

Safety Data Sheet

Prepared In Accordance With HCS 29
C.F.R. 1910.1200

STONHARD**1. Identification of the Substance/Mixture and the Company/Undertaking**

- 1.1 Product Identifier** 53144/B **Revision Date:** 03/19/2025
Product Name: Stonchem 691 Conductive Novolac Pewter Resin **Supersedes Date:** 02/14/2025
- 1.2 Relevant identified uses of the substance or mixture and uses advised against** Base component of 2 components coating - Industrial use. Advised against: others than recommended
- 1.3 Details of the supplier of the safety data sheet**
- Manufacturer:** Stonhard, Division of StonCor Group, Inc.
1000 East Park Avenue
Maple Shade, NJ 08052

+1 856 7797500 (US)
- Datasheet Produced by:** ehs@stonhard.com
- 1.4 Emergency telephone number:** +1 703-741-5970 - North America
+1 800-424-9300
+55 11 4349 1359 - South America
+52 55 8526 4930 - Central America
+44 20 3885 0382 - Middle East, Eastern Europe, Western Europe, And Africa
+65 3163 8374 - Asia, South Asia, And Oceania

2. Hazard Identification**2.1 Classification of the substance or mixture**

Acute Toxicity, Inhalation, category 3
Hazardous to the aquatic environment, Chronic, category 2
Carcinogenicity, category 1B
Eye Irritation, category 2A
Germ Cell Mutagenicity, category 2
Skin Irritation, category 2
Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

Benzyl alcohol, Resorcinol diglycidyl ether, Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFDGE, PHENOL, 4,4'-(1-METHYLETHYLIDENE) BIS-, POLYMER WITH (CHLOROMETHYL) OXIRANE

HAZARD STATEMENTS

Acute Toxicity, Dermal, category 4	H312	Harmful in contact with skin.
Skin Irritation, category 2	H315	Causes skin irritation.
Skin Sensitizer, category 1	H317	May cause an allergic skin reaction.
Eye Irritation, category 2A	H319	Causes serious eye irritation.
Acute Toxicity, Inhalation, category 3	H331	Toxic if inhaled.
Germ Cell Mutagenicity, category 2	H341	Suspected of causing genetic defects.
Carcinogenicity, category 1B	H350-1B	May cause cancer.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

PRECAUTION PHRASES

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P308+313	IF exposed or concerned: Get medical advice/attention.
P308+P313	IF exposed or concerned: Get medical advice/attention
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P337+313	If eye irritation persists: Get medical advice/attention.
P352	Wash with plenty of soap and water.
P362+364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P405	Store locked up.
P501	Dispose of contents/container to waste treatment/disposal facility in accordance with local, state, and federal regulations.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients**3.2 Mixtures****Hazardous ingredients**

<u>Name According to EEC</u>	<u>EINEC No.</u>	<u>CAS-No.</u>	<u>%</u>	<u>Classifications</u>	
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFDGE	701-263-0	9003-36-5	50 - <75	H315-317-319-411	Aquatic Chronic 2, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1
Resorcinol diglycidyl ether	202-987-5	101-90-6	10 - <25	H311-315-317-319-3 41-350-412	Acute Tox. 3 Dermal, Aquatic Chronic 3, Carc. 1B, Eye Irrit. 2, Muta. 2, Skin Irrit. 2, Skin Sens. 1
titanium dioxide	236-675-5	13463-67-7	10 - <25	H351	Carc. 2
Benzyl alcohol	202-859-9	100-51-6	2.5 - <10	H302-312-317-319-3 31	Acute Tox. 3 Inhalation, Acute Tox. 4 Dermal, Acute Tox. 4 Oral, Eye Irrit. 2, Skin Sens. 1B
PHENOL, 4,4'-(1-METHYLETHYLIDENE) BIS-, POLYMER WITH (CHLOROMETHYL) OXIRANE	500-033-5	25068-38-6	2.5 - <10	H315-317-319-411	Aquatic Chronic 2, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1
carbon black		1333-86-4	0.1 - <1.0		

CAS-No.

