

Section 1. Identification

PRODUCT IDENTIFIER

Trade Name : V-Epoxy-R - Part A

Relevant identifies uses of the substance or mixture : Adhesive

DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Supplier/Manufacturer : The D.S. Brown Company
300 East Cherry Street
North Baltimore, Ohio 45872
419-257-3561

Information Department : Environment protection department.

Emergency Telephone Number: ChemTrec: Day or Night within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

Section 2. Hazard(s) Identification

Classification of the Substance or Mixture :  GHS07
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335 May cause respiratory irritation.

LABEL ELEMENTS

GHS label elements : The product is classified and labeled according to the Globally Harmonized System (GHS)

Hazard Pictograms :  GHS07

Signal Word : Warning

Hazard Statements : Causes skin irritation.
Causes serious eye reaction.
May cause allergic skin reaction.
May cause respiratory irritation.

Precautionary Statements : Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves/eye protection/face protection.
Wash thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
Specific treatment (see on this label)

IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Call a POISON CENTER/doctor if you feel unwell.
 Wash contaminated clothing before reuse.
 If skin irritation or rash occurs: Get medical advice/attention.
IF ON SKIN: Wash with plenty of water.
 Take off contaminated clothing and wash it before reuse.
 Store locked up.
 Store in a well ventilated place. Keep container tightly closed.
 Dispose of contents/container in accordance with local/regional/national/
 international regulations.

Classification System : **NFPA ratings (scale 0 - 4)**
 Health = 2 Fire = 1 Reactivity = 0
HMIS-ratings (scale 0 - 4)
 Health = 2 Fire = 1 Physical Hazard = 0

Results of PBT and vPvB Assessment : **PBT:** *Not applicable.*
vPvB: *Not applicable.*

Section 3. Composition/Information on Ingredients

Chemical Characterization : Mixtures
Description : Mixture
Hazardous Components : Components listed below

Chemical Name	CAS Number	Wt %
Bisphenol A Epoxy Resin	25068-38-6	50–100%
Kaolin	1332-58-7	5-20%
[[[(2-ethylhexyl)oxy]methyl]oxirane	2461-15-6	2.5-10%
titanium dioxide	13463-67-7	≤0.5%

Section 4. First Aid Measures

DESCRIPTION OF FIRST AID MEASURES

After Inhalation : Supply fresh air and to be sure call for a doctor.
 In case of unconsciousness place patient stably in side position for transportation.

After Skin Contact : Immediately wash with water and soap and rinse thoroughly.
 If skin becomes irritated seek medical attention.

After Eye Contact : Rinse opened eye for 20 minutes under running water. If eye becomes irritated,
 obtain medical treatment.

After Swallowing : Rinse mouth with water. Do not induce vomiting; immediately call for medical help.

Section 4. First Aid Measures *cont'd.*

INFORMATION FOR DOCTOR

Most Important Symptoms and Effects, Both Acute and Delayed : No further relevant information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed : No further relevant information available.

Section 5. Fire-Fighting Measures

EXTINGUISHING MEDIA

Suitable Extinguishing Agents : CO₂, extinguishing powder or water spray. Fight larger fires with water spray. Use agents fire-fighting measures that suit the environment.

Special Hazards Arising from the Substance or Mixture : No further relevant information available.

Advice for Firefighters : Firefighters use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Protective Equipment : Protective clothing and respiratory protective device.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures : Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

Environmental Precautions : Do not allow to enter sewers/surface or ground water.

Methods and Materials for Containment and Cleaning Up : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste in accordance with federal state and local regulations. Ensure adequate ventilation.

Reference to Other Sections : See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

Protective Action Criteria for Chemicals :

PAC-1

Chemical Name	CAS Number	Wt
Bisphenol A Epoxy Resin	25068-38-6	90 mg/m ³
Synthetic Amorphous Silica	67762-90-7	120 mg/m ³

Section 6. Accidental Release Measures *cont'd.*

PAC-2

Chemical Name	CAS Number	Wt
Bisphenol A Epoxy Resin	25068-38-6	990 mg/m ³
Synthetic Amorphous Silica	67762-90-7	1,300 mg/m ³

PAC-3

Chemical Name	CAS Number	Wt
Bisphenol A Epoxy Resin	25068-38-6	5,900 mg/m ³
Synthetic Amorphous Silica	67762-90-7	7,900 mg/m ³

Section 7. Handling and Storage

HANDLING

Precautions for Safe Handling : Open and handle receptacle with care.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

Information About Protection Against Explosions and Fires : No special measures required.

