Content (g/l)	930	
Density	7.76 lbs/gal	
Bulk density	No information available	

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Hazardous polymerization	None under normal processing.
Conditions to avoid	Heat, flames and sparks.
Incompatible materials	Strong acids. Strong bases. Do not store together with acids, oxidizing substances, strong alkalis, or heavy-metal compounds.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides (NOx). Thermal decomposition can lead to release of

irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	Specific test data for the substance or mixture is not available. May cause irritation. Prolonged contact may cause redness and irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chemical Name	Acute toxicity - Oral	Oral LD50	Acute toxicity - Dermal	LD50/dermal/rat - mg/kg
4-hydroxy-4-methylpentan-2-one 123-42-2		= 4 g/kg (Rat)		= 13500 mg/kg (Rabbit)

Chemical Name	Physical state	Acute toxicity - Inhalation (Dusts/Mists)	Acute toxicity - Inhalation (Gases)	Acute toxicity - Inhalation (Vapors)	Inhalation LC50	LC50 Inh 1-hr Vapor rat/rabbit (no units)	Inhalation LC50 - 4 hour - vapor - mg/L
4-hydroxy-4-methylpentan-2-one 123-42-2	liquid				-	-	-

Chemical Name	Acute aquatic toxicity	M-Factor	Chronic aquatic toxicity	M-Factor
4-hydroxy-4-methylpentan-2-one 123-42-2		-	Not classified	-

Chemical Name	Eyes	Respiratory sensitization	Skin sensitization	Mutagenicity	Mutagenic category 1
4-hydroxy-4-methylpentan-2-one 123-42-2	Category 2				

Chemical Name	NIOSH - Target Organs	STOT - single exposure	Target Organ Systemic Toxicant - Repeated exposure	Aspiration toxicity	Ozone
4-hydroxy-4-methylpentan-2-one 123-42-2	eyes,CNS,respiratory system,liver,skin				

Information on toxicological effects

Symptoms May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	4,000.00 mg/kg
ATEmix (dermal)	13,500.00 mg/kg

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

Component Information

Chemical Name	Oral LD50	LD50/dermal/rat - mg/kg	Inhalation LC50
4-hydroxy-4-methylpentan-2-one 123-42-2	= 4 g/kg (Rat)	= 13500 mg/kg (Rabbit)	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Irritating to eyes.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
Target Organ Systemic Toxicant - Repeated exposure	No information available.
Target organ effects	liver, Respiratory system, Eyes, Skin, Central nervous system.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
4-hydroxy-4-methylpentan-2-one 123-42-2	-	420: 96 h Lepomis macrochirus mg/L LC50 static 420: 96 h Lepomis macrochirus mg/L LC50	-	8750: 24 h Daphnia magna mg/L EC50

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Component Information

Chemical Name	Partition coefficient	DOT Marine Pollutant	DOT Severe Marine pollutant
4-hydroxy-4-methylpentan-2-one 123-42-2	1.03		

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

US EPA Waste Number D001.

14. TRANSPORT INFORMATION

DOT

UN/ID no.	UN1148
Proper shipping name	DIACETONE ALCOHOL
Hazard Class	3
Packing Group	III
Special Provisions	B1, IB3, T2, TP1
Description	UN1148, DIACETONE ALCOHOL, 3, III
Emergency Response Guide Number	129

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CAA (Clean Air Act)

The following component(s) are listed in the Clean Air Act.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Right-to-Know Regulations**US State Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
4-hydroxy-4-methylpentan-2-one 123-42-2	X	X	X

U.S. EPA Label Information**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

NFPA	Health hazards 2	Flammability 2	Instability 0	Physical and chemical properties -
HMIS	Health hazards 2	Flammability 2	Physical hazards 0	Personal protection X

Prepared By Regulatory Compliance Department.

Issue Date 08-Jan-2016

Revision Date 31-Oct-2019

Revision Note SDS sections updated.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. No express or implied warranty of merchantability or fitness for a particular purpose or use, with respect to the product information provided herein is given. The manufacturer disclosed in section 1 shall under no circumstance be liable for incidental or consequential damage nor makes any representation as to the information's accuracy or sufficiency. All suitability of use and safe handling of this product is upon the user. This product is not to be repackaged. Any re-sale or repackaging of this product is a violation of the original terms of sale, and the manufacturer shall not be held responsible whatsoever for the product or use thereof.

End of Safety Data Sheet