9003-36-5
101-90-6
13463-67-7
100-51-6
25068-38-6
1333-86-4

M-Factors

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures**4.1 Description of First Aid Measures**

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice.

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.

AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Irritating to skin. May cause sensitization by skin contact. Prolonged or repeated exposure increases the risk. Harmful to aquatic organisms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-fighting Measures**5.1 Extinguishing Media:**

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. High volume water jet. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Contains epoxy constituents. See information supplied by the manufacturer.

6. Accidental Release Measures**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. May cause long-term adverse effects in the aquatic environment.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

7. Handling and Storage**7.1 Precautions for safe handling**

INSTRUCTIONS FOR SAFE HANDLING: Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment.

PROTECTION AND HYGIENE MEASURES: Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Extremes of temperature and direct sunlight.

STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

The mixing and application to be in accordance with the technical data sheets.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits (US)

<u>Name</u>	<u>CAS-No.</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL</u>	<u>ACGIH Ceiling</u>
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFDGE	9003-36-5			
Resorcinol diglycidyl ether	101-90-6			
titanium dioxide	13463-67-7	10 MGM3	2.5 MGM3	2.5 MGM3 0.2 MGM3
Benzyl alcohol	100-51-6			
PHENOL, 4,4'-(1-METHYLETHYLIDENE) BIS-, POLYMER WITH (CHLOROMETHYL) OXIRANE	25068-38-6			
carbon black	1333-86-4	3 MGM3		

<u>Name</u>	<u>CAS-No.</u>	<u>OSHA PEL</u>	<u>OSHA STEL</u>
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFDGE	9003-36-5		
Resorcinol diglycidyl ether	101-90-6		
titanium dioxide	13463-67-7	15 MGM3	
Benzyl alcohol	100-51-6		
PHENOL, 4,4'-(1-METHYLETHYLIDENE) BIS-, POLYMER WITH (CHLOROMETHYL) OXIRANE	25068-38-6		
carbon black	1333-86-4	3.5 MGM3	

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required.

EYE PROTECTION: Safety glasses.

HAND PROTECTION: Impervious gloves.

Body Protection: Long sleeved clothing.

Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Pewter
Physical State	LIQUID
Odor	Faint epoxy
Odor threshold	Not determined
pH	Non-aqueous
Melting point / freezing point (°C)	Not determined
Boiling point/range (°C)	N.D. - N.D.
Flash Point, (°F / °C)	>201F / >94C
Evaporation rate	Not determined
Flammability (solid, gas)	Not determined
Upper/lower flammability or explosive limits	N/A - N/A
Vapour Pressure	Not determined
Vapour density	Heavier than air
Relative density	Not determined
Solubility in / Miscibility with water	Negligible
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature (°C)	Not determined
Decomposition temperature (°C)	Not determined
Viscosity	Not determined
Explosive properties	Not applicable
Oxidising properties	Not applicable

9.2 Other information

VOC Content g/l:	80
Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.	
Specific Gravity (g/cm3)	1.346

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed. Stable. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong oxidizing agents. Acids and bases.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours. Alcohols. Exothermic reaction. Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50: No information

Inhalation LC50: No information

Irritation: No information available.

Corrosivity: Not corrosive.

Sensitization: Skin sensitizer.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

If no information is available above under Acute Toxicity then 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>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFEDGE	>2000 mg/kg, rat	>2000 mg/kg, rat		0.000	0.000
101-90-6	Resorcinol diglycidyl ether	2570 mg/kg Rat			0.000	0.000
13463-67-7	titanium dioxide	10000 mg/kg, oral (rat)			0.000	6,82 mg/l (rat) 4h
100-51-6	Benzyl alcohol	1620 mg/kg, rat	2000 mg/kg, rabbit	4.178 mg/l, rat, 4h	0.000	4.178 mg/l, 4h, rat
25068-38-6	PHENOL, 4,4'-(1-METHYLETHYLIDENE) BIS-, POLYMER WITH (CHLOROMETHYL) OXIRANE	>2000 mg/kg, rat, oral	>2000 mg/kg, rat		0.000	0.000
1333-86-4	carbon black	>8000 mg/kg oral, rat			0.000	0.000

Additional Information:

This product is classified as a "Reproductive Toxicity - Category 2" due to containing a substance classified as a reproductive toxin via ingestion / oral exposure route only. Normal product application methods by trained crew members would not present a risk of oral exposure or ingestion. This product may contain Titanium Dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities.

