

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

1.1. Product identifier:

Product identifier used on the label: Product Name: Stock No.:

MA441 FILLER CS/CSM-400

Other means of identification Synonyms:

None.

 I.2. Relevant identified uses of the substance or mixture and uses advised against

 Recommended use of the chemical and restrictions on use:

 Product Use/Restriction:
 Not applicable.

1.3.	Details of the	supplier of the safety	data sheet	Chemical manufa	cturer	address ar	nd telephone	number:
Man	ufacturer	ITW Polymers Adhesive	es. North	Supplier Name:	Clock	Spring Corr	pany	

Manufacturer I Name: / Address:

General Phone

Number:

America 30 Endicott Street Danvers, MA 01923 (978) 777-1100 Supplier Name: Clock Spring Company L.P. Address: 621 Lockhaven Drive Houston, TX 77073 Phone Number (281)590-8491

1.4. Emergency telephone number:

Emergency telephone number:

Emergency Phone Number:

(800) 424-9300 INTL: (703)527-3887 Contract # 5043 For emergencies in the US, call CHEMTREC: 800-424-9300

CHEMTREC:

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the mixture

In accordance with Regulation (EU) No 1272/2008: Flam. Liq. 3 : Flammable liquid and vapor. STOT SE 3 : May cause respiratory irritation. Skin Irrit. 2 : Causes skin irritation.

Skin Sens. 1 : May cause an allergic skin reaction.

2.2 Label elements

Labeling in accordance with Regulation (EU) No 1272/2008: Pictograms:



Signal Word: Warning H statements: H226 Flammable liquid and vapor. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. P statements: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing dust/fume/gas/mist/vapors/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection.

P321 Specific treatment (see on this label).
 P370+P378 In case of fire: Use dry chemical, carbon dioxide to extinguish small fires. Use water for large fires.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P403+P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards.

In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.

3.1 Substances

Not Applicable.

3.2 Mixtures

Common Name	CAS No.	EC No.	INDEX No.	REACH Registration No.	% [weight]	Classification according to Regulation (EC) No 1278/2008 (CLP). CLP	specific concentration limit for CLP classification
Crystalline silica	14808-60-7	238-878-4	-	-	30-60	Not classified.	-
Calcium oxide	1305-78-8	215-138-9	607-035- 00-6	01-2119452498- 28-XXXX	0.1-1.0	Skin Corr. 1B, H314	-
Methyl Methacrylate Monomer	80-62-6	201-297-1	-	01-2119475325- 36-XXXX	10-30	Flam. Liq. 2, H225 - STOT SE 3, H335 - Skin Irrit. 2, H315 - Skin Sens. 1, H317	
Wollastonite	13983-17-0	237-772-5	-	-	1-5	Not classified.	-

SECTION 4: FIRSTAIDMEASURES

4.1 Description of first aid measures

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Description of necessary 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:

Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate.

It may cause an allergic reaction, dermatitis, redness or inflammation of the skin.

4.3 Indication of any immediate medical attention and special treatment needed

In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious. Cover the affected area with a dry sterile bandage. Protect the affected area from pressure or friction.

SECTION 5: FIRE FIGHTINGMEASURES

Suitable and unsuitable extinguishing media:					
Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material.					
Water may cause frothing.					
	ing media: Use carbon dioxide (CO2) or dry chemical when fighting fires involving this material. Water may cause frothing.				

5.2. Special hazards arising from the mixture:

Unusual Fire Hazards:	Sealed containers at elevated temperatures may rupture explosively and spread fire
	due to polymerization.
	Fire can cause thick, black smoke. As a result of thermal
	decomposition, dangerous products can form: carbon monoxide,
	carbon dioxide. Exposure to combustion or decomposition products
	can be harmful to your health.

5.3. Advice for firefighters:

Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways. Follow the instructions given in the emergency or fire evacuation plan or plans if available.

Fire protection equipment.

According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and boots. During extinction and depending on the magnitude and proximity to the fire, additional protective equipment such as chemical protection gloves, heat-reflecting suits or gas-tight suits may be required.

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. Eliminate possible ignition points and ventilate the area. No smoking. Avoid breathing fumes. For exposure control and individual protection measures, see section 8.					
6.2. Environmental precautions:					

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

6.3. Methods and materials 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 sec	tions:

For exposure control and individual protection measures, see section 8.

For later elimination of waste, follow the recommendations under section 13.

