



## Material Safety Data Sheet R 21 CE<sup>Plus</sup> Part A

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	R 21 CE <sup>Plus</sup> PART A
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### 2. HAZARDS IDENTIFICATION

May cause sensitisation by skin contact. Irritating to eyes and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CLASSIFICATION Xi;R36/38. R43. N;R51/53.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
Bisphenol F epichlorhydrin resin with MW <700		28064-14-4	1-5%	Xi;R36/38. N;R51/53. R43.
Epoxy resin		55492-52-9	10-30%	Xi;R36/38. N;R51/53. R43.
EPOXY RESIN (Number average MW ≤ 700 )	500-033-5	25068-38-6	30-60%	R43 Xi;R36/38 N;R51/53
LEVELLING ADDITIVE			< 1%	Xn;R65. Xi;R36/37. N;R51/53. R10.
N-METHYL-2-PYRROLIDONE	212-828-1	872-50-4	< 1%	Xi;R36/38
OXIRANE, MONO [(C12-14- ALKYL OXY)METHYL] DERIVS		68609-97-2	5-10%	R43 Xi;R38

The Full Text for all R-Phrases are Displayed in Section 16

### 4. FIRST-AID MEASURES

#### INHALATION

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

#### INGESTION

Rinse mouth thoroughly. Drink plenty of water. Get medical attention if any discomfort continues.

#### SKIN CONTACT

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

#### EYE CONTACT

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

### 5. FIRE-FIGHTING MEASURES

#### EXTINGUISHING MEDIA

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

#### SPECIAL FIRE FIGHTING PROCEDURES

Avoid breathing fire vapours.

#### PROTECTIVE MEASURES IN FIRE

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

**R 21 CE<sup>plus</sup> Part A****6. ACCIDENTAL RELEASE MEASURES****PERSONAL PRECAUTIONS**

Wear protective clothing as described in Section 8 of this safety data sheet.

**ENVIRONMENTAL PRECAUTIONS**

Avoid discharge into drains, water courses or onto the ground.

**SPILL CLEAN UP METHODS**

Stop leak if possible without risk. Absorb in vermiculite, dry sand or earth and place into containers. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

**7. HANDLING AND STORAGE****USAGE PRECAUTIONS**

Avoid spilling, skin and eye contact.

**STORAGE PRECAUTIONS**

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

**STORAGE CLASS**

Chemical storage.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
N-METHYL-2-PYRROLIDONE	WEL	25 ppm(Sk)	103 mg/m3(Sk)	75 ppm(Sk)	309 mg/m3(Sk)

**INGREDIENT COMMENTS**

WEL = Workplace Exposure Limits

**PROTECTIVE EQUIPMENT****PROCESS CONDITIONS**

Provide eyewash station.

**ENGINEERING MEASURES**

Provide adequate ventilation. Observe Workplace Exposure Limits and minimise the risk of inhalation of vapours.

**RESPIRATORY EQUIPMENT**

No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

**HAND PROTECTION**

Use protective gloves made of: Nitrile. Viton rubber (fluor rubber). Barrier cream applied before work may make it easier to clean the skin after exposure, but does not prevent absorption through the skin.

**EYE PROTECTION**

Wear tight-fitting goggles or face shield.

**OTHER PROTECTION**

Wear appropriate clothing to prevent any possibility of skin contact.

**HYGIENE MEASURES**

**DO NOT SMOKE IN WORK AREA!** Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

**R 21 CE<sup>plus</sup> Part A****9. PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Liquid	
COLOUR	Clear Liquid	
ODOUR	CHARACTERISTICS	
SOLUBILITY	Immiscible with water	
BOILING POINT (°C)	>100 760 mm Hg	DECOMPOSITION TEMPERATURE >200 (°C)
FLASH POINT (°C)	130 CC (Closed cup)	
VOC	31.13 g/L	

**10. STABILITY AND REACTIVITY**

## STABILITY

Stable under normal temperature conditions.

## CONDITIONS TO AVOID

Avoid contact with acids and alkalies.

## HAZARDOUS POLYMERISATION

Will not polymerise.

## MATERIALS TO AVOID

Strong oxidising substances.

## HAZARDOUS DECOMPOSITION PRODUCTS

Fire creates: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

**11. TOXICOLOGICAL INFORMATION**

## INHALATION

Irritating to respiratory system.

## INGESTION

May cause stomach pain or vomiting.

## SKIN CONTACT

May cause sensitisation by skin contact. Irritating to skin.

## EYE CONTACT

May cause severe irritation to eyes.

**12. ECOLOGICAL INFORMATION**

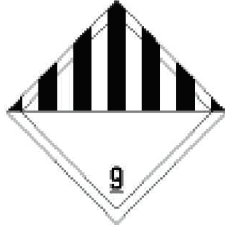
## ECOTOXICITY

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**13. DISPOSAL CONSIDERATIONS**

## DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

**14. TRANSPORT INFORMATION**

UK ROAD CLASS	9		
PROPER SHIPPING NAME	ENVIRONMENT HAZARDOUS SUBSTANCE, LIQUID, N.O.S (EPOXY RESIN (Number average MW <= 700 ), epoxy resin)		
UN NO. ROAD	3082	UK ROAD PACK GR.	III
ADR CLASS NO.	9	ADR CLASS	Class 9: Miscellaneous
dangerous substances and articles.			
ADR PACK GROUP	III	HAZARD NO. (ADR)	90
ADR LABEL NO.	9	HAZCHEM CODE	3Z
CEFIC TEC(R) NO.	90GM6-III	RID CLASS NO.	9
RID PACK GROUP	III	UN No. SEA	3082
IMDG CLASS	9	IMDG PACK GR.	III
EMS	F-A, S-F	MARINE POLLUTANT	No.
UN NO. AIR	3082	AIR CLASS	9
AIR PACK GR.	III		

**15. REGULATORY INFORMATION**

## LABELLING



Irritant



Dangerous for the environment

## CONTAINS

Bisphenol F epichlorhydrin resin with MW <700  
epoxy resin  
EPOXY RESIN (Number average MW <= 700 )  
OXIRANE, MONO [(C12-14- ALKYL)OXY]METHYL] DERIVS

## RISK PHRASES

R43 May cause sensitisation by skin contact.  
R36/38 Irritating to eyes and skin.  
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## SAFETY PHRASES

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S37 Wear suitable gloves.  
S24/25 Avoid contact with skin and eyes.  
S60 This material and its container must be disposed of as hazardous waste.  
S61 Avoid release to the environment. Refer to special instructions/safety data sheets.  
P5 Contains epoxy constituents. See information supplied by the manufacturer.

## STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations.

## APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

## GUIDANCE NOTES

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

**R 21 CE<sup>plus</sup> Part A****16. OTHER INFORMATION**

TRAINING ADVICE : The details of this data sheet must be passed on to all personnel handling the product.

## RISK PHRASES IN FULL

R10 Flammable.

R36/37 Irritating to eyes and respiratory system.

R36/38 Irritating to eyes and skin.

R38 Irritating to skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

**DISCLAIMER**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.