



R F Bright Enterprises Ltd

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Email: enquiries@rfbright.co.uk
Website: www.rfbright.co.uk

SECTION 1

- 1.1 Product identifier
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
- 1.3 Details of the supplier of the safety data sheet
- 1.4 Emergency telephone number

SECTION 2

- 2.1 Classification of the substance or mixture:
 - 2.1.1 Classification according to Regulation (EC) No 1272/2008 CLP
 - 2.1.2 Classification according to Directive 67/548/EEC
 - 2.1.3 Additional information

All recommendations are given in good faith but without warranty

Product Safety Data Sheet

CHEMSET® ES 8103 & ES 8110 Epoxy Enamelling Resins

IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

CHEMSET® ES 8103 Epoxy Enamelling Resin
CHEMSET® ES 8110 Epoxy Enamelling Resin – Superglaze Grade

Enamelling, surface coating

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HAZARDS IDENTIFICATION

Acute Tox. 4	H302
Skin Irrit. 2	H315
Skin Sens. 1	H317
Eye Irrit. 2	H319
Aquatic Chronic 2	H411

Harmful	Xi	R36/38, R43
Dangerous for the Environment	N	R51/53

For full text of R-phrases and Hazard- and EU Hazard- statements see SECTION 16.



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2.2 Label elements:

Hazard pictogram(s)



GHS07

GHS09

Signal word(s)

Hazard statement(s)

Precautionary statement(s)

Supplemental hazard information (EU)

2.3 Other hazards

SECTION 3

3.1 Substances

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Warning

H302 Harmful if swallowed
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

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351 +P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention
P337+P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/container to hazardous or special waste collection point in accordance with national regulations.

EUH205 Contains epoxy constituents. May produce an allergic reaction.

None known

COMPOSITION / INFORMATION ON INGREDIENTS

Bisphenol-A based epoxy resin	EC No: 500-033-5
Polyglycidyl ether	EC No: 292-011-4
Benzyl Alcohol	EC No: 202-859-9

JRD/JRD/AT

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SECTION 4

4.1 Description of first aid measures:

General notes

After inhalation

After skin contact

After eye contact

After swallowing

Self-protection of the first aider

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5

5.1 Extinguishing media

DO NOT USE

5.2 Specific hazards arising from the substance or mixture

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FIRST AID MEASURES

Provide personal protection for the first aider.
Contains epoxy constituents. May produce an allergic reaction.

Move the affected person to fresh air.
If affected person feels unwell get medical advice/attention.

Remove affected person from source of contamination.
Remove any clothing soiled by the product.
Wash the skin with plenty of soap and water.
If skin irritation or rash occurs get medical advice/attention.

Remove affected person from source of contamination.
Remove any contact lenses.
Rinse cautiously with water for several minutes.
If eye irritation persists get medical advice/attention.

DO NOT INDUCE VOMITING!
Never make an unconscious person vomit or drink fluids!
Get affected person to rinse mouth thoroughly then drink plenty of water.
Provide rest, warmth and fresh air.
If affected person feels unwell get medical advice/attention.

Wear protective gloves/protective clothing.

No further relevant information is available

No further relevant information is available

FIRE-FIGHTING MEASURES

Dry powder, foam, CO₂, dry sand

Water jet

May produce toxic fumes of carbon monoxide (CO) and carbon dioxide (CO₂) during a fire.



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5.3 Advice for fire fighters

SECTION 6

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel

6.1.2 For emergency responders

6.2 Environmental precautions

6.3 Methods and material for containment and cleaning up:

6.3.1 For containment

6.3.2 For cleaning up

6.3.3 Other information

6.4 Reference to other sections

SECTION 7

7.1 Precautions for safe handling

7.1.1 Protective measures

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Wear self-contained breathing apparatus.
Wear chemical protection suit if personal (close) contact is likely.

ACCIDENTAL RELEASE MEASURES

Wear suitable protective equipment as referred to in Section 8.
Stop leak if possible without risk.
Keep unprotected persons away.

Wear suitable protective equipment as referred to in Section 8.

Do not allow to enter drainage system, surface or ground water.
Inform authorities if there is a possibility that large amounts of product might enter sewer or waterway.

Prevent from spreading.
Prevent from entering drains/water courses.

Absorb in vermiculite, dry sand or earth and place into containers for recovery or disposal.
Wash area thoroughly after dealing with a spillage.

No further relevant information is available.

Dispose of contaminated material and dirty washing water as waste according to Section 13.

HANDLING AND STORAGE

Avoid spilling.
Avoid contact with skin and eyes.
Do not use in a confined space without good ventilation.
Do not eat, drink or smoke when using this product.

Avoid spilling.
Avoid contact with skin and eyes.
Ensure good ventilation.



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7.1.2 Advice on general occupational hygiene

7.2 Conditions for safe storage including any incompatibilities

7.3 Specific end use(s)

SECTION 8

8.1 Control parameters

8.2 Exposure controls

8.2.1 Appropriate engineering controls

8.2.2 Personal protection equipment:

Eye & face protection

Skin protection:

Hand protection

Other skin protection

Respiratory Protection

Thermal Hazards

All recommendations are given in good faith but without warranty

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Do not eat, drink or smoke when using this product.
Wash hands at the end of each work shift and before eating, drinking, smoking or using the toilet.
Remove contaminated clothing and protective equipment before entering eating areas.

Store in tightly closed containers in a dry, cool, well-ventilated place.
Store away from foodstuffs.
Keep in original containers.

This product has no specific end uses.