SECTION 7: HANDLING and STORAGE

7.1. Precautions for safe handling:

Handling:	Use with adequate ventilation. Avoid breathing vapor, aerosol or mist. Material will accumulate static charges 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. The fumes are heavier than air and can spread across the ground. They can form explosive mixtures with air. Prevent the creation of flammable or explosive fume concentrations in the air; prevent fume concentrations above work exposure limits. The product must only be used in areas where all unprotected flames and other ignition points have been eliminated. Electrical equipment has to be protected according to applicable standards.
	The product can be electrostatically charged: always use earth grounds when
	transferring the product. Operators must use anti-static footwear and clothing, and floors must be conductors
7.2. 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. Store the containers between 5 and 35° C. Keep away from oxidizing agents and from highly acidic or alkaline materials. Do not smoke. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELIN	<u>ES:</u>
Crystalline silica (CAS	<u>: 14808-60-7, EC: 238-878-4):</u>
Guideline ACGIH:	0.025 mg/m 3
	TLV-TW A: 0.025 m g/m 3 Respirable fraction (R)
Guideline OSHA:	[10 mg/m 3]/ [{% SiO2} + 2]
EU limits:	Not applicable for content in a paste material, only applicable to the air fraction, not in
	this product.
Calcium oxide (CAS: 1	<u>305-78-8, EC: 215-138-9):</u>
Guideline ACGIH:	2 mg/m 3
	TLV-TW A: 2 m g/m ³
Guideline OSHA:	5 mg/m ³
	PEL-TW A: 5 m g/m ³
EU limits	DNEL (workers): 3.5 mg/m ³ . (Not applicable for content in a paste material, only
	applicable to the air fraction not in this product.)
Methyl Methacrylate M	onomer (CAS: 80-62-6, EC: 201-297-1):
Guideline ACGIH:	50 ppm
	Sensitizer.: Se n

Guideline OSHA:

EU limits:

TLV-STEL: 100 ppm TLV-TW A: 50 ppm 100 ppm PEL-TW A: 100 ppm DNEL (workers): 208 mg/m³. Eight-hours limit exposure value: 50ppm Short-term limit exposure value: 100ppm.

See more details in the table above:

	Limit	Limit value - Eight hours		t value - Short term
	ppm	mg/m³	ppm	mg/m³
EU	50	-	100 (1)	
Denmark	25	102	50	204
France	50	205	100	410
Germany	50	210	100 (1)	420 (1)
REMARKS	(1) 15 minutes average value			

8.2. Exposure controls:

Follow established company guidelines Appropriate engineering controls:

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. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.
Individual protection measures:	
Eye/Face Protection:	According to the physical state of the product (paste) it is not expected to be necessary the use of mask or goggles, no splatters are expected. Do not touch eyes or face with hands when handling the material and use protective gloves.
Skin Protection Description:	Wear appropriate protective glove s and other protective apparel to prevent skin contact. Consult manufacturer's data for permeability data. Use CE marking gloves category I, according to CEN Standards EN 374-1, EN 374-2, EN 420. Wear anti-static protective clothing, use CE marking, category II. Protective clothing should not be too tight or loose in order not to obstruct the user's movements. Use CEN standards EN 340, EN 1149-1, EN 1149-2, EN 1149-3, EN 1149-5. Use anti-static safety footwear, CE marking category II (EN ISO 13287, EN ISO 20344 or EN ISO 20346.
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. If the recommended technical measures are observed, no individual protection equipment is necessary.
Other Protective:	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:	213°F (100.5°C)
Melting Point:	-54°F (-47.7°C)
Specific Gravity:	0.93-1.05
Solubility:	Not determined.
Vapor Density:	> 1 (air = 1)
Vapor Pressure:	28 mm Hg @68°F
Percent Volatile:	Not determined.
Evaporation Rate:	3 (butyl acetate = 1)
pH:	Not determined.
Molecular Formula:	Mixture
Molecular Weight:	Mixture

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

9.2. Other information:

Percent Solids by Weight Not determined.

SECTION 10: STABILITY and REACTIVITY

10.1 Reactivity.

If the storage conditions are satisfied, does not produce dangerous reactions. **10.2.** <u>Chemical Stability:</u>

Chemical Stability: Unstable.

10.3. Possibility of hazardous reactions:

Hazardous Polymerization:Polymerization may occur under certain conditions. Flammable liquid and vapor.10.4. Conditions To Avoid:Polymerization may occur under certain conditions. Flammable liquid and vapor.Conditions to Avoid:Extreme heat, sparks, and open flame. Incompatible materials, oxidizers and

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. Static discharge. High temperatures

10.5. Incompatible Materials:

Incompatible Materials:

Oxidizing agents (e.g., peroxides, nitrates), reducing agents, acids, bases, azocompounds, catalytic metals (e.g., copper, iron), halogens. Free radical initiators. Oxygen scavengers.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

There are no tested data available on the product. Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to nonallergic contact dermatitis and absorption of the product through the skin. Splatters in the eyes can cause irritation and reversible damage. See below the ECHA disclosed data substance information: **Calcium oxide:** EC Number: 238-878-4 LD50 2 000 mg/kg bw (rat). Toxicological data: LC50 (4h), exposure route inhalation, rat: 6.04 mg/L air. **Methyl Methacrylate Monomer:** EC Number: 201-297-1 Toxicological data: LD50 5 000 mg/kg bw (rabbit) Skin: Inhalation: LC50 (4 h) 29.8 mg/L air (rat) REPEATED DOSE

TOXICITY: Study data: oral Study data: inhalation NOAEL (rat): 124.1 - 164 mg/kg bw/day NOAEC (rat): 104 - 1 640 mg/m³ air NOAEC (rat): 500 - 1 000 ppm LOAEC (rat): 416 mg/m³ air

Wollastonite:

No toxicity available data information. Not classified as hazardous.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