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):	No information
IC50 72hr (Algae):	No information
LC50 96hr (fish):	No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB assessment: The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

12.6 Other adverse effects: No information

<u>CAS-No.</u>	<u>Chemical Name</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
9003-36-5	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol/BPFDGE	2 mg/l	>1.8 mg/l	1.9 mg/l
101-90-6	Resorcinol diglycidyl ether	No information	No information	
13463-67-7	titanium dioxide	>100 mg/l (EC50, 48h, Daphnia magna OECD202)ation	No information	>1000 mg/l
100-51-6	Benzyl alcohol	230 mg/l	700 mg/l	460 mg/l
25068-38-6	PHENOL, 4,4'-(1-METHYLETHYLIDENE) BIS-, POLYMER WITH (CHLOROMETHYL) OXIRANE	1.8 mg/l	No information	1.3 mg/L
1333-86-4	carbon black	No information	No information	

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

14.1	UN number	UN3082
14.2	UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
	Technical name	RESORCINOL DIGLYCIDYL ETHER; 1,3-BIS(2,3-EPOXYPROPOXY) BENZENE, PHENOL, 4,4'-(1-METHYLETHYLIDENE) BIS-, POLYMER WITH (CHLOROMETHYL) OXIRANE
14.3	Transport hazard class(es)	9
	Subsidiary shipping hazard	Not applicable
14.4	Packing group	III
14.5	Environmental hazards	Not applicable
14.6	Special precautions for user	Not applicable
	EmS-No.:	F-A, S-F
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not applicable

15. Regulatory Information

- 15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

U.S. Federal Regulations: As follows -

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:

Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Germ cell mutagenicity

Sara Section 313:

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

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>%</u>
Resorcinol diglycidyl ether	101-90-6	17.32

Toxic Substances Control Act:

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

<u>Chemical Name</u>	<u>CAS-No.</u>
1,6 hexandiol glycidyl ether	16096-31-4

U.S. Clean Air Act:

EPA Coating Category:	Industrial Maintenance Coating
EPA VOC Content Limit (g/l):	450
Product VOC Content (g/l)	80
Thinning Recommendations:	None
Application Recommendations:	For professional use only.

* As per the federal EPA definition for coating categories in 40 CFR 59.401.

** Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

U.S. State Regulations: As follows -**New Jersey Right-to-Know:**

The following materials are non-hazardous, but are among the top five components in this product.

Chemical Name**CAS-No.**

No NJ Right-To-Know components exist in this product.

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

California Proposition 65:

WARNING: Cancer - www.P65Warnings.ca.gov

No Proposition 65 Reproductive Toxins exist in this product.

International Regulations: As follows -*** Canadian DSL:**

All chemical ingredients included on inventory or exempt.

15.2 Chemical Safety Assessment:

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

16. Other Information

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

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Reasons for revision

Substance and/or Product Properties Changed in Section(s):

14 - Transportation Information

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark.
- Joint Research Centre in Ispra, Italy.
- Regulation (EC) 1272/2008 with subsequent amendments.
- Regulation (EC) 1272/2006 with subsequent amendments.
- Commission Regulation (EU) 2020/878
- EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

Acronym & Abbreviation Key:

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
ppm	Parts per million
mg/m3	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	Milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%

EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects
IMO	International Maritime Organization
Note P:	The classification as a carcinogen or mutagen need not apply; the substance contains less than 0,1 % w/w benzene
Note 10:	The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter $\leq 10 \mu\text{m}$.

For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.

