

15-0136-1 150100-4GL
15-0136-5 150100-5P
150100-1GL 150100-55D

Material Safety Data Sheet

1. Product and company identification

Product code : 15-01360/1P
Product name : MRC LOW VOC
Material uses : Printing.
Manufacturer/ Distributor : Sun Chemical Corporation
631 Central Avenue
Carlstadt, NJ 07072
In case of emergency : (800) 424-9300 (U.S.)
(703) 527-3887 (International)
Regulatory information : Canada: (905) 798-2222
US: (201) 933-4500
Other information : (513) 830-8500
Date of revision : 3/11/2011.

2. Hazards identification

Physical state : Liquid.
Color : Clear.
OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview : DANGER!
Extremely flammable liquid. Harmful if swallowed. Irritating to eyes, respiratory system and skin. Keep away from heat, sparks and flame. Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Contains material that may cause target organ damage, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.
Routes of entry : Dermal contact. Inhalation.
Potential acute health effects
Eyes : Irritating to eyes.
Skin : Irritating to skin.
Inhalation : Irritating to respiratory system.
Ingestion : Toxic if swallowed.
Potential chronic health effects (Long term exposure)
Carcinogenic effects : No known significant effects or critical hazards.
Mutagenic effects : No known significant effects or critical hazards.
Teratogenicity / Reproductive toxicity : No known significant effects or critical hazards.
Target organs : Contains material which may cause damage to the following organs: kidneys, liver, heart, gastrointestinal tract, upper respiratory tract, skin, eyes, central nervous system (CNS).
Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.
See toxicological information (Section 11)

2. Hazards identification

3. Composition/information on ingredients

<u>Hazardous ingredients</u>	<u>CAS number</u>	<u>%</u>
Acetone	67-64-1	40- 70
Toluene	108-88-3	10- 25
Methyl Alcohol	67-56-1	10- 25

4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

5. Fire-fighting measures

- Flammability of the product** : Extremely flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- Products of combustion** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Flammability (OSHA criteria)** : IB
- Flash point** : Lowest known value: <-18°C (0°F) (Closed cup)

6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

6. Accidental release measures

- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- Methods for cleaning up** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see section 13). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

Product name

Acetone

Exposure limits

ACGIH TLV (United States, 1/2009).

STEL: 1782 mg/m³ 15 minute(s).

STEL: 750 ppm 15 minute(s).

TWA: 1188 mg/m³ 8 hour(s).

TWA: 500 ppm 8 hour(s).

Toluene

ACGIH TLV (United States, 2/2010).

TWA: 20 ppm 8 hour(s).

Methyl Alcohol

ACGIH TLV (United States, 2/2010). Absorbed through skin.

STEL: 328 mg/m³ 15 minute(s).

STEL: 250 ppm 15 minute(s).

TWA: 262 mg/m³ 8 hour(s).

TWA: 200 ppm 8 hour(s).

Consult local authorities for acceptable exposure limits.

Engineering measures

- : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

8 . Exposure controls/personal protection

Personal protection

- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Color** : Clear.
- Boiling/condensation point** : Lowest known value: 56°C (133°F)
- Melting/freezing point** : May start to solidify at the following temperature: -94.2°C (-137.6°F) This is based on data for the following ingredient: acetone. Weighted average: -95.12°C (-139.2°F)
- Flash point** : Lowest known value: <-18°C (0°F) (Closed cup)
- VOC** : 41.19%
- Auto-ignition temperature** : Lowest known value: 464°C (867.2°F) (methanol).
- Density** : 0.807 g/cm³ (6.734 lbs/gal)
- Vapor density** : Highest known value: 3.14 (Air = 1) (toluene). Weighted average: 2.07 (Air = 1)
- Evaporation rate** : Highest known value: 6.06 (acetone) Weighted average: 4.4 compared with butyl acetate
- Critical temperature** : Lowest known value: 234.9°C (454.8°F) (acetone).

10 . Stability and reactivity

- Stability and reactivity** : The product is stable.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization** : Under normal conditions of storage and use, hazardous polymerization will not occur.
- Reactivity - Light** : Not applicable.

