Altro Adhesive for Recycled Rubber Flooring

Safety Data Sheet

Revision Date: 3/5/2021

SECTION 1: Identification and Company Details

Product Name:	Altro Adhesive for Recycled Rubber Flooring
Recommended Use:	Flooring Adhesive
Product Code:	Altro291750000
Manufacturer/Supplier:	Altro
Address:	80 Industrial Way, Suite 1 Wilmington, MA USA 01887
Emergency Phone:	(USA) CHEMTREC 1-800-424-9300 (24 hour response) (Canada) CANUTEC 1-613-996-6666 (24 hour response)

SECTION 2: Hazard(s) Identification

Classification of the chemical

Eye Irrit. 2A	Cause serious eye irritation.
Resp. Sens. 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	May cause allergic skin reaction.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure if inhaled.
Carc. 2	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.

Label Elements

Pictograms and Signal Words

Danger

Hazard Statements:

H317	May cause an allergic skin reaction.
H319	Cause serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H351.G	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H373.A	May cause damage to organs through prolonged or repeated exposure if inhaled.

Precautionary Statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264.2	Wash skin thoroughly after handling.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/ face protection.
P284	[In case of inadequate ventilation] wear respiratory protection.
P302+P352.A	IF ON SKIN: Wash with plenty of water.
P304+P341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	If exposes or concerned: Get medical advice/attention.
P321.A	Specific treatment (see supplementary instructions on this label)
P222+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311.A	If experiencing respiratory symptoms: Call a POISON CENTER.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
P501.A	Dispose of contents/container in accordance with applicable regulations.

Ingredient(s) with unknown acute toxicity:

None

Hazards not otherwise classified identified during the classification process:

None

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of thehardened product may create a silica dust hazard).

SECTION 3: Composition/Information on Ingredients

Substances

N.A.

Mixtures

Hazardous components within the meaning of 29 CFR 1910.1200 and related classification.

List of components

Quantity	Name	Ident. Numb.	Classification
2.5-5%	Calcium Oxide	CAS: 1305-78-8	Skin Irrit. 2, H315; STOT SE 3, H335; Eye Dam. 1, H318
1-2.5%	Methylenediphenyl diisocyanate (MDI)	CAS: 26447-40-5	Carc. 2, H351; STOT RE 2, H373; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; Acute Tox. 4, H332
1-2.5%	4, 4'-Methylendiphenyl diisocyante	CAS: 101-68-8	Acute Tox. 4, H332; Eye Irrit. 2A, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317; STOT RE 2, H351
0.25-0.49%	Silica Sand	CAS: 14808-60-7	Carc. 1A, H350; STOT RE 1, H372
0.1-0.25%	4-Methylbenzenesulfonyl isocyanate	CAS: 4083-64-1	Eye Irrit. 2A, H319; STOT SE 3, H224; Skin Irrit. 2, H315; Resp. Sens. 1, H334

SECTION 4: First Aid Measures

Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.
OBTAIN IMMEDIATE MEDICAL ATTENTION.
Obtain medical attention if skin related symptoms persist.
Remove contaminated clothing immediately and dispose of safely.
After contact with skin, wash immediately with soap and plenty of water.

In case of eye contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.
Protect uninjured eye.

In case of ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of inhalation:

If breathing is irregular or stopped, administer artificial respiration.
In case of inhalation, consult a doctor immediately and show them packing or label.

Most important symptoms/effects, acute and delayed

Eye irritation
Eye damages

Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Water

Carbon dioxise (CO_2)

Unsuitable extinguishing media:

None in particular.

Specific hazards arising from the chemical

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

Hazardous combustion products: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective equipment and precautions for fire-fighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water seperately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidential Release Measures

Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use approporate respiratory protection.

See protective measures under section 7 and 8.

Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Wash with plenty of water.

SECTION 7: Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat to drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including and incompatibilities

Storage Temperature: N.A.

Incompatible Materials: None in particular.

Instructions as regards storage premises: Adequately ventilated premises.

SECTION 8: Exposure Controls / Personal Protection

Control parameters

List of components with OEL value

Component	OEL Type	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Note
Calcium oxide	OSHA			5			
	ACGIH			2			Upper respiratory tract irritation;
Methylenediphenyl diisocyanate (MDI)	OSHA	C			0,2	0,02	
4,4' 0 Methylenediphenyl diisocyanate	ACGIH			0,005			Respiratory sensitization (listed under Methylene bisphenyl isocyanate (MDI);
	OSHA	C			0,2	0,02	
Silica Sand	ACGIH		0,025				A2- Suspected Human Carcinogen; lung cancer; pulmonary fibrosis;

Appropriate engineering controls: N.A.

