



SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) 1907/2006.

Version: 2.0

Revision Date: August 1, 2018

Printed Date: August 1, 2018

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier:

Product name: MA 440 ADHESIVE
Stock No.: CS-300-(A-H), X, Z.
Revision date: August 1, 2018.
Date Printed: August 1, 2018.
Version: 2.0

1.2. Recommended uses of the mixture and uses advised against:

Adhesives

1.3. Details of the supplier of the safety data sheet

Clock Spring Company L.P.
621 Lockhaven Drive
Houston, TX 77073
281-590-8491

1.4. Emergency telephone number

800-424-9300 Intl: 703-527-3887
Chemtrec Contract # 5043

SECTION 2: HAZARD(S) IDENTIFICATION

2.1. Classification of the mixture

Classification of the mixture in accordance with Regulation (EC) 1272/2008 CLP

Flammable Liquid. Category 2.
Skin Irritation. Category 2.
Skin Sensitization. Category 1.
Eye Irritation. Category 2.
Specific Target Organ Toxicity - STOT, Single Exposure SE. Category 3.

2.2. Label elements

Pictograms:



Signal Word:

DANGER.

Hazard Statements:

H225 - Highly flammable liquid and vapor.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.

Precautionary Statements:

P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P370+P378 - In case of fire: Use dry chemical, carbon dioxide to extinguish small fires. Use water for large fires.

2.3. Other hazards

Hazards not otherwise classified that have been identified during the classification process:

Route of Exposure:

Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eye: Can cause moderate irritation, burning sensation, tearing, redness, and swelling. Overexposure may cause lacrimation, conjunctivitis, corneal damage and permanent injury.

Skin: Can cause skin irritation; itching, redness, rashes, hives, burning, and swelling. Allergic reactions are possible.
May cause skin sensitization, an allergic reaction, which becomes evident on reexposure to this material.

Inhalation: Respiratory tract irritant. High concentration may cause dizziness, headache, and anesthetic effects.

Ingestion: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

Chronic Health Effects: Prolonged skin contact may lead to burning associated with severe reddening, swelling, and possible tissue destruction.

Signs/Symptoms: Overexposure can cause headaches, dizziness, nausea, and vomiting.

Target Organs: Eyes. Skin. Respiratory system. Digestive system. Liver. Kidney. Olfactory Function.

Aggravation of Pre-Existing Conditions: Individuals with pre-existing skin disorders, asthma, allergies or known sensitization may be more susceptible to the effects of this product.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

NA

3.2. Mixtures:

Common Name	CAS No.	EC No.	INDEX No.	REACH Registration No.	% [weight]	International Chemical Identification	Classification according to Regulation (EC) No 1278/2008 (CLP). CLP
Styrene-Butadiene-Styrene Polymer	9003-55-8	618-370-2	NA	NA (Polymer)	17.1-18.9	1,3 Butadiene/styrene copolymers	Not classified
p(BD/MMA/STY)	25053-09-2	607-511-3	NA	Not Available	7.9-8.7	buta-1,3-diene ethenylbenzene methyl 2-methylprop-2-enoate	Not harmonized classification. Skin Irrit. 2 H315 Skin Sens. 1, H317 Eye Irrit. 2, H319
Methyl Methacrylate Monomer	80-62-6	201-297-1	607-035-00-6	01-2119452498-28-XXXX	59.7-66	methyl methacrylate methyl 2-methylprop-2-enoate methyl 2-methylpropenoate	Flam. Liq. 2 H225 Skin Irrit. 2 H315 Skin Sens. 1 H317 STOT SE 3 H335
Paraffin waxes (petroleum), clay-treated	64742-43-4	265-145-6	NA	01-2119487943-22-XXXX	0.1-1%	Paraffin waxes (petroleum), clay-treated	Not classified.
Diisodecyl adipate	27178-16-1	248-299-9	NA	01-2119488956-14-XXXX	4.7-5.2		Not classified.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

Eye Contact: Immediately flush eyes with plenty of water for at least 15 to 20 minutes. Ensure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention.

Skin Contact: Immediately wash skin with plenty of soap and water for 15 to 20 minutes, while removing contaminated clothing and shoes.
Get medical attention if irritation develops or persists.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Seek immediate medical attention.

