



## Safety Data Sheet according to Regulation (EC) 'No. 2015/830

### SECTION 1: Identification of the Substance/Mixture and the Company/Undertaking

<b>1.1 Product Identifier</b>	H220	<b>Revision Date:</b>	10/07/2020
<b>Product Name:</b>	HI EP SEALER PART A	<b>Supersedes Date:</b>	27/08/2019
		<b>Version Number:</b>	9
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	Base component of 2 components coating - Industrial use. Advised against: Please see Technical Data Sheet.		
<b>1.3 Details of the supplier of the safety data sheet</b>			
<b>Importer:</b>	None		
<b>Manufacturer:</b>	Hummervoll Industribelegg A/S Sanddalsringen 3 N-5225 NESTTUN Norway		
	Regulatory / Technical Information: +47 55 92 27 00 +47 55 92 27 10 (Fax) <a href="http://www.hummervoll.no">http://www.hummervoll.no</a>		
<b>Datasheet Produced by:</b>	Chen, Shi - ehs@stoncor.com		
<b>1.4 Emergency telephone number:</b>	CHEMTREC +1 703 5273887 (Outside US)		

### SECTION 2: Hazard Identification

#### 2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

#### HAZARD STATEMENTS

Other EU extensions	EUH205
Skin Irritation, category 2	H315
Skin Sensitizer, category 1	H317
Eye Irritation, category 2	H319
Hazardous to the aquatic environment, Chronic, category 2	H411

## 2.2 Label elements

### Symbol(s) of Product



### Signal Word

Warning

### Named Chemicals on Label

bis-[4-(2,3-epoxipropoxy)phenyl]propane, Epoxy resin based on bisphenol F, Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

### HAZARD STATEMENTS

Other EU extensions	EUH205	Contains epoxy constituents. May produce an allergic reaction.
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.
Hazardous to the aquatic environment, Chronic, category 2	H411	Toxic to aquatic life with long lasting effects.

### PRECAUTION PHRASES

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.

## 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.

## SECTION 3: Composition/Information On Ingredients

### 3.2 Mixtures

#### Hazardous Ingredients

CAS-No.	EINEC No.	Name According to EEC	%
1675-54-3	216-823-5	bis-[4-(2,3-epoxipropoxy)phenyl]propane	50 - <75
9003-36-5	500-006-8	Epoxy resin based on bisphenol F	10 - <25
68609-97-2	271-846-8	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	10 - <25

CAS-No.	REACH Reg No.	CLP Symbols	CLP Hazard Statements	M-Factors
1675-54-3	01-2119456619-26	GHS07-GHS09	H315-317-319-411	
9003-36-5	01-2119454392-40	GHS07-GHS09	H315-317-411	
68609-97-2	01-2119485289-22	GHS07	H315-317	

**Remarks:** CAS No. 9003-36-5 identified as EC No. 701-263-0 under REACH Registration

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

## SECTION 4: First-aid Measures

### 4.1 Description of First Aid Measures

**GENERAL NOTES:** Show this safety data sheet to the doctor in attendance.

**AFTER INHALATION:** Move to fresh air. Provide fresh air, rest and warmth. Call a physician immediately. Give oxygen or artificial respiration if needed. When risk of unconsciousness, place and transport the victim in secured recovery position.

**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. Do not use solvent or thinners to clean skin.

**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:** If vomiting occurs spontaneously: Keep head below hips to prevent aspiration of stomach vomit into lungs. Provide fresh air, rest and warmth. Do not induce vomiting. Get immediate medical attention. 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**

May cause sensitization by skin contact. Irritating to eyes and skin.

#### **4.3 Indication of any immediate medical attention and special treatment needed**

Treat symptomatically. No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11. When symptoms persist or in all cases of doubt seek medical advice.

### **SECTION 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. Do not use a solid water stream as it may scatter and spread fire.

#### **5.2 Special hazards arising from the substance or mixture**

Heating or fire conditions liberates toxic gas. As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Vapours may form explosive mixtures with air. Solvent vapours are heavier than air and may spread along floors and ignite.

#### **5.3 Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### **SECTION 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. Local authorities should be advised if significant spillages cannot be contained.

#### **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). Clean with detergents. Avoid solvents.

#### **6.4 Reference to other sections**

**FURTHER INSTRUCTIONS:** Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

### **SECTION 7: Handling and Storage**

#### **7.1 Precautions for safe handling**

Electrical equipment should be protected to the appropriate standard. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Use only explosion-proof equipment. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is being used. Apply technical measures to comply with the occupational exposure limits (see section 8). People handling polyurethane or epoxy products must have received special training according to guidelines from the National Occupational Health and Safety Board.

