Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name	**TEPOX COLORATO**
Chemical name and synonym	**COLOURED LIQUID EPOXY RESIN**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use	**DYE FOR EPOXY RESINS**

1.3. Details of the supplier of the safety data sheet

Name	**Tenax Spa**
Full address	**Via I Maggio, 226**
District and Country	**37020 Volargne (VR)** **Italy** **Tel. +39 045 6887593** **Fax +39 045 6862456**
e-mail address of the competent person responsible for the Safety Data Sheet	**tenax@tenax.it**
Product distribution by	**TENAX USA 1408 Center Park Drive, 28217 Charlotte Tel. 001 704 583 1173** **Fax 001 704 583 3166 info@tenaxusa.com**

1.4. Emergency telephone number

For urgent inquiries refer to	**1-800-5355053 (1-352-323-3500 international)**

2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulationn 1907/2006 and subsequent amendments.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Danger Symbols: Xi-N

R phrases: 36/38-43-51/53

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

2.2. Label elements.

Hazard labelling pursuant to Directives 67/548/EEC and 1999/45/EC and subsequent amendments and supplements.

Xi

IRRITANT

N

DANGEROUS FOR THE ENVIRONMENT

R36/38	IRRITATING TO EYES AND SKIN.
R43	MAY CAUSE SENSITIZATION BY SKIN CONTACT.
R51/53	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
S24/25	AVOID CONTACT WITH SKIN AND EYES.
S26	IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
S29	DO NOT EMPTY INTO DRAINS.
S37	WEAR SUITABLE GLOVES.
S61	AVOID RELEASE TO THE ENVIRONMENT. REFER TO SPECIAL INSTRUCTIONS/SAFETY DATA SHEETS.

Contains epoxy constituents. See information supplied by the manufacturer.

Contains: REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN) GLYCIDYL NEODECANOATE

2.3. Other hazards.

Information not available.

3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification.		Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)				
CAS.	*25068-38-6*	30 - 50	Xi R36/38, Xi R43, N R51/53	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC.	*500-033-5*			
INDEX.	*603-074-00-8*			
Reg. no.	*01-2119456619-26*			
GLYCIDYL NEODECANOATE				
CAS.	*26761-45-5*	10 - 20	Xi R43, N R51/53	Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC.	*247-979-2*			
INDEX.	*-*			

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

4. First aid measures.

4.1. Description of first aid measures.

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.
SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.
INHALATION: Remove to open air. If breathing is irregular, seek medical advice.
INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed.

For symptoms and effects caused by the contained substances see chap. 11.

4.3. Indication of any immediate medical attention and special treatment needed.

Follow doctor's orders.

5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING MEDIA
The extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulised water.
EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS
None in particular.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

5.3. Advice for firefighters.

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a depressurised mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in

the event of large quantities of fume.

6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.
Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, see the other sections of this sheet.

6.2. Environmental precautions.
The product must not penetrate the sewers, surface water, ground water and neighbouring areas.

6.3. Methods and material for containment and cleaning up.
Use inert absorbent material (sand, vermiculite, diatomeous earth, Kieselguhr, etc.) to soak up leaked product. Collect the majority of the remaining material and deposit it in containers for disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.
Any information on personal protection and disposal is given in sections 8 and 13.

7. Handling and storage.

7.1. Precautions for safe handling.
Do not smoke while handling and use.

7.2. Conditions for safe storage, including any incompatibilities.
Store in a well ventilated place, keep far away from sources of heat, bright flames and sparks and other sources of ignition.

7.3. Specific end use(s).
Information not available.

8. Exposure controls/personal protection.

8.1. Control parameters.
Information not available.

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Ask your chemical substance suppliers for advice when choosing personal protection equipment. Personal protection equipment must comply with the rules in force indicated below.
HAND PROTECTION
Protect hands with category II (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in PVC, neoprene, nitryl or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.
EYE PROTECTION
Wear protective airtight goggles (ref. standard EN 166).
SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.
RESPIRATORY PROTECTION
If the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear a mask with an B or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (ref. standard EN 141).
The use of breathing protection equipment, such as masks with organic vapour and dust/mist cartridges, is necessary in the absence of technical measures limiting worker exposure. The protection provided by masks is in any case limited.
If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).
An emergency eye washing and shower system must be provided.