Ingestion: If swallowed, do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

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

NA

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

Other First Aid: Due to possible aspiration into the lungs, DO NOT induce vomiting if ingested. Provide a glass of water to dilute the material in the stomach. If vomiting occurs naturally, have the person lean forward to reduce the risk of aspiration.

SECTION 5: FIRE FIGHTING MEASURES

5.1. [Extinguishing media](#)

Suitable and unsuitable extinguishing media:

- Suitable Extinguishing Media: Use carbon dioxide (CO2) or dry chemical when fighting fire s involving this material.
- Unsuitable extinguishing media: Water may cause frothing.
- Unusual Fire Hazards: Sealed containers at elevated temperatures may rupture explosively and spread fire due to polymerization.

5.2. [Special hazards arising from the mixture](#)

NA

5.3. [Advice for fire-fighters](#)

5.4. [Special protective equipment and precautions for fire-fighters:](#)

- Protective Equipment: As in any fire, wear Self-Contained Breathing Apparatus (SCBA), MSHA/NIOSH (approved or equivalent) and full protective gear.
- Fire Fighting Instructions: Evacuate area of unprotected personnel. Use cold water spray to cool fire exposed containers to minimize risk of rupture. Do not enter confined fire space without full protective gear. If possible, contain fire run-off water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. [Personal precautions, protective equipment and emergency procedures:](#)

- Personnel Precautions: Evacuate area and keep unnecessary and unprotected personnel from entering the spill area.

6.2. [Environmental precautions:](#)

- Environmental Precautions: Avoid runoff into storm sewers, ditches, and waterways.

6.3. [Methods and material for containment and cleaning up:](#)

- Spill Cleanup Measures: Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Provide ventilation. Collect spill with a non-sparking tool. Place into a suitable container for disposal. Clean up spills immediately observing precautions in the protective equipment section. After removal, flush spill area with soap and water to remove trace residue. Flammable, eliminate ignition sources. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to distant ignition sources and flash back. Ventilate area. Use proper personal protective equipment as listed in section 8.
- Other Precautions: Pump or shovel to storage/salvage vessels. Add inhibitor to prevent polymerization.

6.4. [Reference to other sections:](#) NA

SECTION 7: HANDLING and STORAGE

7.1. [Precautions for safe handling:](#)

7.2. [Handling:](#)

Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Material will accumulate static charge s which may cause an electrical spark (ignition source). Use proper grounding procedures. Do not reuse containers without proper cleaning or reconditioning.

- Hygiene Practices: Wash thoroughly after handling.

- Special Handling Procedures: Provide appropriate ventilation/respiratory protection against decomposition products (see Section 10) during welding/flame cutting operations and to protect against dust during sanding/grinding of cured product. Hazardous liquid or vapor residue may remain in emptied container. Do not reuse, heat, burn, pressurize, cut, weld, braze, solder, drill, grind, expose to sparks, flame, or ignition sources of empty containers without proper commercial cleaning or reconditioning.

7.3. [Conditions for safe storage, including any incompatibilities:](#)

- Storage: Store in a cool, dry, well ventilated area away from sources of heat, combustible materials, direct sunlight, and incompatible substances. Keep container tightly closed when not in use.

7.4. [Specific end use:](#)

See section 1.2

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1. [Control parameters:](#)

Substance Methyl methacrylate

CAS No.	Limit value - Eight hours			Limit value - Short term
	ppm	mg/m ³	ppm	mg/m ³
80-62-6	25	102	50	204
Denmark	50		100	
European Union	50	205	100	410
France	50		100	
Italy	50		100	

GESTIS INTERNATIONAL LIMIT VALUES, by IFRA Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung.

8.2. Exposure controls:

Follow established company guidelines

Engineering Controls: Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Good general ventilation should be sufficient to control airborne levels. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards e.g. international standard NFPA 654. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Individual protection measures:

Eye/Face Protection: Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Skin Protection Description: Wear appropriate protective gloves and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data.

Respiratory Protection: A NIOSH approved air-purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. Facilities storing or utilizing this material should be equipped with an eyewash and a deluge shower safety station.

Notes: Only established PEL and TLV values for the ingredients are listed.