STORAGE

Information for Safe Handling : **Storerooms and receptacles:** Store in a cool location away from direct heat.
One common storage facility: Keep away from oxidizing agents.
Further information: Keep receptacle tightly sealed.

Specific End Use(s) : No further relevant information available.

Section 8. Exposure Controls/Personal Protection

Additional Information About Design of Technical Systems : No further data.

Components with Limit Values that Require Monitoring at the Workplace : The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the other constituents have no known exposure limits.

13463-67-7	Titanium Dioxide
PEL	Long-term value: 15* mg/m ³ (*Total dust)
REL	See Pocket Guide App. A
TLV	Long-term value: 10 mg/m ³ withdrawn from NIC
1332-58-7	Kaolin
PEL	Long-term value: 15* 5** mg/m ³ (*Total dust **Respirable fraction)
REL	Long-term value: 10* 5** mg/m ³ (*Total dust)
TLV	Long-term value: 2* mg/m ³ (E; as respirable fraction)

Section 8. Exposure Controls/Personal Protection *cont'd.*

Additional Information : The lists that were valid during the creation were used as basis.

EXPOSURE CONTROLS

Personal Protection Equipment (See list below)

General Protective and Hygienic Measures	: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.
Breathing Equipment	: Not necessary if room is well-ventilated.
Protection of Hands	: Protective gloves. The glove material has to be impermeable and resistant to the product the substance/ the preparation. 
Material of Gloves	: Nitrile rubber, NBR Chloroprene rubber, CR The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Penetration Time of Glove Material	: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye Protection	: Safety glasses with side shields. Tightly sealed goggles. 
Body Protection	: Protective work clothing.

Section 9. Physical and Chemical Properties

Appearance	
Form	: Liquid
Color	: Khaki
Odor	: Characteristic
Odor Threshold	: Not determined.
pH Value	: Not determined.
Change in Condition	
Melting Point	: Undetermined
Boiling Point	: Undetermined
Flash Point	: 94 °C / 201 °F
Flammability (Solid, Gaseous)	: Not applicable.
Ignition Temperature	: Not applicable.
Decomposition Temperature	: Not determined.
Auto Ignition	: Product is not self-igniting
Danger of Explosion	: Product does not present an explosion hazard.

Section 9. Physical and Chemical Properties *cont'd.*

Flammable Limits	
Lower	: Not determined
Upper	: Not determined
Vapor Pressure	: Not determined
Specific Gravity at 20 °C (68 °F)	: 1.35 g/cm ³ (11.266 lbs/gal)
Relative Density	: Not determined
Vapor Density	: Not determined
Evaporation Rate	: Not determined
Solubility in/Miscibility with Water	: Not miscible or difficult to mix
Partition Coefficient (n-octonal/water)	: Not determined
Viscosity	
Dynamic	: Not determined
Kinematic	: Not determined
Solvent Content	
Organic Solvents	: 0.0%
Solids Content	: Not available
Other Information	: No further relevant information available.

Section 10. Stability and Reactivity

Reactivity : No further relevant information available.

CHEMICAL STABILITY

Thermal Decomposition/ Conditions to be Avoided	: No decomposition if used according to specifications.
Possibility of Hazardous Reactions	: No further information is available.
Conditions to Avoid	: Exposure to high temperatures.
Incompatible Materials	: Strong oxidizers, acids, and bases.
Hazardous Decomposition Products	: Carbon Monoxide, Carbon Dioxide, Aldehydes, acids.

Section 11. Toxicological Information

Acute Toxicity	
Primary Irritant Effect	: On the skin: Irritant to skin and mucous membranes. On the eye: Irritating effect.
Sensitization	: Skin contact: Sensitization possible through skin contact.
Additional Toxicological Information:	: The product shows the following dangers according to internally approved calculation methods for preparations: Irritant.

Carcinogenic Categories	Components
IARC (International Agency for Research on Cancer)	13463-67-7 titanium dioxide 2B
NTP (National Toxicology Program)	None of the ingredients are listed.
OSHA-Ca (Occupational Safety & Health Administration)	None of the ingredients are listed.

Section 12. Ecological Information

Aquatic Toxicity	: No further relevant information available.
Persistence and Degradability	: No further relevant information available.

