

SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY INFORMATION

This Safety Data Sheet covers the following products manufactured by Formica Corporation.

1.1 PRODUCT NAME: Formica® Brand Acrylic Solid Surfacing (Under Toll)

1.2 PRODUCT USE: Solid Surface

1.3 <u>MANUFACTURER:</u> Formica Corporation (Under Toll) 10155 Reading Rd Cincinnati, Ohio 45241

1.4 CONTACT INFORMATION:

EMERGENCY TELEPHONE NUMBER (CHEMTREC): (800) 424-9300 (U.S.), (202) 482-7616 (International)

TELEPHONE NUMBER FOR INFORMATION: (513) 786-3400, (513) 786-3097 (Fax)

DATE PREPARED: June 9, 2015

REPARED BY: Dave Swenson: North America Quality/Development Engineer

SECTION 2 – HAZARDS INDENTIFICATION

2.1 CLASSIFICATION OT SUBSTANCE

PRODUCT Classification Information: Not Classified

INGREDIENT Classification Information:

Preliminary Statement:

The product in its finished, marketed form is believed to be inert and generally innocuous. This classifications/hazards are pertaining to a compromised/disrupted product due to operations and processing such as sanding, sawing, burning etc.

Classification according to Regulation (EC) No 1272/2008[CLP]:

Eye Irritation – Category 2 Skin Irritation – Category 2 Skin Sensitization – Category 1 Specific Target Organ Toxicity Single Exposure – Category 3 (Respiratory)

2.2 LABEL ELEMENTS:



Signal Word: WARNING!

Relevant Routes of Exposure: Inhalation, eye and skin.

CLP/GHS Statements:

Hazard Statement(s):

- H312 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H335 May cause respiratory irritation

Precautionary statement(s):

Prevention:

- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash skin thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P280 Wear protective gloves/protective clothing /eye protection/face protection.

Response:

- P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
- P304 + P340 IF INHALED: 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 continue rinsing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P333 + P313 IF SKIN irritation or rash occurs. Get medical advice/attention
- P337 + P313 IF eye irritation persists: Get medical advice/attention.
- P362 Take of contaminated clothing and wash before reuse.
- P370 + P378 In case of fire: Use water or dry chemicals for extinction.

STORAGE:

P403 + P235 Store ih a well-ventilated place. Keep cool.

DISPOSAL:

- P501 Dispose of contents/container in accordance with local, state and federal requirements. This product as sold in its marketed form is not considered an EPA hazardous waste when discarded. Allow hot or heated material to solidify and cool before disposal.

3.1 COMPOSITION:

Ingredient Name	CAS #	EC#	% WT	DSD Classification	CLP/GHS Classification
*Formica Solid				Not	Not
Surface (Under Toll)	Mixture	Mixture	100	Classified	Classified
Alumina Trihydrate	21645-51-2	244-492-7	40-70	Not Classified	Skin Irrit. 2 H 315 Eye Irrit. 2 H 319 STOT SE # H335 WARNING!
Butyl acrylate, methyl methacrylate co[polymer	25852-37-3	N/A	>30	Not Classified (but includes butyl acrylate) Additional to MMA is: R10;R36/37/38/S09	Not Classified (but includes buty acrylate) Additional to MMA is: Eye Irrit. 2 H319 WARNING!
Colorants	N/A	N/A	<5	Not Classified	Not Classified
Methyl methacrylate	80-62-6	201-297-1	<1	F; Xi R11;R37/38 S02;S24 S37;S46	Flam. Liq 2 H225 Skin Irrit. 2 H315 Skin Sens. 1 H317 STOT SE 3 H335

*Mixture. Chemicals that follow this listed chemical are part of the listed mixture

SECTION 4 – FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

General notes:

Consult a physician. Show this safety data sheet to the doctor in attendance

Relevant Routes of Exposure: Inhalation, eye and skin.

Inhalation:

For overexposure to heated resins, remove form exposure. If breathing is difficult, or has stopped, administer artificial respiration (mouth-to-mouth) or oxygen as indicated. Call a physician immediately.

Skin Contact:

Wash affected area with soap and plenty of water. If irritation develops, call a physician.

Eye Contact:

Flush immediately with plenty of cool water for at least 15 minutes. Call a physician immediately.

Ingestion:

Product in its marketed form is inert. If large amounts are swallowed call a physician.

SECTION 5 – FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Use water or dry chemicals to extinguish fire.