Individual protection measures

Eye Protection:

Use close fitting safety goggles, don't use eye lense.

Protection for Skin:

Use clothing that provides comprehensive protection to the skin; e.g. cotton rubber, PVC or viton.

Protection for Hands:

Use protective gloves that provides comprehensive protection, e.g. PVC, neoprene or rubber.

Respiratory Protection:

Use adequate protective respiratory equipment.

SECTION 9: Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State: Liquid

Appearance and color:	Paste beige
Odour:	Characteristic
Odour threshold:	N.A.
pH:	9
Melting Point/Freezing Point:	N.A.
Initial boiling point and boiling range:	>100 °C (212 °F)
Flash Point:	>100 °C (212 °F)
Evaporation Rate:	N.A.
Upper/lower flammability or explosive limits:	N.A.
Vapour density:	1.1-1.2
Vapour pressure:	N.A.
Relative density:	1.45 g/cm3
Solubility in water:	Soluble
Solubility in oil:	N.A.
Partition coefficient (n-octanol/water):	N.A.
Auto-ignition temperature:	N.A.
Decomposition temperature:	N.A.
Viscosity:	N.A.
Explosive properties:	N.A.
Oxidizing properties:	N.A.
Solid/gas flammability:	N.A.
VOC	37 g per L

Other information

Substance groups relevant properties: N.A.
Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.

SECTION 10: Stability and Reactivity

Reactivity

Stable under normal conditions

Chemical Stability

Data not available.

Possibility of hazardous reactions

None

Conditions to avoid

Stable under normal conditions

Incompatible materials

None in particular

Hazardous decomposition products

None

SECTION 11: Toxicological Information

Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

Calcium oxide	a) acute toxicity	LD50 Oral Rat - 500 mg/kg
4,4'-Methylenediphenyl diisocyanate	a) acute toxicity	LC50 Inhalation Rat = 369 mg/m3 4h
Methylenediphenyl diisocyanate (MDI)	a) acute toxicity	LD50 Skin Rabbit > 6200 mg/kg LC50 Inhalation Rat = 369 mg/l 4h LD50 Oral Rat > 7400 mg/kg
Silica Sand	a) acute toxicity	LD50 Oral Rat = 500 mg/kg
4-Methylbenzenesulfonyl isocyanate	a) acute toxicity	LC50 Inhalation Rat > 640 ppm 1h

If not differently specified, the information required in the regulation and listed below must be considered as N.A.

a) acute toxicity
b) skin corrosion/irritation
c) serious eye damage/irritation
d) respiratory or skin sensitisation
e) germ cell mutagenicity
f) carcinogenicity
g) reproductive toxicity
h) STOT-single exposure
i) STOT-repeated exposure
j) aspiration hazard

Substance(s) listed on the IARC Monographs:

4,4'-Methylenediphenyl diisocyanate	Group 3
Methylenediphenyl diisocyanate (MDI)	Group 3
Silica Sand	Group 1

Substance(s) listed as OSHA Carcinogen(s):

Silica Sand

Substance(s) listed as NIOSH Carcinogen(s):

Silica Sand

Substance(s) listed on the NTP report on Carcinogens:

Silica Sand

SECTION 12: Ecological Information

Toxicity

Adopt good working practices, so that the product is not released into the environment.
Eco-Toxicological Information:

List of components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
2.5-5 %	Calcium oxide	CAS: 1305-78-8	a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 1070 mg/L 96h IUCLID
1-2.5 %	Methylenediphenyl diisocyanate (MDI)	CAS: 26447-40-5	d) Terrestrial toxicity : LC50 Worm Eisenia foetida > 1000 mg/kg 14d IUCLID d) Terrestrial toxicity : NOEC Worm Eisenia foetida >= 1000 mg/kg 14d IUCLID
0.25-0.49%	Silica Sand	CAS: 14808-60-7	a) Aquatic acute toxicity : LC50 carp > 10000,00000 mg/L 72h

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

SECTION 13: Disposal Considerations

Waste treatment methods

Waste must be handled in accordance with all federal, state, provincial, and local regulations.
Consult authorities before disposal.

