



Safety Data Sheet

24 Hour Emergency Phone Numbers
Medical/Poison Control:
 In U.S.: Call 1-800-222-1222

Outside U.S.: Call your local poison control center

Transportation/National Response Center:

1-800-535-5053
1-352-323-3500

NOTE: The National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this SDS are further described in Section 16.

1. Identification

Product Name:	Tankbond Heavy Duty Advanced Epoxy (Resin)	Revision Date:	4/12/2022
Product UPC Number:	070798001763	Supersedes Date:	12/29/2021
Manufactured For	DAP Global Inc. 2400 Boston Street Suite 200 Baltimore, MD 21224-4723 888-327-8477 (non - emergency matters)	Product Use/Class:	Adhesive
	SDS Coordinator: MSDS@dap.com	SDS No:	1021004
	Emergency Telephone: 1-800-535-5053, 1-352-323-3500, 1-800-222-1222	Preparer:	Regulatory and Environmental Affairs

2. Hazards Identification

EMERGENCY OVERVIEW: DANGER! Flammable liquid and vapor. KEEP OUT OF REACH OF CHILDREN! Vapors may cause flash fire or explosion. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Keep container closed and away from heat, sparks, and open flame. Store away from caustics and oxidizers. Skin and eye irritant. Contains epoxy constituents. See information supplied by the manufacturer.

GHS Classification

Acute Tox. 4 Inhalation, Carc. 2, Eye Irrit. 2, Flam. Liq. 2, Skin Irrit. 2, Skin Sens. 1, STOT SE 3 RTI

Symbol(s) of Product**Signal Word**

Danger

Possible Hazards

17% of the mixture consists of ingredients of unknown acute toxicity

GHS HAZARD STATEMENTS

Flammable Liquid, category 2	H225	Highly flammable liquid and vapour.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 4	H332	Harmful if inhaled.
STOT, single exposure, category 3, RTI	H335	May cause respiratory irritation.
Carcinogenicity, category 2	H351	Suspected of causing cancer.

GHS LABEL PRECAUTIONARY STATEMENTS

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P281	Use personal protective equipment as required.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep 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 exposed or concerned: Get medical advice/attention.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P321	Specific treatment (see ... on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing.
P370+P378	In case of fire: Use... to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container.

GHS SDS PRECAUTIONARY STATEMENTS

P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P363	Wash contaminated clothing before reuse.

3. Composition/Information on Ingredients

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Wt. %</u>	<u>GHS Symbols</u>	<u>GHS Statements</u>
Methyl methacrylate	80-62-6	15-40	GHS02-GHS07	H225-315-317-319-332-335
2-Propenoic acid, 2-methyl-, cyclohexyl ester	101-43-9	1-5	GHS07	H315-319-335
N,N-Dimethylaniline	121-69-7	1-5	GHS06-GHS08	H302-312-330-351
2-Propanol, 1,1'-[(4-methylphenyl)imino]bis-	38668-48-3	1-5	No Information	No Information
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate	52628-03-2	1-5	No Information	No Information
Hexadecanoic acid, hexadecyl ester	540-10-3	1-5	No Information	No Information
Methacrylic acid	79-41-4	1-5	GHS05-GHS06-GHS07	H302-311-314-335

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

4. First-aid Measures

FIRST AID - INHALATION: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

FIRST AID - SKIN CONTACT: In case of contact, wash skin immediately with soap and water.

FIRST AID - EYE CONTACT: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

FIRST AID - INGESTION: If swallowed do not induce vomiting. Seek immediate medical attention.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: Eliminate sources of ignition: heat, electrical equipment, sparks and flames. Vapors can form an ignitable mixture with air. Vapors can flow along surfaces to a distant ignition source and flash back. Vapors may form explosive mixtures with air. Containers may explode if exposed to extreme heat. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion.