BEHAVIOR IN ENVIRONMENTAL SYSTEMS

Bioaccumulative Potential	: No further relevant information available.
Mobility in Soil	: No further relevant information available.

ECOTOXICAL EFFECTS

Remark	: Toxic for fish.
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ADDITIONAL ECOLOGICAL INFORMATION

General Notes	: At present there are no ecotoxicological assessments.
Results of PBT and vPvB Assessment	: PBT: <i>Not applicable.</i> vPvB: <i>Not applicable.</i>
Other Adverse Effects	: No further relevant information available.

Section 13. Disposal Considerations

Waste Treatment Methods Recommendation	: Must be specially treated adhering to official regulations.
Uncleaned Packagings Recommendation	: Disposal must be made according to official regulations.

Section 14. Transport Information

UN-Number	: DOT: Not regulated IMDG, IATA: UN3082	
UN Proper Shipping Name	: DOT: Not regulated IMDG: Environmentally hazardous substance, liquid, N.O.S. (Bisphenol A Epoxy Resin) marine pollutant IATA: Environmentally hazardous substance, liquid, N.O.S. (Bisphenol A Epoxy Resin)	
Transport Hazard Class(es)	: DOT Class: Not regulated IMDG, IATA Class: 9 Miscellaneous dangerous substances and articles. Label: 9	
Packing Group	: DOT: Not regulated IMDG, IATA: III	
Environmental Hazards	: Marine Pollutant: Yes Special Marking (ADR): Special Marking (IATA):	
Special Precautions for User	: Warning: Miscellaneous dangerous substances and articles EMS Number: F-A, S-F Stowage Category: A	
Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code	: Not applicable	
Transport/Additional Information	: Not dangerous according to the above specifications. Epoxy Resin - This product is not considered to be DOT hazardous when transported via any mode within the United States. However, if this product is transported via any mode within the European Community it is considered to be an Environmentally Hazardous Substance, Liquid Epoxy Resin, UN3082, Class 9	
UN "Model Regulation"	: UN 3082 Environmentally hazardous substances, liquid, N.O.S. (Bisphenol A Epoxy Resin), 9, III	

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA

Section 355 (extremely hazardous substances)	: None of the ingredients are listed.
Section 313 (specific toxic chemical listings)	: None of the ingredients are listed
TSCA (Toxic Substance Control Act)	: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

PROPOSITION 65

Chemicals Known to Cause Cancer	: None of the ingredients are listed.
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Section 15. Regulatory Information *cont'd.*

Chemicals Known to Cause Reproductive Toxicity for Females	: None of the ingredients are listed.
Chemicals Known to Cause Reproductive Toxicity for Males	: None of the ingredients are listed.
Chemicals Known to Cause Developmental Toxicity	: None of the ingredients are listed.
(DSL) Canada Domestic Substance List	: All components of this product are on the DSL (Canada Domestic Substance List) are exempt from the DSL requirements.
New Jersey Right-To-Know List	: 1317-65-3 Limestone 1332-58-7 Kaolin 13463-67-7 titanium dioxide
New Jersey Special Hazardous Substance List	: None of the ingredients are listed.
Pennsylvania Right-To-Know List	: 1317-65-3 Limestone 1332-58-7 Kaolin 13463-67-7 titanium dioxide
Pennsylvania Special Hazardous Substance List	: None of the ingredients are listed.

CANCEROGENICITY CATEGORIES

EPA (Environmental Protection Agency)	: None of the ingredients are listed.
TLV (Threshold Limit Value Established by ACGIH)	: 1332-58-7 Kaolin 13463-67-7 titanium dioxide
MAK (German Maximum Workplace Concentration)	: 13463-67-7 titanium dioxide
NIOSH-Ca (National Institute for Occupational Safety and Health)	: 13463-67-7 titanium dioxide

NATIONAL REGULATIONS

Water Hazard Class	: Water hazard class 2 (Self-assessment): hazardous for water.
Chemical Safety Assessment	: A Chemical Safety Assessment has not been carried out.

Section 16. Other Information

Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, The D.S. Brown Company makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will The D.S. Brown Company or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

Section 16. Other Information *cont'd.*

Department Issuing SDS : Environment protection department.

Creation Date : 01/17/2017

Date of Preparation/ Last Revision : 08/16/2017

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3