SECTION 14: Transport Information

UN number

ADR-UN number: N/A
DOT-UN Number: N/A
IATA-Un number: N/A
IMDG-Un number: N/A

UN proper shipping name

ADR-Shipping Name: N/A
DOT-Proper Shipping Name: N/A

IATA-Technical name: N/A
IMDG-Technical name: N/A

Transport hazard class(es)

ADR-Class: N/A
DOT-Hazard Class: N/A
IATA-Class: N/A
IMDG-Class: N/A

Packing group

ADR-Packing Group: N/A
DOT-Packing group: N/A
IATA-Packing group: N/A
IMDG-Packing group: N/A

Environmental hazards

Marine pollutant: No
Environmental Pollutant: N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

Special precautions

Department of Transportation (DOT):

DOT-Special Provision(s): N/A
DOT-Label(s): N/A
DOT-Symbol: N/A
DOT-Cargo Aircraft: N/A
DOT-Passenger Aircraft: N/A
DOT-Bulk: N/A
DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):

ADR-Label: N/A
ADR-Hazard identification number: N/A
ADR-Transport category (Tunnel restriction code): N/A

Air (IATA):

IATA-Passenger Aircraft: N/A
IATA-Cargo Aircraft: N/A
IATA-Label: N/A
IATA-Subrisk: N/A
IATA-Erg: N/A
IATA-Special Provisions: N/A

Sea (IMDG):

IMDG-Stowage Code: N/A
IMDG-Stowage Note: N/A
IMDG-Subrisk: N/A
IMDG-Special Provisions: N/A
IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: N/A
IMDG-MFAG: N/A

SECTION 15: Regulatory Information

USA - Federal regulations

TSCA - Toxic Substances Control Act
TSCA inventory:
All the components are listed on the TSCA inventory
TSCA listed substances:

Calcium oxide	is listed in TSCA	Section 8b
Methylenediphenyl diisocyanate (MDI)	is listed in TSCA	Section 8b Section 8a - PAIR
4,4'-Methylenediphenyl diisocyanate	is listed in TSCA	Section 8b Section 8a - PAIR
Silica Sand	is listed in TSCA	Section 8b
4-Methylbenzenesulfonyl isocyanate	is listed in TSCA	Section 8b

SARA - Superfund Amendments and Reauthorization Act
Section 302 - Extremely Hazardous Substances:
no substances listed
Section 304 - Hazardous substances:
4,4'-Methylenediphenyl diisocyanate
Section 313 - Toxic chemical list:
4,4'-Methylenediphenyl diisocyanate

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
Substance(s) listed under CERCLA:

4,4'-Methylenediphenyl diisocyanate	Reportable quantity:	5000 pounds

CAA - Clean Air Act
CAA listed substances:

4,4'-Methylenediphenyl diisocyanate	is listed in CAA	Section 112(b) - HAP Section 112(b) - HON

CWA - Clean Water Act
CWA listed substances:
no substances listed

USA - State specific regulations
California Proposition 65
Substance(s) listed under California Proposition 65:

Silica Sand	Listed as carcinogen

Massachusetts Right to know
Substance(s) listed under Massachusetts Right to know:
Calcium oxide
Methylenediphenyl diisocyanate (MDI)
4,4'-Methylenediphenyl diisocyanate

Silica Sand

Pennsylvania Right to know

Substance(s) listed under Pennsylvania Right to know:

Calcium oxide
4,4'-Methylenediphenyl diisocyanate
Silica Sand

New Jersey Right to know

Substance(s) listed under New Jersey Right to know:

Calcium oxide
Methylenediphenyl diisocyanate (MDI)
4,4'-Methylenediphenyl diisocyanate
Silica Sand

Canada - Federal regulations

DSL - Domestic Substances List

DSL Inventory:

All the substances are listed in the DSL.

NDSL - Non Domestic Substances List

NDSL Inventory:

no substances listed

NPRI - National Pollutant Release Inventory

Substances listed in NPRI:

no substances listed

SECTION 16: Other Information

Code	Description
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H350	May cause cancer .
H351	Suspected of causing cancer .
H351.G	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H372	Causes damage to organs through prolonged or repeated exposure .
H373	May cause damage to organs through prolonged or repeated exposure .
H373.A	May cause damage to organs through prolonged or repeated exposure if inhaled.

Additional classification information

HMIS Health: 1 = Slight
HMIS Health - Is health hazard chronic?: Yes
HMIS Flammability: 1 = Combustible if heated
HMIS Reactivity: 0 = Minimal
HMIS P.P.E.: Safety glasses, gloves
NFPA Health: 1 = Slight
NFPA Flammability: 1 = Combustible if heated
NFPA Reactivity: 0 = Minimal
NFPA Special Risk: NONE

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

This document was prepared by a competent person who has received appropriate training.
It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
IMDG: International Maritime Code for Dangerous Goods.
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
CLP: Classification, Labeling, Packaging.
EINECS: European Inventory of Existing Commercial Chemical Substances.
INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
WGK: German Water Hazard Class.
KSt: Explosion coefficient.

End of document.