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

EXTINGUISHING MEDIA: Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Spray or Fog

6. Accidental Release Measures

ENVIRONMENTAL MEASURES: No Information

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: NOTE: Review fire hazards before proceeding with clean up. Immediately eliminate sources of ignition. Keep people away from and upwind of spill/leak. Dike to prevent entering any sewer or waterway. Soak up with inert absorbent material and dispose of as hazardous waste. Use personal protective equipment as necessary. Read all product instructions before using. Personal protective equipment should include impervious gloves, protective eye wear, and suitable work clothes. Use absorbent material or scrape up dried material and place in container. Never discard in a liquid state. Dispose of material in accordance with all federal, state and local regulations.

7. Handling and Storage

HANDLING: KEEP OUT OF REACH OF CHILDREN! DO NOT TAKE INTERNALLY. Remove all sources of ignition. Keep away from open flames, hot surfaces and sources of ignition. Provide adequate ventilation. Avoid heat, sparks and open flames. Wear appropriate personal protection. Avoid contact with eyes, skin and clothing. Empty containers retain product residue (liquid and/or vapor). Vapor can ignite potentially causing an explosion. Do not use in areas where static sparks may be generated.

STORAGE: Store away from sources of ignition and heat. Do not store at temperatures above 120 °F (49 °C). Store containers away from excessive heat and freezing. Store away from caustics and oxidizers. Keep containers tightly closed.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH-TLV STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>
Methyl methacrylate	50 ppm TWA	100 ppm STEL	100 ppm TWA, 410 N.E. mg/m3 TWA	
2-Propenoic acid, 2-methyl-, cyclohexyl ester	N.E.	N.E.	N.E.	N.E.
N,N-Dimethylaniline	5 ppm TWA Dimethylaniline	10 ppm STEL Dimethylaniline	5 ppm TWA Dimethylaniline, 25 mg/m3 TWA Dimethylaniline	N.E.

2-Propanol, 1,1'-[[4-methylphenyl]imino] bis-	N.E.	N.E.	N.E.	N.E.
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate	N.E.	N.E.	N.E.	N.E.
Hexadecanoic acid, hexadecyl ester	N.E.	N.E.	N.E.	N.E.
Methacrylic acid	20 ppm TWA	N.E.	N.E.	N.E.

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation
Sk = Skin Sensitizer N.E. = Not Established

Personal Protection



RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.



SKIN PROTECTION: Impervious gloves. Wear nitrile, neoprene, or natural rubber gloves.



EYE PROTECTION: Goggles or safety glasses with side shields.



OTHER PROTECTIVE EQUIPMENT: Impervious clothing.



HYGIENIC PRACTICES: Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Do not ingest or inhale. Do not expose container to heat or flame. Contaminated clothing should be changed and washed before reuse. Eating, drinking and smoking in immediate work area should be prohibited.

9. Physical and Chemical Properties

Appearance:	Gray	Physical State:	Paste
Odor:	Not Established	Odor Threshold:	Not Established
Density, g/cm3:	1.12 - 1.12	pH:	Not Applicable
Freeze Point, °C:	Not Established	Viscosity (mPa.s):	Not Established
Solubility in Water:	Not Established	Partition Coeff., n-octanol/water:	Not Established
Decomposition Temperature, °C:	Not Established	Explosive Limits, %:	1 - 8.8
Boiling Range, °C:	100 - 100	Auto-Ignition Temperature, °C	Not Established
Minimum Flash Point, °C:	15	Vapor Pressure, mmHg:	Not Established
Evaporation Rate:	Slower Than n-Butyl Acetate	Flash Method:	Seta Closed Cup
Vapor Density:	Heavier Than Air	Flammability, NFPA:	Flammable Liquid Class IB
Combustible Dust:	Does not support combustion		

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

10. Stability and Reactivity

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat and freezing. Keep away from open flames, hot surfaces and sources of ignition. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Do not smoke.

INCOMPATIBILITY: Open flames, hot surfaces and sources of ignition. Keep away from strong oxidizing agents, heat and open flames. None under normal processing.