5.2 SPECIAL HAZARDS ARISING FORM THE SUBSTANTS OF MIXTURE:

Burning material may give off toxic products of combustion (CO,CO₂) when involved in a hot fire.

5.3 ADVICE FOR FIREFIGHTERS:

Firefighters should wear NIOS?MSHA approved self-contained breathing apparatus and full protective clothing fighting fires. Use cold water spray to cool fire exposed containers.

5.4 FURTHER INFORMATION:

Combustion products may include carbon dioxide, carbon monoxide, methyl methacrylate monomer (MMA) and acid smoke and fumes.

Flammable Limits in Air (% by Volume): N/A

Flash Point: N/A

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 PERSOANL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

Proper personal protective equipment should be utilized when handling this material.

6.2 ENVIRONMENTAL PRECAUTIONS:

This product as sold in its marketed form is not considered an EPA hazardous waste.

6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEAN-UP:

If released or spilled, product may be cleaned up and disposed in the trash. Allow hot or heated material to solidify and cool before disposal.

6.4 REFERENCE TO OTHER SECTION(S):

See SECTION 7 for information on Safe Handling. See SECTION 8 for information on Personal Protective Equipment. See SECTION 13 for information on Disposal.

SECTION 7 – HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Avoid breathing of vapors, fumes and smoke which may be released during thermal processing. Since finished product has sharp edges, protective gloves should be worn when handling.

7.2 CONDITIONS FOR SAFE STRORAGE, INCLUDING ANY INCOMPATIBILITIES:

Store in a cool dry area.

SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

Exposure Limit values:

Ingredient Name	CAS #	% WT	Limit Values
*Formica Solid Surface (Under Toll)	Mixture	100	This product can generate Particulates Not Otherwise Regulated (PNOR). The OSHA PEL-TWA for PMOR is 15mg/me (total dust) and 5 mg/m ³ (respirable fraction). The TLV-TWA for Particles Not Otherwise Specified (PNOS) is 10 mg/m ³ (Inhalable) and 3mg/m ³ (respirable fraction).
Alumina Trihydrate	21645-51-2	40-70	Y(Hazardous)** PNOC-15mg/m ^{3(total} dust)5mg/m ³ (respirable fraction)(OSHA PEL TWA) PNOC- 10mg/m ³ (inhalable)3mg/m ³ (respirable Fraction)(ACGIH TLV TWA)
Butyl acrylate, methyl methacrylate co[polymer	25852-37-3	>30	N (Hazardous) N/A-OSHA PEL TWA N/A-ACGHIH TLV TWA
Colorants	N/A	<5	Y (Hazardous)** N/A-OSHA PEL TWA N/A-ACGHIH TLV TWA
Methyl methacrylate	80-62-6	<1	Y (Hazardous)** 100ppm -OSHA PEL TWA 50ppm -ACGHIH TLV TWA 100ppm-ACGIH STEL CEILING

*Mixture. Chemicals that follow this listed chemical are part of the listed mixture

** All ingredients in quantities>1.0%(>0.1% for carcinogens) that are potentially hazardous per OSHA definitions. Some States enforce the PELs that OSHA promulgated in 1989, which were subsequently vacated by the U.S. Supreme Court. Check with your state OSHA agency to determine which PEL is enforced in your jurisdiction.

8.2 EXPOSURE CONTROLS:

Ventilation Requirements:

Local exhaust ventilation should be used to control the emissions of air contaminants. General dilution ventilation may assist with the reduction of air contaminates concentrations.

Eye/Face:

Employees should be required to wear chemical safety goggles to prevent eye contact. A face shield should be used when appropriate to prevent eye contact and contact with the material.

Skin:

Since finished material has sharp edges, wear protective gloves when handling. Polyvinyl alcohol and Teflon® protective garments have been recommended for protection against methyl methacrylate. When necessary, garments for protection against heated materials should be used to prevent skin contact with hot acrylate polymer.

Respirator:

No personal respirator protective equipment normally required. Wear a NIOSH approved dust respirator that is properly fitted and is in good condition when exposed to dust levels above ACGIH permissible exposure limits (10mg/m³ based on an eight hour Time Weighted Average).

Other Protective Clothing/Equipment:

Emergency eye wash stations and safety showers should be available in the area.