SECTION 9: PHYSICAL and CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Appearance:	Paste.
Color:	off-white.
Odor:	Fragrant.
Boiling Point:	>212°F (100°C)
Melting Point:	-54°F (-47.7°C)
Specific Gravity:	0.93-1.05
Solubility:	Not determined.
Vapor Density:	3.5 (air = 1)
Vapor Pressure:	28 mm Hg @68°F
Percent Volatile:	Not determined.
Evaporation Rate:	3 (butyl acetate = 1)

9.2. Other information:

Percent Solids by Weight	Not determined
--------------------------	----------------

Molecular Formula:	Mixture
Molecular Weight:	50°F (10°C)
Flash Point:	Tag closed cup. (TCC)
Flash Point Method:	1.7%
Lower Flammable/Explosive Limit: Upper Flammable/Explosive Limit: Auto	12.5%
Ignition Temperature:	789°F
VOC Content:	<50 g/L mixed.

SECTION 10: STABILITY and REACTIVITY

10.1. Reactivity

NA

10.2. Chemical Stability:

Chemical Stability: Unstable.

10.3. Possibility of hazardous reactions:

Hazardous Polymerization: Polymerization may occur under certain conditions.

10.4. Conditions To Avoid:

Conditions to Avoid: Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and oxidizing conditions. Oxygen-free atmospheres or inert gas blanketing. Freezing conditions. Material can soften paint and rubber.

10.5. Incompatible Materials:

Incompatible Materials: Oxidizing agents (e.g., peroxides, nitrates), reducing agents, acids, bases, azo-compounds, catalytic metals (e.g., copper, iron), halogens. Free radical initiators. Oxygen scavengers.

10.6. Hazardous decomposition products: Not known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Styrene-Butadiene-Styrene Polymer:

Eye: Administration into the eye - Rabbit Standard Draize test: 500 mg/24H [Mild] (RTECS)

Methyl Methacrylate Monomer:

Eye: Administration into the eye - Rabbit Standard Draize test: 150 mg [Not reported.] (RTECS)

Skin: Administration onto the skin - Rabbit LD50 - Lethal dose, 50 percent kill: >5 gm/kg [Skin and Appendages - Dermatitis, other (After systemic exposure)] (RTECS)

Inhalation: Inhalation - Rat LC50 - Lethal concentration, 50 percent kill: 78000 mg/m³/4H [Details of toxic effects not reported other than lethal dose value] (RTECS)

Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 7872 mg/kg [Behavioral - Muscle weakness
Behavioral - Coma Lungs, Thorax, or Respiration - Respiratory depression] (RTECS)

Diisodecyl adipate:

Ingestion: Oral - Rat LD50 - Lethal dose, 50 percent kill: 20.5 gm/kg [Details of toxic effects not reported other than lethal dose value] (RTECS)

SECTION 12: ECOLOGICAL INFORMATION

12.1. Ecotoxicity:

Ecotoxicity: No ecotoxicity data was found for the product.

Environmental Fate: No environmental information found for this product.

12.2. Persistence and degradability: Not applicable.

12.3. Bioaccumulative potential: Not applicable.

12.4. Mobility in soil: Not applicable.

12.5. Results of PBT and vPvB: Not applicable.

12.6. Other adverse effects: Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

According to DIRECTIVE 2008/98/EC the waste resulting is classified as H 3-B, according to Annex III.

Local, national and European waste management legislation for the particular form of containment used must be complied with.

It should be noted that final decisions on the appropriate waste management method, in line with regional, national and European legislation, and possible adaptation to local conditions, remains the responsibility of the waste treatment operator.

SECTION 14: TRANSPORT INFORMATION

14.1. UN Number	1133
14.2. UN Proper shipping name:	Adhesives containing flammable liquid
14.3. Transport hazard class:	3
14.4. Packing group	III
14.5. Environmental hazards	NA
14.6. Special precautions for user	NA
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	NA

SECTION 15: REGULATORY INFORMATION

[15.1. Safety, health and environmental regulations/legislation specific for the mixture](#)

EU REGULATIONS:

- Regulation (EC) 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), according to Annex II.
- Regulation (EC) 1272/2008 on the classification, labeling and packaging of substances and mixtures (CLP Regulation)
- Directive (EC) 98/2008 on waste
- ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road

Restrictions of occupation

Order of Occupational Safety and Health at Work No. 507 of 17 May 2011, as amended, Environmental Protection Agency of Denmark.
 GESTIS INTERNATIONAL LIMIT VALUES, by IFRA Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung.

AGENCIES:

ECHA: European Chemicals Agency.

[15.2. Chemical safety assessment](#)

NA

SECTION 16: OTHER INFORMATION

NA

DISCLAIMER

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. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.