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:** Avoid heat, sparks, flames and other ignition sources.

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

### 7.3 Specific end use(s)

No specific advice for **end use** available.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Ingredients with Occupational Exposure Limits (EU)

<u>Name</u>	<u>CAS-No.</u>	<u>LTEL ppm</u>	<u>STEL ppm</u>	<u>STEL mg/m3</u>	<u>LTEL mg/m3</u>
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3				
Epoxy resin based on bisphenol F	9003-36-5				
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2				

<u>Name</u>	<u>CAS-No.</u>	<u>OEL Note</u>
bis-[4-(2,3-epoxipropoxy)phenyl]propane	1675-54-3	
Epoxy resin based on bisphenol F	9003-36-5	
Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	68609-97-2	

**FURTHER ADVICE:** Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation. Annotations: Carc = Capable of causing cancer and/or heritable genetic damage, Sen = Capable of causing occupational asthma, Sk = Can be absorbed through the skin.

### 8.2 Exposure controls

#### Personal Protection

**RESPIRATORY PROTECTION:** Wear a self-contained breathing apparatus or full-face airline respirator during spraying operations and long-term exposure. When working in confined or poorly ventilated spaces, a self-contained breathing apparatus or full-face airline respirator must be used. When painting small areas, or when using a roller or brush, respiratory protection with combination filter (dust and gas filter, EN 14387:2004+A1:2008) may be used: Gas filter type A2 (organic substances). Dust filter P3 (for fine dust).

**EYE PROTECTION:** If splashes are likely to occur, wear: Face-shield, tightly fitting safety goggles (EN 166).

**HAND PROTECTION:** Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Long sleeved clothing. Remove and wash contaminated clothing before re-use. Use chemical resistant gloves and lotions and barrier creams to prevent drying of the skin. Protective gloves complying with EN 374: Butyl rubber. Nitril rubber. Recommended glove material for mixed product: Protective gloves complying with EN 374: Butyl rubber. Nitril rubber.

**OTHER PROTECTIVE EQUIPMENT:** Ensure that eyewash stations and safety showers are close to the workstation location.

**ENGINEERING CONTROLS:** Ensure adequate ventilation, especially in confined areas.

**Chemical Name:**

Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

**EC No.:**

271-846-8

**CAS-No.:**

68609-97-2

**DNELs - Derived no effect level**

Route of Exposure	Workers				Consumers			
	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effect local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							
Inhalation								
Dermal								

**PNEC's - Predicted no effect concentration**

Environmental protection target	PNEC
Fresh water	0.0072 mg/l
Fresh water sediments	66.77 mg/kg dw
Marine water	0.00072 mg/l
Marine sediments	6.677 mg/kg dw
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
Air	

**SECTION 9: Physical and Chemical Properties****9.1 Information on basic physical and chemical properties**

<b>Appearance:</b>	Yellowish
<b>Physical State</b>	Liquid
<b>Odor</b>	Characteristic
<b>Odor threshold</b>	Not determined
<b>pH</b>	Not determined
<b>Melting point / freezing point (°C)</b>	Not determined
<b>Boiling point/range (°C)</b>	>200
<b>Flash Point, (°C)</b>	>150
<b>Evaporation rate</b>	Not determined
<b>Flammability (solid, gas)</b>	Not determined
<b>Upper/lower flammability or explosive limits</b>	Not determined
<b>Vapour Pressure</b>	Not determined
<b>Vapour density</b>	Not determined
<b>Relative density</b>	1.10 - 1.16
<b>Solubility in / Miscibility with water</b>	Insoluble
<b>Partition coefficient: n-octanol/water</b>	Not determined
<b>Auto-ignition temperature (°C)</b>	Not determined
<b>Decomposition temperature (°C)</b>	Not determined
<b>Viscosity</b>	80 - 110
<b>Explosive properties</b>	Not determined
<b>Oxidising properties</b>	Not determined

**9.2 Other information**

VOC Content g/l: 0.00

Specific Gravity (g/cm<sup>3</sup>) 1.13**SECTION 10: Stability and Reactivity****10.1 Reactivity**No **reactivity** hazards known under normal storage and use conditions.**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Polymerisation can occur.

**10.4 Conditions to avoid**

Avoid heat, sparks, flames and other ignition sources.