SECTION 9: PHYSICAL AND CHEMICAL POPERPTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

pH Value: N/A

Boiling Point: N/A Molecular/Chemical Formula: $(C_7H_{12}O_2-C_5H_8O_2)_x$ -Al(OH)3 Evaporation Rate: N/A Bulk Density: N/A Freezing Point: N/A Melting Point: N/A Octanol/Water Partition Coefficient: N/A Water/Oil Distribution Coefficient: N/A Odor: Odorless Odor Threshold: N/A Percent Volatile: N/A Physical State: Solid sheet Reactivity in Water: N/A Solubility in Water: N/A Specific Gravity: N/A Vapor Density: N/A Vapor Pressure: N/A Flammable Limits in Air: N/A Flash Point: N/A

SECTION 10: STABILITY AND REACTIVITY

10.1 <u>REACTIVITY:</u> Unreactive.</u>

10.2 CHEMICAL STABLITY: Stable.

10.3 POSSIBILITY OF HARZARDOUS REACTIONS: None known

10.4 CONDITIONS TO AVOID: Temperatures above 500°F can release methyl methacrylate.

10.5 INCOMPATIBILE MATERIALS: None known

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, acrid smoke and fumes, MMA

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Product Based Information:

No toxicological information is available for the finished product.

Ingredient Based Information:

Alumina trihydrate may cause eye and skin irritation. The LD_{50} for butyl acrylate, methyl methacrylate copolymer (CAS No. 25852-37-3) is greater than 29,500 mg/kg. One of the monomers of butyl acrylate, methyl methacrylate copolymer, is methyl methacrylate (MMA). In one study, high doses of MMA were reported to produce increased incidence of blood vessel aggregates in rat pups whose mothers received MMA by injection while pregnant. Degenerative changes in the liver were observed in Guinea pigs following inhalation exposure of 9.5 ppm of MMA for 3 hrs/day for 15 days, according to a 1945 report. Ingestion of MMA caused irritation of the alimentary canal and kidney and liver lesions (Lefaus, R. Practical Toxicology of Plastics. CRC Press, Inc., 1968P.324). Methyl methacrylate has been shown to cause neurotoxic effects in primarily animal studies.

Possible target organs: Skin and respiratory system (e.g., lungs).

Signs and Symptoms of Acute Overexposure:

Product sold in its marketed form is not expected to present a serious health hazard; however, operations such as sawing, sanding, grinding or burning may generate dust, smoke or vapors which may be irritating. Inhalation of such dusts, smoke and vapors may cause upper respiratory tract irritation. Symptoms may include burning sensation, coughing, sneezing, and sore throat. Skin contact with the dust may produce transitory mechanical irritation. Symptoms include redness and itching. High concentrations of dusts may cause irritation to the eyes causing burning, redness and tearing. This product is not expected to be toxic if ingested.

Signs and Symptoms of Chronic Exposure:

Prolonged or repeated over exposures to high concentrations may cause coughing, dizziness, confusion, headache and drowsiness. Prolonged or repeated skin contact may lead to allergic skin reactions.

Medical Conditions Generally Aggravated by Exposure:

Individuals with chronic respiratory disorders may be adversely affected by any fume or airborne particulate matter exposure. Persons with preexisting skin disorders may be more susceptible to the effects of this material.

Additional Information:

*This product may contain certain inorganic pigments that may include compounds of nickel. Certain molecules of nickel have shown sufficient evidence of carcinogenicity (IARC Vol. 49) while others have shown limited or insufficient evidence of carcinogenicity in humans or animals. Titanium Dioxide: In lifetime inhalation studies of rats, airborne respirable-size titanium dioxide particles have been shown to cause lung tumors at concentrations associated with substantial particle lung burdens and consequential pulmonary overload and inflammation. However, other laboratory animals such as mice and hamsters did not develop lung tumors under similar testing with titanium dioxide. Furthermore, human epidemiology studies do not suggest an association between occupational exposures to titanium and risk for cancer. Under normal conditions of use and exposure, toxicological and epidemiological studies for titanium dioxide were at no greater risk of developing lung cancer than were employees who had not been exposed. No associations were observed between titanium dioxide exposure and chronic respiratory disease or lung abnormalities. Based on the results of this study, it was concluded that titanium dioxide will not cause lung cancer or chronic respiratory disease in humans at concentrations experienced in the work place.