EXPOSURE CONTROLS / PERSONAL PROTECTION

Not required.

Avoid breathing fume/mist/vapours/spray.
Avoid contact with the eyes and skin.
Wash at the end of each work shift and before eating, drinking, smoking or using the toilet.
Do not eat, drink or smoke when using this product.
Wash promptly if skin becomes wet or contaminated.
Promptly remove any clothing that becomes contaminated and launder before reuse.
Avoid release to the environment.

No specific requirements noted, except this product must not be used in a confined space without good ventilation.

Use approved safety goggles or face shield.

Use suitable protective gloves.

Wear appropriate protective clothing to prevent any possibility of skin contact.

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

None known.



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8.2.3 Environmental Exposure Controls

SECTION 9

9.1 Information on basic physical and chemical properties:

Appearance

Odour

Odour threshold

pH

Melting point / freezing point

Initial boiling point and boiling range

Flash point

Evaporation rate

Flammability

Upper/lower flammability or explosive limits

Vapour pressure

Vapour density

Relative density

Solubility(ies):

Water at 20°C

Organic Solvent

Partition Coefficient:

n-octanol / water

Auto-ignition temperature

Decomposition temperature

Viscosity

Explosive properties

Oxidising properties

9.2 Other Information

SECTION 10

10.1 Reactivity

10.2 Chemical stability

10.3 Possibility of hazardous reactions

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Avoid release to the environment.
Runoff or release to sewer, waterway or ground is forbidden.

PHYSICAL AND CHEMICAL PROPERTIES

Pale coloured viscous liquid (may be supplied pre-coloured according to description on product label)

Slightly sweet

Not determined

7.0

Not determined

>200°C @ 760mm Hg

<100°C

Not determined

Product is not flammable under normal temperature conditions

Not determined

Not determined

Not determined

1.17 g/cm³ at 20°C

Partly soluble

Soluble

Not determined

<300°C

Not determined

Not determined

Not classified as explosive

Not classified as oxidising

No further relevant information available

STABILITY AND REACTIVITY

Reacts with amines.

No hazardous reaction when handled and stored according to provisions.

Exothermic reaction with amines.

Polymerisation may start at higher temperatures.



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- 10.4 Conditions to avoid
- 10.5 Incompatible materials
- 10.6 Hazardous decomposition products

SECTION 11

- 11.1 Information on toxicological effects:
 - Acute Toxicity
 - Skin corrosion / irritation
 - Serious eye damage / irritation
 - Respiratory or skin sensitisation
 - Germ cell mutagenicity
 - Carcinogenicity
 - Reproductive toxicity
 - Summary of evaluation of the CMR properties
 - STOT single exposure
 - STOT repeated exposure
 - Aspiration hazard

SECTION 12

- 12.1 Toxicity
- 12.2 Persistence and degradability
- 12.3 Bioaccumulative potential

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Contact with strong acids, alkaline materials and oxidising substances.

No further relevant information available.

High temperatures generate vapours/gases/fumes of carbon monoxide (CO) and carbon dioxide (CO₂).

TOXICOLOGICAL INFORMATION

No acute toxicity effects known.

Irritating to skin.

Irritating to eyes.

May cause irritation of the respiratory tract.
May cause sensitisation by skin contact.

No mutagenic effects known.

No carcinogenic effects known.

No reproductive toxicity effects known.

According to present knowledge no CMR effects are known.

No single exposure specific target organ toxicity effects known.

No repeated exposure specific target organ toxicity effects known.

No aspiration hazard effects known.

ECOLOGICAL INFORMATION

Dangerous for the environment.
May cause long-term adverse effects in the aquatic environment.

No further relevant information available.

No further relevant information available.



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12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

SECTION 13

13.1 Waste treatment methods

SECTION 14

14.1 UN number

14.2 Proper shipping name

14.3 Transport hazard class(es)

14.4 Packing group

14.5 Environmental hazards

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

SECTION 15

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

15.2 Chemical safety assessment

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No further relevant information available.

Not applicable.

No further relevant information available.

DISPOSAL CONSIDERATIONS

All waste should be disposed of using a registered waste carrier operating in accordance with local regulations.
Waste should not be disposed of by release to sewers.

TRANSPORT INFORMATION

UN 3082

Environmentally hazardous substance, liquid, n.o.s. (contains bisphenol-A epichlorhydrin reaction product)

Class 9 Miscellaneous dangerous substances and articles

III

Marine pollutant.

Not applicable.

This product is not intended to be transported in bulk.

REGULATORY INFORMATION

EU Legislation:

Regulation (EC) No 1272/2008 of the European Parliament and of the Council dated 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

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



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SECTION 16

16.1 Issue Date

Revisions Made

Supersedes Issue(s) Dated

16.2 Classification according to Regulation (EC) Nr. 1272/2008 [CLP]

Classification procedure

16.3 Classification according to Regulation Nr. 1999/45EC

16.4 Note:-

Product Safety Data Sheet

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OTHER INFORMATION

12 August 2013

None

21 December 1994, 12 August 2002, 17 October 2006 & 23 July 2009

H302	Harmful if swallowed
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

Calculation method

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

This product is intended for industrial use only and should be in used accordance with good industrial hygienic practice, the recommendations described in the relevant Product Information Sheets and in conformity with the current statutory regulations.

The information given is based on our present knowledge and is supplied solely in connection with the safe use of the product. It is not to be taken as guaranteeing specific properties and customers should satisfy themselves as to the suitability and completeness of such information for their own use.

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