HAZARDOUS DECOMPOSITION PRODUCTS: To avoid thermal decomposition, do not overheat.

11. Toxicological Information

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes).

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Immediate bonding of skin may result upon contact.

EFFECT OF OVEREXPOSURE - EYE CONTACT: Causes severe eye irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

CARCINOGENICITY: No Information

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: Chronic exposure may cause dermatitis. Constituents of this product include crystalline silica which, if inhalable, may cause silicosis, a form of progressive pulmonary fibrosis. Inhalable crystalline silica is listed by IARC as a group I carcinogen (lung) based on sufficient evidence in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Constituents may also contain asbestiform or non-asbestiform tremolite or other silicates as impurities, and above de minimus exposure to these impurities in inhalable form may be carcinogenic or cause other serious lung problems.

PRIMARY ROUTE(S) OF ENTRY: Skin Contact, Inhalation

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>
80-62-6	Methyl methacrylate	9400 mg/kg Rat	6550 mg/kg Rabbit	29.8 mg/L Rat
101-43-9	2-Propenoic acid, 2-methyl-, cyclohexyl ester	N.I.	>2000 mg/kg Rat	N.I.
121-69-7	N,N-Dimethylaniline	951 mg/kg Rat	1770 mg/kg Rabbit	>0.5 - <5.0 mg/L Rat
38668-48-3	2-Propanol, 1,1'-[(4-methylphenyl)imino]bis-	N.I.	>2000 mg/kg Rat	N.I.
52628-03-2	2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, phosphate	N.I.	N.I.	N.I.
540-10-3	Hexadecanoic acid, hexadecyl ester	N.I.	N.I.	N.I.
79-41-4	Methacrylic acid	1060 mg/kg Rat	500 - 1000 mg/kg Rabbit	N.I.

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Ecological injuries are not known or expected under normal use.

13. Disposal Information

DISPOSAL INFORMATION: Residues and spilled material are hazardous waste due to ignitability. Dispose of material in accordance with all federal, state and local regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste. Do not flush into surface water or sanitary sewer system. Do not empty into drains. Do not re-use empty containers. The container for this product can present explosion or fire hazards, even when emptied. To avoid risk of injury, do not cut, puncture, or weld on or near this container.

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: NOTE: Review fire hazards before proceeding with clean up. Immediately eliminate sources of ignition. Keep people away from and upwind of spill/leak. Dike to prevent entering any sewer or waterway. Soak up with inert absorbent material and dispose of as hazardous waste. Use personal protective equipment as necessary. Read all product instructions before using. Personal protective equipment should include impervious gloves, protective eye wear, and suitable work clothes. Use absorbent material or scrape up dried material and place in container. Never discard in a liquid state. Dispose of material in accordance with all federal, state and local regulations.

14. Transport Information

DOT UN/NA Number: UN1133
DOT Proper Shipping Name: Adhesives, containing a flammable liquid
DOT Technical Name: N.A.
DOT Hazard Class: 3 Flammable liquid
Hazard SubClass: N.A.
Packing Group: II

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical Name	CAS-No.
Methyl methacrylate	80-62-6
N,N-Dimethylaniline	121-69-7

TOXIC SUBSTANCES CONTROL ACT:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information

Revision Date: 4/11/2022 **Supersedes Date:** 12/29/2021

Reason for revision: Substance and/or Product Properties Changed in Section(s):
01 - Product Information

Datasheet produced by: Regulatory Department

HMIS Ratings:

Health:	Flammability:	Reactivity:	Personal Protection:
2*	3	1	X

VOC Less Water Less Exempt Solvent, g/L: 0.4

VOC Material, g/L: 0

VOC as Defined by California Consumer Product Regulation, Wt/Wt%: 0.00

VOC Actual, Wt/Wt%: 0.0

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS02



GHS05



GHS06



GHS07



GHS08



Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.