SECTION 12: ECOLOGICAL INFORMATION

12.1 ECOLOGICAL INFORMATION

No ecological data is currently available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 DISPOSAL:

Dispose of in accordance with local, state and federal requirements. This product as sold in its marketed form is not considered an EPA hazardous waste when discarded. Allow hot or heated material to solidify and cool before disposal.

SECTION 14: TRANSPORT INFORMATION

14.1 TRANSPORT:

Proper Shipping Name: Not regulated as a hazardous material. Hazard Class: None ID Number: None Marine Polltant: No

SECTION 15: REGULATORY INFORMATION

15.1 <u>SAFETY, HEALTH AND ENVIRONMENTAL REGLATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR</u> <u>MIXTURE EU REGULATION:</u>

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA) Inventory-Yes Superfund Amendments and Reauthorization Act (SARA 313) – Nickel Compounds

State Regulations:

California Proposition 65 List-Yes* (Nickel)

*Warning, this product contains chemical(s) known to the state of California to cause cancer and/or birth defects or other reproductinve harm. The Proposition 65 chemical(s) found in this product appear in trace amounts and would not be expected to pose significant risk; however, a risk assessment for this (these) chemical(s) has not yet been performed. Each product should be assessed inlight of its use.

International Regulations: European Inventory (EINECS) – Unknown Canadian Inventory (DSL) – Yes

SARA Hazards:

Acute: Yes Chronic: No Reactive: No Fire: No Pressure: No

SECTION 16: OTHER INFORMATION

16.1 ABBREVIATIONS AND ACRONYMS:

CLP=Classification, Labeling and Packaging CAS=Chemical Abstract Service DSD=Dangerous Substance Directive N/A=Not Applicable MSHA=Mine Safety and Health Administration NIOSH=National Institute of Occupational Safety and Health CEIL=Ceiling Limit Value CSN=Central Nervous System SARA=Superfund Amendment and Reauthorization Act ACGIH=American Conference of Governmental Industrial Hygienists OSHA=Occupational Safety and Health Administration PNOC=Particulates Not Otherwise Classifiable TLV=Threshold Limit Value PEL=Permissible Exposure Limit TWA=Time Weighted Average STEIL=Short Term Exposure Limit

16.2 KEY LITERATURE REFERENCE AND SOURCES FOR DATA: Provided by company

16.3 APPLICBLE STATEMENTS:

DSD Statements:

Risk(R) Statement(s):

- R36/37/38 Irritating to eyes, respiratory system and skin

Safety(S) Statements(s):

- S24 Avoid contact with skin
- S37 Wear suitable gloves
 - S46 If swallowed, seek medical advice immediately and show this container or label

Additional Statements:

Emergency Overview:

- Caution! Inhalation of dusts or vapors may cause upper respiratory tract irritation with coughing and burning sensation in the throat. Repeated skin exposures to dusts may cause allergic skin reactions.

Potential Health Effects:

- Eyes: Transient/mechanical irritation from contact with dusts. Possible irritation from operations and processing vapors or dusts.
- Skin: Possible transient/mechanical irritation.
- Ingestion: Product in marketed form is inert.
- Inhalation: Sawing, sanding, grinding, or burning may cause upper respiratory tract irritation.

Label Statements:

- Caution! Inhalation of dusts or vapors may cause upper respiratory tract irritation with coughing and burning sensation in the throat. Repeated skin exposures to dusts may cause allergic skin reactions.
- Avoid contact with eyes, skin and clothing.
- Avoid breathing dust or vapors
- Wash thoroughly after handling.
- Launder contaminated clothing before re-use
- Use only with adequate ventilation.
- If repeated skin contact may occur, wear PVA gloves.
- Wear chemical safety goggles.
- If Exposure Limits may have exceeded, wear NIOSH approved dust respirator.

16.4 TRAINING ADVISE:

Provide adequate information, instruction and training to operators.

16.5 DECLARE FOR READER:

If you require additional information regarding any legal or regulatory requirements referred to in this SDS, we suggest that you consult with an appropriate regulatory agency, or with a professional with expertise in this area. This information is taken form sources or based upon data believed to be reliable; however, Formica (under toll) makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.

16.6 ADDITIONAL INFORMATION:

NFPA Codes:	HMIS Codes:
Health: 2	Health: 1
Flammability: 0	Flammability: 0
Reactivity: 0	Reactivity: 0

·

Prepared according to: Appendix D of 29 CFR 1910.1200 Regulation (EC) No. 1272/2008[CLP]