The product is not classified as hazardous for the environment. See below available information on ecotoxicological effects of the substances of

LOAEC (rat): 250 ppm

this product: Methyl methacrylate, EC: 201-297-1, available information: *Predicted No-Effect Concentration (PNEC)*

Hazard for Aquatic Organisms: 940 µg/L Freshwater Intermittent releases 940 µg/L (freshwater) Marine water 940 µg/L Sewage treatment plant (STP) 10 mg/L Sediment (freshwater) 5.74 mg/kg sediment dw Sediment (marine water) No exposure of sediment expected Hazard for Terrestrial Organism 1.47 mg/kg soil dw (1) Soil Short-term toxicity to fish LC50 (4 days) 79 mg/L NOEC (4 days) 40 mg/L Short-term toxicity to aquatic invertebrates EC50 (48 h) 69 mg/L NOEC (48 h) 48 mg/L Long-term toxicity to aquatic invertebrates NOEC (21 days) 37 mg/L LOEC (21 days) 68 mg/L EC50 (21 days) 49 mg/L Toxicity to aquatic algae and cyanobacteria EC50 (72 h) 110 mg/L NOEC (72 h) 49 - 110 mg/L

12.2 Persistence and degradability

There is no information available on the degradability of the substances present. No information is available regarding the degradability of the substances present. No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential

No information is available regarding the bioaccumulation of the substances present.

12.4 Mobility in soil

No information is available about the mobility in soil. The product must not be allowed to go into sewers or waterways. Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment

No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects

No information is available about other adverse effects for the environment for the product.

SECTION 13: DISPOSALCONSIDERATIONS

13.1. Waste treatment methods	<u>S:</u>
Description of waste:	_
Waste Disposal:	Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation. Follow the provisions of Directive 2008/98/EC regarding waste management.
Important Disposal Information:	DANGER! Rags, steel wool and waste soaked with this product may spontaneously catch fire if improperly discarded or stored. To avoid a spontaneous combustion fire, immediately after use, place rags, steel wool or waste in a sealed, water-filled, metal container.

SECTION 14 : TRANSPORT INFORMATION

14.1 <u>UN number</u> UN No: UN1133

14.2 UN proper shipping name

Description:ADR:UN 1133, ADHESIVES, 3, PG III, (D/E)IMDG:UN 1133, ADHESIVES, 3, PG IIIICAO/IATA:UN 1133, ADHESIVES, 3, PG III

14.3 Transport hazard class(es)

Class(es): 3

14.4 Packing group Packing group: III

14.5 Environmental hazards Marine pollutant: No

14.6 Special precautions for user F-E, S-D Labels: 3



Hazard number: 30 ADR LQ: 5 L IMDG LQ: 5 L ICAO LQ: 10 L

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The product is not transported in bulk.

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)
- Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.
- Directive (EC) 98/2008 on waste
- ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road Restrictions of occupation

Exposure limit values: GESTIS INTERNATIONAL LIMIT VALUES, by IFRA Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung.

AGENCIES: ECHA: European Chemicals Agency

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: ADDITIONAL INFORMATION

Abbreviations and acronyms used:

ADR:	European Agreement concerning the International Carriage of Dangerous
	Goods by Road.
BCF:	Bioconcentration factor.
CEN:	European Committee for Standardization.
DMEL:	Derived Minimal Effect Level, exposure level corresponding to a low risk,
	that risk should be considered a tolerable minimum.
DNEL:	Derived No Effect Level, level of exposure to the substance below which
	adverse effects are not anticipated.
EC50:	Half maximal effective concentration.
PPE:	Personal protection equipment.
IATA:	International Air Transport Association.
ICAO:	International Civil Aviation Organization.
IMDG:	International Maritime Code for Dangerous Goods.
LC50:	Lethal concentration, 50%.
LD50:	Lethal dose, 50%.
Log Pow:	Logarithm of the partition octanol-water.
NOEC:	No observed effect concentration.
PNEC:	Predicted No Effect Concentration, concentration of the substance below
	which adverse effects are not expected in the environmental compartment.
RID:	Regulations Concerning the International Transport of Dangerous Goods by

SDS Revision Date: MSDS Revision Notes:	June 15, 2018 GHS Update, CLP and REACH update.
SDS Format: MSDS Author:	
Disclaimer:	This Health and Safety Information is correct to the best of our knowledge and belief at the date of its publication but we cannot accept liability for any loss, injury or damage which may result from its use. The information given in the Data Sheet is designed only as a guidance for safe handling, storage and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment.
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<u>Disclaimer</u>

Rail.

The information on this Safety Data Sheet (SDS) is based on the present state of our knowledge, current national legislation and guidelines. As the specific conditions of use of the product are outside the supplier's knowledge and control the user is responsible for ensuring that the requirements of relevant legislation are complied with. This SDS should not be construed as any guarantee of the technical performance or suitability for particular applications. UNLESS SUPPLIER AGREES OTHERWISE IN WRITING, SUPPLIER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND DISCLAIMS ALL IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR FREEDOM FROM PATENT INFRINGEMENT. SUPPLIER WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

End of Safety Data Sheet