11 . Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
methanol	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50	Rat	7529 mg/kg	-
	Intraperitoneal			
	LD50 Intravenous	Rat	2131 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-
	TDLo	Rat	3490 mg/kg	-
	Intraperitoneal			
	TDLo	Rat	3000 mg/kg	-
Intraperitoneal				

11. Toxicological information

	TDL _o Oral	Rat	8 g/kg	-	
	TDL _o Oral	Rat	3 g/kg	-	
	TDL _o Oral	Rat	3500 mg/kg	-	
	LC ₅₀ Inhalation	Rat	64000 ppm	4 hours	
	Gas.				
acetone	LD ₅₀ Intravenous	Rat	5500 mg/kg	-	
	LD ₅₀ Oral	Rat	5800 mg/kg	-	
	LDLo Dermal	Rabbit	20 mL/kg	-	
	LDLo	Rat	500 mg/kg	-	
	Intraperitoneal				
	TDL _o Oral	Rat	5 mL/kg	-	
	LC ₅₀ Inhalation	Rat	50100 mg/m ³	8 hours	
	Vapor				

Conclusion/Summary : No known significant effects or critical hazards.

Chronic toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
acetone	A4	-	-	-	-	-
toluene	A4	3	-	-	-	-

Mutagenicity

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary : No known significant effects or critical hazards.

12. Ecological information

Environmental effects : No known significant effects or critical hazards.

Aquatic ecotoxicity

Conclusion/Summary : Not available.

Biodegradability


Conclusion/Summary : Not available.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Refer to protective measures listed in sections 7 and 8.
Empty containers or liners may retain some product residues.

14 . Transport information

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
DOT Classification	UN1993	FLAMMABLE LIQUIDS, N.O.S. (CONTAINS: ACETONE, TOLUENE, METHANOL)	3	II		-

PG* : Packing group

15 . Regulatory information

HCS Classification : Flammable liquid
Toxic material
Irritating material
Target organ effects

TSCA 8(b) inventory : Listed

U.S. Federal regulations : **TSCA 4(a) final test rules:** No products were found.
TSCA 4(a) ITC priority list: No products were found.
TSCA 4(a) proposed test rules: acetaldehyde
TSCA 5(a)2 final significant new use rules: No products were found.
TSCA 5(a)2 proposed significant new use rules: No products were found.
TSCA 5(e) substance consent order: No products were found.
TSCA 6 final risk management: No products were found.
TSCA 6 proposed risk management: No products were found.
TSCA 8(a) CAIR: No products were found.
TSCA 8(a) chemical risk rules: No products were found.
TSCA 8(a) dioxin/furane precursor: No products were found.
TSCA 8(a) IUR Exempt/Partial exemption: Not determined
TSCA 8(a) PAIR: acetaldehyde
TSCA 8(c) calls for record of SAR: No products were found.
TSCA 8(d) H and S data reporting: acetaldehyde
TSCA 12(b) annual export notification: No products were found.
TSCA 12(b) one-time export: No products were found.
Commerce control list precursor: No products were found.
TSCA commerce control list Not listed
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: toluene; acetone; methanol
SARA 311/312 MSDS distribution - chemical inventory - hazard identification
toluene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;
acetone: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;
methanol: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: benzene; toluene
Clean Water Act (CWA) 311: acetaldehyde; benzene; toluene
Clean Air Act (CAA) 112 accidental release prevention: No products were found.
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

SARA 313Product nameCAS numberConcentration

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15. Regulatory information

Supplier notification : Toluene 108-88-3 21.56
Methanol 67-58-1 19.62

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

CONEG : In compliance.

International lists

International lists : Canada inventory: All components are listed or exempted.
Europe inventory: All components are listed or exempted.
Australia inventory (AICS): All components are listed or exempted.
China inventory (IECSC): All components are listed or exempted.
Japan inventory: All components are listed or exempted.
Korea inventory: All components are listed or exempted.
New Zealand inventory of Chemicals (NZIoC): All components are listed or exempted.
Philippines inventory (PICCS): All components are listed or exempted.

16. Other information

Label requirements : EXTREMELY FLAMMABLE LIQUID AND VAPOR. FLAMMABLE. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Hazardous Material Information System (U.S.A.) :

Health	2
Fire hazard	3
Reactivity	0
Personal protection	

Version : 3

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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