**10.5 Incompatible materials**

Amines. Keep away from strong oxidising agents and strongly acid or alkaline materials.

**10.6 Hazardous decomposition products**In case of fire or hot work operations, **hazardous decomposition products** may be formed such as: Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), aliphatic amines, aldehydes.**SECTION 11: Toxicological Information****11.1 Information on toxicological effects****Acute Toxicity:**

Oral LD50: No information available on the product itself as the product is not tested.

Inhalation LC50: No information available on the product itself as the product is not tested.

**Irritation:** Irritating to eyes and skin. Vapour/spray mist may irritate respiratory system and lungs.**Corrosivity:** No information available.**Sensitization:** May cause an allergic skin reaction.**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>Name According to EEC</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Vapor LC50</u>	<u>Gas LC50</u>	<u>Dust/Mist LC50</u>
1675-54-3	bis-[4-(2,3-epoxipropoxy)phenyl]propane	>2000 mg/kg (oral-rat)	>2000 mg/kg (dermal-rabbit)	No information	No information	No information

9003-36-5	Epoxy resin based on bisphenol F	>5000 mg/Kg (rat, oral)	>2000 mg/Kg (rat, dermal)	No information	No information	No information
68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	17100 mg/kg, oral, rat	4500 mg/kg, dermal, rabbit	No information	No information	No information

**Additional Information:**

Chronic exposure causes drying effect on the skin and eczema. The product is irritating to the eyes and may cause sensitisation to the respiratory system. Swallowing concentrated chemical may cause severe internal injury. Inhalation of vapour or mist can cause headache, nausea, irritation of nose, throat, and lungs. Repeated skin contact leads to irritation and to sensitisation, possible with cross-sensitisation to other epoxies.

## SECTION 12: Ecological Information

**12.1 Toxicity:**

<b>EC50 48hr (Daphnia):</b>	No information
<b>IC50 72hr (Algae):</b>	No information
<b>LC50 96hr (fish):</b>	No information

**12.2 Persistence and degradability:** Not readily biodegradable

**12.3 Bioaccumulative potential:** Not expected to bioaccumulate.

**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>Name According to EEC</u>	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>
1675-54-3	bis-[4-(2,3-epoxipropoxy)phenyl]propane	2.1 mg/L (daphnia)	>11 mg/L (EC50, algae)	1.3 mg/L (fish)
9003-36-5	Epoxy resin based on bisphenol F	1.6 mg/l (Daphnia)	1.8 mg/l (algae, EC50 static)	0.55 mg/l (fish)
68609-97-2	Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	No information	No information	> 5.000 mg/l (Oncorhynchus mykiss, CL50, 96h static),

## SECTION 13: Disposal Considerations

**13.1 WASTE TREATMENT METHODS:** Do not burn, or use a cutting torch on, the empty drum. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local state, and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems.

**European Waste Code:** 08 01 11\*  
**Packaging Waste Code:** 15 01 10

**SECTION 14: Transport Information**

14.1	UN number	UN3082
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BIPHENOL A EPOXY RESIN)
	Technical name	Bisphenol A epoxy resin
14.3	Transport hazard class(es)	9
	Subsidiary shipping hazard	Not applicable
14.4	Packing group	III
14.5	Environmental hazards	Marine pollutant: Yes (Bisphenol A epoxy resin)
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

**SECTION 15: Regulatory Information****15.1 Safety, health and environmental regulations/legislation for the substance or mixture:****National Regulations:**

Denmark Product Registration Number:	Not available
Danish MAL Code:	Not available
Danish MAL Code - Mixture:	Not available
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	P-70932
Germany WGK Class:	3

Covered by Directive 2012/18/EC (Seveso III):	E2
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Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:	Entry 3
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**Annex XIV - Authorisation List:**

<u>CAS-No.</u>	<u>Name According to EEC</u>
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Not Applicable

**SVHC - Substances of very high concern (Candidate List):**

<u>CAS-No.</u>	<u>Name According to EEC</u>
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Not Applicable

**15.2 Chemical Safety Assessment:**

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

**SECTION 16: Other Information**

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

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H411	Toxic to aquatic life with long lasting effects.

### Reasons for revision

Changes have been made to Section 15 of the Safety Data Sheet (SDS). Please refer to the Regulatory Information in Section 15 of this SDS. . . .

### 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;  
 European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;  
 European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP);  
 EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes".

### 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/m <sup>3</sup>	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

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.