9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance		viscous liquid
Colour		as showed in color folder
Odour		typical
Odour threshold.		Not available.
pH.		Not available.
Melting or freezing point.		Not available.
Boiling point.		Not available.
Distillation range.		Not available.
Flash point.	>	150 °C.
Evaporation Rate		Not available.
Flammability of solids and gases		Not available.
Lower inflammability limit.		Not available.
Upper inflammability limit.		Not available.
Lower explosive limit.		Not available.
Upper explosive limit.		Not available.
Vapour pressure.		Not available.
Vapour density		Not available.
Specific gravity.		1,5 Kg/l
Solubility		insoluble in water
Partition coefficient: n-octanol/water		Not available.
Ignition temperature.		Not available.
Decomposition temperature.		Not available.
Viscosity		Not available.
Reactive Properties		Not available.

9.2. Other information.

VOC (Directive 1999/13/EC) :	0
VOC (volatile carbon) :	0

10. Stability and reactivity.

10.1. Reactivity.

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability.

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid.

Avoid overheating, electrostatic discharge and all sources of ignition.

10.5. Incompatible materials.

Information not available.

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

11. Toxicological information.

11.1. Information on toxicological effects.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation. Contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapour inhalation may slightly irritate the upper respiratory tract. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

Upon contact with skin, this product causes sensitization (dermatitis). Dermatitis derives from skin irritation on the areas which repeatedly come into contact with the sensitizing agent. Cutaneous lesions may include: erythemas, edemas, papules, vesicles, pustules, scurvies, ulcerations and exudative phenomena, whose intensity varies according to illness seriousness and affected areas.

Erythemas, edemas and exudative phenomena prevail during the acute phase. Scurfy skin, dryness, ulcerations and skin thickening prevail during the chronic phase.

12. Ecological information.

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it may even have negative effects on acquatic environment.

12.1. Toxicity.

Information not available.

12.2. Persistence and degradability.
Information not available.

12.3. Bioaccumulative potential.
Information not available.

12.4. Mobility in soil.
Information not available.

12.5. Results of PBT and vPvB assessment.
Information not available.

12.6. Other adverse effects.
Information not available.

13. Disposal considerations.

13.1. Waste treatment methods.
Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information.

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations.
These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR/RID Class:	9	UN:	3082
Packing Group:	III		
Label:	9		
Nr. Kemler:	90		
Limited Quantity.	5 lt		
Tunnel restriction code.	(E)		
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN); GLYCIDYL NEODECANOATE)		

Carriage by sea (shipping):

IMO Class:	9	UN:	3082
Packing Group:	III		
Label:	9		
EMS:	F-A, S-F		
Marine Pollutant.	YES		
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN); GLYCIDYL NEODECANOATE)		

Transport by air:

IATA:	9	UN:	3082
Packing Group:	III		
Label:	9		
Cargo:			
Packaging instructions:	964	Maximum quantity:	450 L
Pass.:			
Packaging instructions:	964	Maximum quantity:	450 L
Special Instructions:	A97, A158		
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN); GLYCIDYL NEODECANOATE)		

15. Regulatory information.

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

Seveso category. 9ii

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.
Point. 3

Substances in Candidate List (Art. 59 REACH).
None.

Substances subject to authorisarion (Annex XIV REACH).
None.

Healthcare controls.
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment.

A chemical safety assessment has been performed for the following contained substances.
REACTION PRODUCT: BISPHENOL A-(EPICHLORHYDRIN)

16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Respiratory / skin sensitization, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity category 2
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R36/38	IRRITATING TO EYES AND SKIN.
R43	MAY CAUSE SENSITIZATION BY SKIN CONTACT.
R51/53	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.

GENERAL BIBLIOGRAPHY
1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. The Merck Index. - 10th Edition
8. Handling Chemical Safety
9. Niosh - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique (toxicological sheet)
11. Patty - Industrial Hygiene and Toxicology
12. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

Note for users:
The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Changes to previous review:
The following sections were modified:
01.